

CHAPTER 2

LITERATURE REVIEW

2.1 Fundamental Theory

2.1.1 Culture

To understand how cultures change, people look at the factors that shape civilizations and their values. Generally speaking, a value is something that someone prefers to another, be it a material item or a certain action. Values are typically non-rational and are typically acquired early in life. Human's cultural orientation's fundamental building elements are their values. Cultural refers to more than only individuals from other nations. All kinds of groups have their own cultures. There are even subcultures inside a country or target ethnic group which every person belongs to a variety of cultures, including the national, subcultural (regional, gender, ethnic, religious, generational, and socioeconomic), group, and workplace (also known as organizational) cultures. (Cole, 2017; Pappas & McKelvy, 2022; Pweb.info, 2022; iEduNote, 2023).

2.1.2 Cultural Changes

The term "cultural change" refers to a variety of internal and external elements that influence changes in a society's cultural foundation. It may have a tangible or non-material nature. Although there are numerous potential causes for cultural change, the majority occur as a result of interactions with other cultures, inventions, and internal cultural adaptation. Based on an article shared by Chand (n.d.), the following are some observations David Dressier and Donald Carns have made about the reasons behind cultural changes:

1. People in a culture occasionally run into traditions that are different from those they have come to accept. They follow modified versions of some of the new

customs, reject others, and adopt some of the new ones. This could be referred to as cultural eclecticism.

2. New customs and practices are more likely to be accepted under two circumstances: (i) if they represent what is seen as socially helpful and desirable; and (ii) if they do not conflict with previously practiced and still regarded customs and practices.
3. Always, especially during cultural contact, changes in one culture are superimposed on another.
4. Not all cultural shifts are equally significant. Certain cultural modifications are made because they are seen to be essential for human survival. In order to satisfy socially learned, non-survival demands, some additional alterations are approved.
5. Common observation shows that times of crises tend to bring about or hasten cultural changes. If the adjustments are initially accepted as a result of the crisis, they frequently last. For instance, women were allowed to serve in the military during the Second World War, and they still do now.
6. The overall impact of cultural change is cumulative. Little is lost, and much is added. Its growth resembles the growth of a tree that constantly grows but only sheds leaves and, occasionally, limbs as long as it survives.
7. Every time a change is adopted into the culture and recognized as a "social necessity," new requirements arise and the need for additional modifications to complete or supplement the initial change arises.

2.1.3 Folktale Issues

Basiroen and Permatasakti (2018) stated that visitors visiting Indonesia are mostly anticipated to embrace the diversity of the country's cultures, to witness or learn about Indonesian art and heritage, and to experience the mysterious and mystical atmosphere present in traditional ceremonies. One of Indonesia's most compelling qualities that must be carefully conserved, it may be said, is its cultural wonder. When technology is not a top priority for people, folktales are very popular in society. However, nowadays, where technology has taken its place as a top priority for people, even the most well-known folktales, which are primarily from Java, appear to become more outdated and forgotten.

According to Anggini and Harmoko (2019), society has abandoned folktales over time as a result of the rapid growth of digital technology. The proliferation of information technology causes changes in socioeconomic life that indirectly alter socializing behaviors. Social media is a more common means of communication than face-to-face communication. It reduces the chance to convey stories and eventually vanishes. Indonesia's traditional culture has been lost as a result of its inability to defend itself against the invasion of foreign cultures. One of them is the loss of folklore in different areas. Indonesian folklore that falls within the category of traditional arts is indeed entering a phase of extinction. The average is a result of the general lack of interest and is replaced by modern art.

Moreover, Utami and Sama (2022) strongly mentioned that folklore confronts numerous challenges in society because individuals, particularly members of Generation Z, are less interested in traditional folklore and more interested in stories from other countries since they are seen as entertainment icons, particularly by young people. Few young people are interested in listening to traditional folklore because they believe the stories and characters are old. One could argue that the young people of today are no longer interested in reading and listening to fairy tales. Folklore is more likely to be in jeopardy the less people are interested in it. The age of the perpetrators or those who still understand and value oral tradition is a reflection of the disappearance of folklore; the average age is 50, and nobody knows anything about folklore before that age. The generation known as Generation Z has grown up with technological advancements. The

generation born between 1995 and 2012 has never had the chance to experience life without the internet, despite the fact that technology and the internet aid in their growth and development. Due to technical advancements and the quick flow of information over the internet, which have an impact on Generation Z's life, technology and the internet have become an integral part of their everyday lives and routines. People are accustomed to using gadgets to communicate, viewing numerous online rumors from the outside world, playing games, and making purchases via smartphones. Almost all people in Generation Z, whether they are wealthy or not, urban or rural residents, have smartphones. All of the Z generations are presumably constantly exposed to smartphone use. Losing their allowance does not make them as angry as losing their internet access. Considering how dependent Gen Z is on smartphones, it is impossible for Gen Z kids to be interested in traditional cultures, including folklore, and prefer to watch stories or shows from overseas that are thought to be more enjoyable.

2.1.4 Folklore Definition

Folklore is composed of two words: folk (regional people) and lore (tales). As a result, folklore represents stories spoken by individuals in a certain place. With its literary themes, folklore can define a population's values, beliefs, and preferred way of life. Folklore was passed down orally from previous generations who recited the stories. The stories were then passed down from generation to generation, and they became part of a culture's tradition. The printing press enabled these stories to be published — and therefore shared with the rest of the world (Gunner, n.d.). Folklore can be used by societies to communicate their views in a variety of ways. Some cultures employ music and dance to tell their stories, while others narrate larger-than-life stories about mythical heroes.

2.1.5 Difference between Folklore and Folktale

The categories myth, folklore, legend, and fairy tale are sometimes used interchangeably, giving the impression that they all refer to the same thing: fantastical narratives. Although these labels may apply to bodies of literature that answer some of life's basic issues or provide moral criticism, each form provides a unique reader experience. Whereas myth is about the beginnings of a tribe and is frequently sacrosanct, folklore is a collection of fictional stories about people or animals. Superstitions and erroneous beliefs are key components of folklore. Myths and folklore were initially passed down orally. Folktales depict how the main character deals with ordinary situations, and the story may include a crisis or conflict. These stories may teach individuals how to cope with life (or death), and they may also contain elements that are shared by cultures around the world (Lombardi, 2019).

2.1.6 Folklore in Indonesia

According to Adellestia, Slamet, and Winarno (2022), Indonesia is an archipelagic nation with thousands of folktales from the hundreds of local tribes. If correctly documented, these folktales can serve as an important teaching tool in foreign language schools that focus on regional culture and traditional knowledge. Indonesian folklore has the potential to be the subject of literary critique due to its status as a literary work with a specific set of literary traits. Indonesian folklore has the capacity to spread concepts about the environment, especially the ideals of environmental wisdom, given its role as a medium for reflecting attitudes, opinions, and public responses to the surroundings. This is expected because Indonesian folklore grows out of and is rooted in its natural surroundings. Folklore is a literary genre that has several advantages for language learners. It frequently reflects patriarchal values and behaviors, either overtly or covertly. Indonesia offers a diverse range of folklore. Local customs, habits, and values are contained in folklore. Children and folklore are associated because parents frequently impart morals and customs on their kids through story-telling, which helps kids grasp them better and helps them retain them permanently. Folklore is extremely helpful for teaching kids morals like friendship, heroism, and parent-child compliance, according to Nurhayati

(2019). Indonesia is home to a vast amount of folklore that comes from its 34 provinces, more than 100,000 cities, and five main islands.

Folklore has been there ever since people have been able to communicate with one another, claims Novianti (2022), the author of the journal "Indonesian Folk Narratives: On the Interstices of National Identity, National Values, and Character Education." Folklore evolved into one of the key tools for forging a sense of national identity as civilizations advanced and national boundaries were drawn. The phrase "folk narratives," which refers to stories from folklore, is controversial. Folktales, according to Stith Thompson, are "stories that have been transmitted orally or in writing from one generation to the next." William Bascom referred to three significant types of folklore—myths, legends, and folktales—as "prose storytelling." These stories are divided by Dan Ashliman into the three main categories of myth, legend, and folktale. The Aarne-Thompson-Uther (ATU) index makes a thorough effort to categorize folktales but falls short in its precision. Folktales are frequently considered to provide a window into a country or people in the context of national identity and values. Herder's romantic nationalism prioritized emotion and instinct above logic, national diversity over shared objectives, and the creation of nations based on historical traditions and mythologies. Many countries have been influenced by the Grimm brothers' efforts to collect fairy tales from all throughout Germany. Indonesia has a variety of folktales, many of which are a part of the people's religious or spiritual beliefs, which are used in the theory of manipulating folklore to establish a national identity. Indonesian folklore research benefits from Jan de Vries' *Volksverhalen uit OostIndi: Sprookjes en Fabels* since he is the first Dutch folklorist to have assembled representative folktales from various regions of Indonesia for comparative studies. Important annotated bibliographies of Indonesian folklore can be found in Herman C. Kemp and Gabriel A. Bernardo's *A Critical and Annotated Bibliography of Filipino, Indonesian, and Other Malayan Folklore*. During the colonial era, Dutch and other European anthropologists examined Indonesian folklore but neglected to take into account the people from whom it was collected. With Indonesia's independence, the government and independent publishing houses maintained their attempts to preserve Indonesian folklore. Local folktales were also produced by language services run by the local government. To spread national principles and create an

Indonesian nation from archipelagic cultures, folk narratives are collected, translated, and distributed.

Indonesian folktales are traditional stories that have been passed down from generation to generation in Indonesia. These stories often feature characters such as animals, mythical creatures, and humans and convey moral lessons or cultural values. Some popular Indonesian folktales include Timun Mas, Bawang Merah Bawang Putih, and Malin Kundang.

Timun Mas, also known as Golden Cucumber, is a popular folktale adapted from Central Java. The story features a young brave girl named Timun Mas and a giant called Buto Ijo or Green Giant. The story of Timun Mas is popular because it portrays the bravery of a young girl who struggles against a giant monster. If she is defeated by the monster, she will be eaten by him. The story has been passed down through generations and remains popular to this day. There are many different versions of this folktale because it has been adapted and retold by different people over time. For example, one version published by Erlangga for Kids (EFK) in 2016 portrays Buto Ijo, the green giant, as a lonely giant who wants Timun Mas to be his friend (Sarahtika, 2018). Folktales are often passed down orally from generation to generation and can change over time as they are retold.

According to the authors of the journal "Moral Value and Character Building Education in Folklore from Central Java "Timun Mas"" (Nanda, Simbolon, Damanik, and Sembiring, 2021), education is a process of learning that molds a person's moral principles, inventiveness, and character. Humanity depends on education. As a result, everyone with an education can increase their knowledge and lay a strong foundation for their future independence and responsibility. All human behavior and behaviors are based on or motivated by human values. Value is an abstraction of one's individual experience with others and refers to something that is both physically and spiritually beneficial to humans. Implementing moral principles into learning is known as character education. Folklore, to put it simply, is a production that has been passed down orally from one generation to the next and has come to represent the culture of a particular group of people.

The story of Timun Mas teaches several important morals. One moral is the importance of bravery and determination in the face of danger. Timun Mas faces a seemingly impossible situation when she is chased by the giant Buto Ijo, but she never gives up and uses her intelligence and resourcefulness to outsmart him. Another moral is the value of keeping one's promises. Mbok Srimi makes a promise to Buto Ijo to give him her first child, but when the time comes to fulfill her promise, she tries to protect Timun Mas instead. This leads to danger for both Timun Mas and Mbok Srimi. There are many Indonesian folktales that share similar themes and morals with Timun Mas. Some of these include Bawang Merah Bawang Putih, Malin Kundang, Ande Ande Lumut and Kleting Kuning, and Keong Emas. These stories often feature brave and resourceful protagonists who face challenges and overcome them through their intelligence, determination, and kindness.

Folktales in Indonesia are important for several reasons. Some of them are:

- They preserve the cultural heritage and identity of Indonesia: Folktales in Indonesia reflect the diversity and richness of the cultures, religions, languages and regions of the country. They also contain historical events, legends, myths and beliefs that shape the worldview and values of the people. Folktales in Indonesia are part of the ancestors' legacy that is passed down from generation to generation.
- They teach moral lessons and social values to the younger generations: Folktales in Indonesia often have moral messages and themes that can guide the behavior and attitude of the listeners or readers. They can also instill social values such as respect, honesty, loyalty, courage, compassion and justice. Folktales in Indonesia can serve as a source of inspiration and motivation for the younger generations to overcome challenges and achieve their goals.
- They entertain and educate the audience: Folktales in Indonesia are not only stories, but also art forms that can be performed through various media such as oral narration, puppetry, theatre, dance and music. They can capture the attention and imagination of the audience with their plots, characters, settings

and dialogues. They can also provide information and knowledge about various aspects of life such as nature, geography, science, religion and culture.

2.1.7 Interactive Media

According to Dhir (2021), the goal of interactive media is to interact with the user and captivate people in a manner that is not possible with static media. At first, passive engagement was not required for traditional media channels such as television and radio. These media forms rendered consumers more passive because the only way to navigate the experience was to change the channel. But with the advent of the internet in the 1990s, things began to shift. As technology developed, consumers were presented with a multitude of tools via which interactive media could be seen. Internet connectivity, once a costly service available exclusively via dial-up, has developed into a wireless device that can be operated with a fingertip. Smartphones started to make interaction with media simple and convenient, and computers and laptops started to become standard household items and workplace necessities. Interactive media will become even more immersive as technology progresses, expanding human potential. After all, the internet and smartphones are relatively new technologies.

2.1.8 Advancements of Interactive Media

People live in a digital age when interactive media is all around them. Below are examples of interactive media advancement based on What is interactive media? (n.d):



Figure 2.1. Virtual Reality (VR)

Source: <https://www.forbes.com/sites/bernardmarr/2019/07/19/the-important-difference-between-virtual-reality-augmented-reality-and-mixed-reality/>

Big brands like Oculus are supplying cutting-edge VR headsets to suit the need for virtual reality systems, which is a field of interactive media that is constantly developing. The designers and developers of virtual reality create realistic-looking, intricately detailed 3D computer environments. Using a virtual reality headset or specialized VR gloves transports users to a realistic virtual environment where they can pick up objects that are exclusive to the virtual world. The process of creating user interfaces for virtual reality that enable interaction in the software might take a lot of time. Nonetheless, it has a number of beneficial uses, including immersive video games and movies, training programs for the workforce, and education.



Figure 2.2. Applications (Apps)

Source: <https://www.michaelpage.com.au/advice/job-description/technology/application-manager>

Applications, or "apps," are programs that users can download to their mobile device, such as an iPhone or an Android phone. These programs can be downloaded for free or for a small fee. Nearly everything can be done with an app, from tracking sleep patterns to assisting users in exploring new locations. There are already 2.6 billion smartphone users globally, and by 2020, this figure is expected to nearly triple. As a result, the industry of

app development is currently seeing tremendous growth, with new app start-ups appearing practically daily. With so many options available to consumers when choosing an app, user experience is more crucial than ever. Apps should be easy to use and contain the most interesting content.

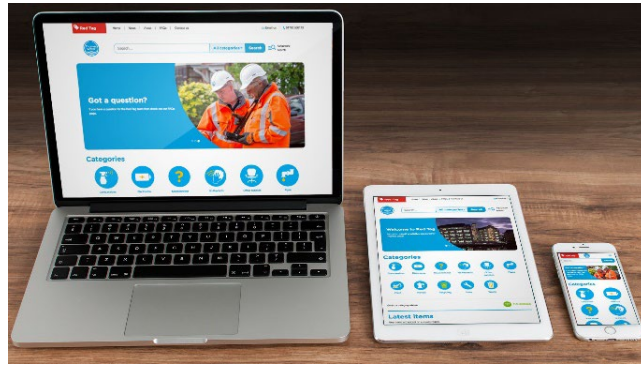


Figure 2.3. Websites

Source: <https://www.spinningclock.com/services/interactive-media/what-is-interactive-media>

The majority of people visit many websites daily. It's critical to get the website design right because it will likely provide customers their initial impression of what a company does and why. Making a website interactive is one approach to get visitors to stay on it longer. Video, animation, and sound can be included into interactive webpages to enhance engagement by offering a multi-sensory experience. The greatest website designs are not only interactive but also make it simple for readers to get pertinent information.

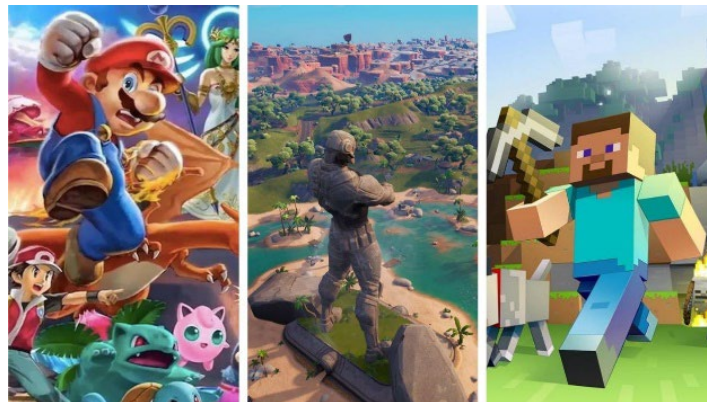


Figure 2.4. Video Games

Source: <https://gaminggorilla.com/most-popular-video-games-now/>

Franchises frequently exploit the nearly \$70 billion in revenue generated by video game sales to diversify their product offerings. You can play video games on a variety of consoles or on a computer. The player can always engage with them through a user interface. Game walkthroughs are currently some of the most watched videos on YouTube. Professional gaming is now regarded as a professional competitive sport.



Figure 2.5. Training Videos

Source: <https://houseofvizion.co.za/training-videos/>

In order to instruct workers in the company's procedures, businesses use training movies to present situational demonstrations in an engaging environment. In the company's e-learning portal, these training films are frequently available.

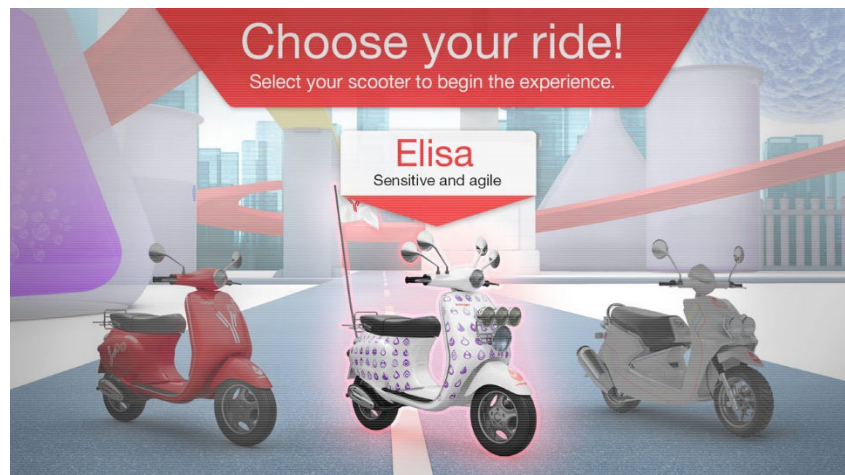


Figure 2.6. Multimedia for Events

Source: <https://www.spinningclock.com/services/interactive-media/what-is-interactive-media>

Event technology can include iPads, virtual reality headsets, motion-activated lights, touchscreen displays, and more. By effectively showcasing the company's goods rather than making a long sales pitch, interactive displays are a terrific method to get attendees involved at a trade show or event.

2.1.9 Choose Your Own Adventure

'Choose Your Own Adventure' books were a staple of many kids' reading diets. These interactive books, also referred to as gamebooks, rely on the reader's judgment to craft a special experience just for them. There are several instances of fictional works with branching narratives in literature, including novels, plays, and even psychoanalytic theory. While literary innovators like Jorge Luis Borges explored the concept of "forking paths" through changes in narrative structure, other academics like B.F. Skinner investigated the potential of alternative dialectical methods to improve learning skills in children by involving them in every step of the learning process. The gamebook form became well-known in later years as a result of all these groundbreaking innovations (Bose, 2021).

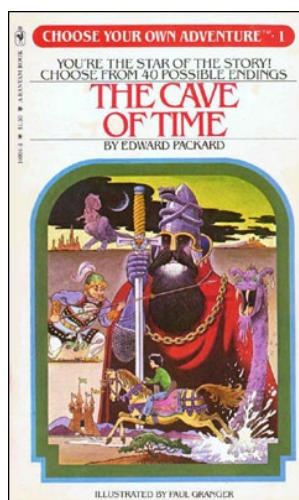


Figure 2.7. Choose Your Own Adventure

Source: https://en.wikipedia.org/wiki/Choose_Your_Own_Adventure

According to History of CYOA (n.d.), the first Choose Your Own Adventure® gamebooks were published in 1979 as part of a brand-new section at Bantam Books that focused to younger readers. Before some marketing genius decided to "seed" 100,000 copies in libraries around the nation, the interactive gamebook series had only mediocre sales at first. The books quickly gained enormous popularity. The series was translated into 38 different languages and sold more than 250 million copies worldwide between 1979 and 1999. There were 184 gamebooks in the original "classic" Choose Your Own Adventure series, written by 30 different authors. The books' settings included many parts of the world, as well as outer space, the ocean, and a number of vividly imagined fantastical worlds. Every known literary genre was represented in CYOA over the duration of its publication. In 1998, Bantam—by then a division of Random House—released the final new book in the original series. Author and series creator R. A. Montgomery and his wife, author Shannon Gilligan, formed the independent publishing house Chooseco LLC in Waitsfield, Vermont, in 2003, where the gamebooks are currently produced.

2.1.10 Visual Novel



Figure 2.8. Visual Novel

Source: <https://www.digitallydownloaded.net/2017/11/everything-that-you-need-to-know-about.html>

Originating in Japan, the Visual Novel (VN) is a popular and well-known narrative-driven video game genre. Their popularity has been steadily increasing outside of Japan; there are currently 2,272 VNs available for purchase on Steam in the US and 27,140 VNs hosted on community-run websites such as Visual Novel Database (VNDB), a website dedicated to documenting the evolution of VNs. The availability of free VN game engines like Ren'Py has increased this appeal even more. Not surprisingly, considering VNs' popularity in the marketplace and academia, several definitions have been created to offer a high-level overview of the genre's essential design elements. These interpretations, however, may differ greatly, which has a significant influence on game design. "VNs are interactive textbooks," for instance, according to a single definition, yet "Adventure Games born in Japan" employ "attractive characters, narrative engagement, riddles, and other interactive features to keep user interest while immersing players in complicated stories." Virtual reality researchers and designers may find this broad variety of definitions problematic since it leads to wildly divergent (under and too constrained) perceptions of the design space that is open to them while creating virtual reality games.



Figure 2.9. The Visual Novel Database (VNDB)

Source: https://en.wikipedia.org/wiki/The_Visual_Novel_Database

Although there is not a consensus on a precise definition of visual novels as a genre, both the publishers who produce them and the player base who appreciates them may readily recognize them as such. Examples of this consensus may be seen in the community-driven genre classifications on Steam and the fan-driven documentation efforts on VNDB. This implies that VNs may be recognized based on a very narrow set of criteria, which implies the possibility of a more cohesive description and organized body of information about VNs. There is no officially established census on the collection of features that identify VNs, despite indications of an implicit understanding of them, such as the 2,556 tags used to characterize VN traits on VNDB. Moreover, these tags are applicable to both the structure and content of VNs. A lack of a defined definition makes it difficult for designers to create VNs and realize the complete creative space of the genre. It also makes it challenging for researchers to recognize and analyze VN games. Ultimately, by establishing a clear definition of the genre of visual novel and understanding the key components of a visual novel's design, individuals will be able to more effectively shape future developments in the visual novel and interactive narrative fields (Camingue et al., 2021).

2.1.11 Difference between Plot and Story

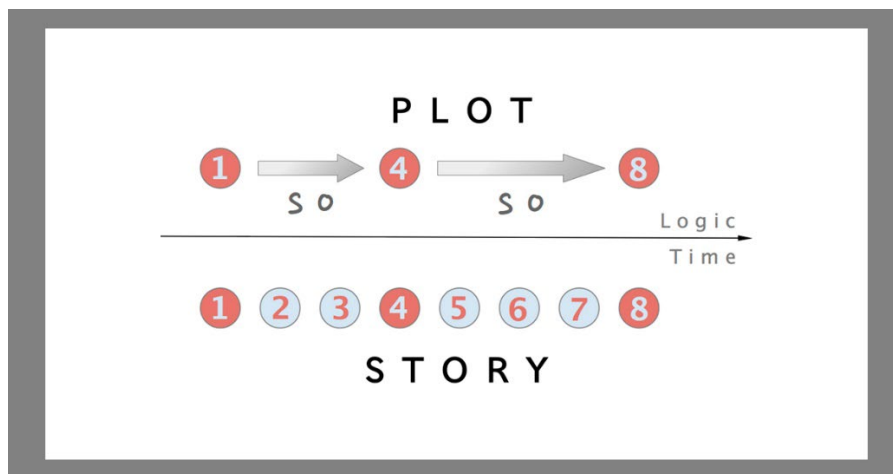


Figure 2.10. Plot & Story

Source: <https://www.shorescripts.com/story-vs-plot-two-ways-to-structure-your-script/>

An article written by MasterClass (2022) stated that it is common practice to use the phrases "plot" and "narrative" interchangeably, and there is some overlap between both concepts. Plot and story, however, differ in important ways. Whether a writer is a novice or an experienced pro, knowing the distinction between the two can help projects run more smoothly. The sequence of events that take place from beginning to end makes up the storyline of a book, movie, or play. In addition to describing what occurs, the plot also describes causation, or how one event causes another. Aristotle described the fundamental structure of a narrative as having a beginning, middle, and finish in his book *Poetics*. Aristotle believed that a story should move forward with events taking place in the correct order. Gustav Freytag, a German novelist, added rising action and falling action as new elements to Aristotle's plot theory. The five stages of Freytag's Pyramid are introduction, rising action, climax, declining action, and resolution. A whole narrative makes up a story. It includes the plot as well as other literary elements including setting, themes, and character development. A story involves a point of view, or the viewpoint from which the action is seen: Who is narrating the tale? Is it from one of the characters' perspectives? Is it being told from the perspective of an all-knowing narrator? A philosophy or lesson may also be included in a story. The reader is made to care about the action and experience emotion through a good story. A novel or series may have more than one main plot, although short stories typically have just one.

2.1.12 Plot Structure

The order of events in a story makes up the plot or plot structure. The reader can discover information about the characters, incidents, setting, and topic of the story as they occur in the story's chronological order. Anyone can write stories that are more coherent and understandable if they follow a systematic plot framework from beginning to end. A story's plot structure is intended to give it shape and cohesion. The plot structure's primary purpose is to communicate the story to the reader. Also, the plot serves to advance the action and organize the way that the story's events unfold. In general, the plot structure serves as the narrative's framework. (Writers Republic, n.d.).

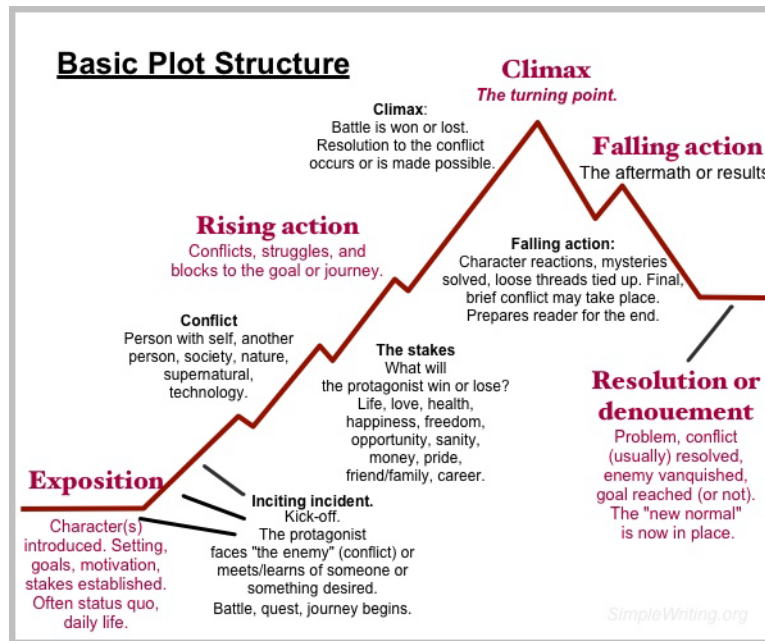


Figure 2.11. Plot Structure

Source: <https://simplewriting.org/plot-structure/basic-plot-structure/>

When individuals talk about various story structures, they frequently refer to the various analytical frameworks. Every story has some aspects in common, according to Reedsy (2022).

- The status quo. The protagonist is living some kind of ‘normal life’ but has a greater desire or goal. This is usually the first part of the story — but not always.
- An inciting incident. Sometimes called a catalyst, this is an event that sets the story in motion, forcing the protagonist out of their comfort zone.
- Rising action. The protagonist pursues their goal and is tested along the way.
- An all-is-lost moment. The protagonist believes they have failed.
- A resolution. The protagonist a) gets what they want, b) doesn’t get what they want, or c) does not get what they want, but realizes that they have something that is more important.

2.1.13 Kinetic Novel

A type of visual novel known as a "kinetic novel" avoids the custom of having many endings in favor of a single, linear story. There are no options at all, and there is no interactive element. In other words, it essentially tells a single, linear story with complementing visuals as well as sounds (TV Tropes, n.d.). Not all online stories need to have branches. After all, linear stories have been a favorite among humans for about ten thousand years. There are visual novels with voice acting, animations, and graphics that are completely pleasant without choices. Choices can occasionally disrupt the flow of a story; therefore, authors frequently squeeze them in to give readers a feeling of participation. But, as people will see, certain games can be played fairly satisfactorily without having several endings. Even before the complex animations and detailed sprites of today's standards, this sub-genre of visual novels was fairly popular. Some interactive fiction masterpieces did not offer many choices, but nobody labeled them multimedia novels or anything else. This kind of storytelling actually gained its name as a result of the success of the games (notably Kanon, AIR, CLANNAD, and Planetarian ~the daydream of a miniature planet~) published by the well-known Key/Visual Art's studio (Fung, 2018).

2.1.14 Branching Stories

Branching storylines are based on the "path" or "route" that the player has followed through the game's story. These storylines are typically influenced by the decisions the player has made throughout the course of the game, including moral and dialogue choices that can change the plot and result in different endings. Although there are many examples among RPG, adventure, and action-adventure games, this method is most frequently used in visual novels, which are known for being the least linear. Several games, primarily visual novels, take this idea a step further by urging players to see every possible outcome in order to properly understand the game's main plot. For instance, different endings could present contrasting viewpoints, with story aspects that would not make sense in one ending making sense in another. By witnessing these diverse viewpoints, the player is able to better comprehend the game's underlying narrative. The visual novel Yu-No is primarily

credited for developing this strategy, which has subsequently been adopted by numerous other visual novels including Clannad, Fate/stay night, 428, Steins;Gate, and Zero Escape (Branching Story Line, 2021).

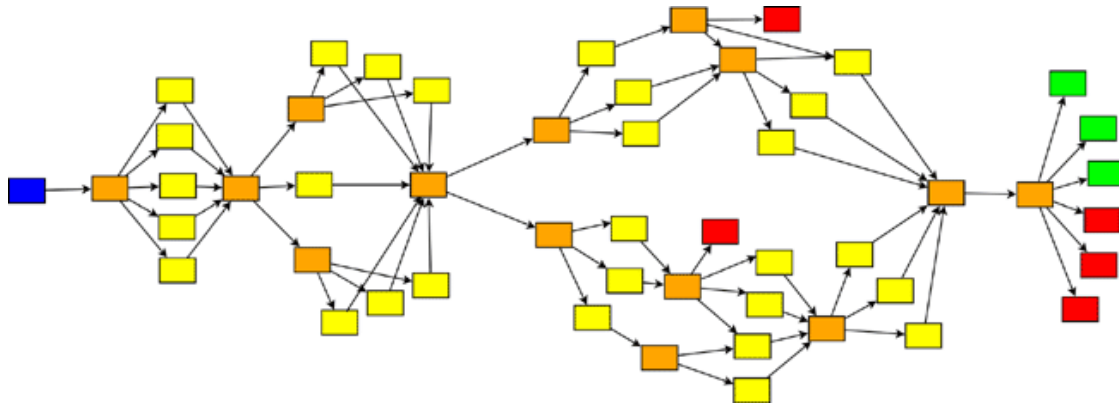


Figure 2.12. Branching Stories

Source: <https://heterogenoustasks.wordpress.com/2015/01/26/standard-patterns-in-choice-based-games/>

According to Fung (2021), there are two primary categories of branching stories:

Visual novels with plots are frequently otome or bishojo games in which the player's choices affect the final result. Short common routes with complicated branching are typical of stories with a plot. Characters with a plot typically have a defined personality. The types of branches into which the plot will branch out are decided by the episodes. As a result, the usual route is brief and largely based on the actions and reactions of the player. There is typically a point of no return when a story hits the climax of a buildup, at which moment the plot completely changes. The story may still have "hidden" characters or conclusions even after it has taken other turns. After point of no return, there are a variety of possible episode structures, but choosing the particular style of ending is the main objective of choices.

Visual novels with a focus on characters have a simpler branching structure and a longer common route. The branching and kind of ending are determined by the player's selections, which develop their personality and skills. Character-based games include

raising sims and adventure visual novels. They make an effort to maintain the impartiality of the characters' responses in this story framework. Via a sequence of personality-based decisions, players play "themselves" and become intimately linked with the character. This format is used in a lot of adventure video games, quests, and stories where the player is discovering a new world. Exposition follows a typical, lengthy, linear format and includes choices that reflect the player's selected personal characteristics. Instead of a personality test, the player's responses would be added up, and then shorter branches would lead to conclusions.

According to Engström, Brusik, and Erlandsson (2018), tools are essential to game production and are a key part of the creative process. According to their investigation of the creative process in the video game industry, technology initially serves as a conduit between concepts and their actualization, and for games, concepts must be put into practice and proven before they make sense. This is the rationale behind the advice to developers to "choose a quick loop engine" in order to facilitate early testing and iterative development. Prototyping is frequently utilized in the early stages of a development process in the games industry, and businesses expect their tools to facilitate prototyping and allow for flexibility. Many tools exist with a focus on game writers, including:



Figure 2.13. Articy:draft 3

Source: <https://www.articy.com/en/>

Many game content categories can be edited visually with Articy:draft. It has all of the editors for story flows, entities, locations, and assets, and it synchronizes data with the server through a server connection. With its extensive automation features, it can be used as a tool for visual representation of game entities. The entities database is one of its further uses. It can definitely assist a gaming company in maintaining entity organization. The most popular tool in the world for generating interactive tales, according to their website, is articy:draft 3. It can be utilized to produce funny conversation, fascinating choices, endearing characters, valuable goods, difficult quests, strategic locations, and global variables (Articy:draft, n.d.).

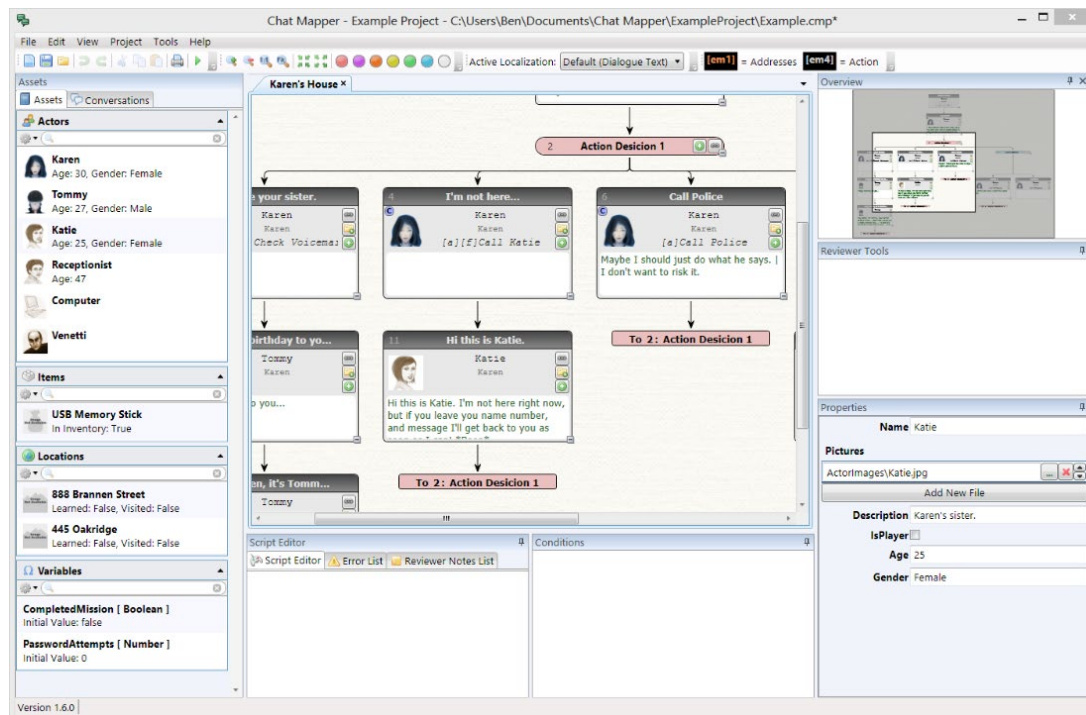


Figure 2.14. Chat Mapper

Source: <https://www.chatmapper.com/features/>

The tool Chat Mapper is used to create and test nonlinear dialogue and events. It is intended to be both stylish and user-friendly. It can be applied to industries including

entertainment, e-learning, emergency response, medical diagnosis, sales and customer service, and strategic planning where dealing with complicated problems is the norm (ChatMapper, n.d.).

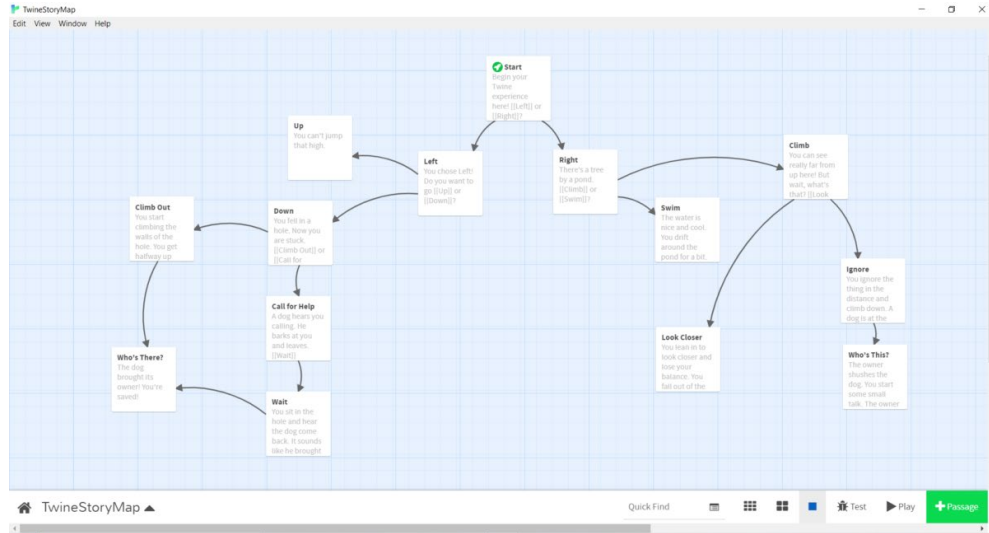


Figure 2.15. Twine

Source: <https://dh.sites.gettysburg.edu/toolkit/tools/twine/>

An open-source program called Twine can be used to write interactive, non-linear stories for video games, comic books, and other media. Users of the program must understand some basic coding in order to design pathways because it employs a story builder interface. Twine offers a straightforward drag-and-drop user interface and is made to be simple to use. Moreover, it enables multimedia components like pictures and sound files (Twine, n.d.).

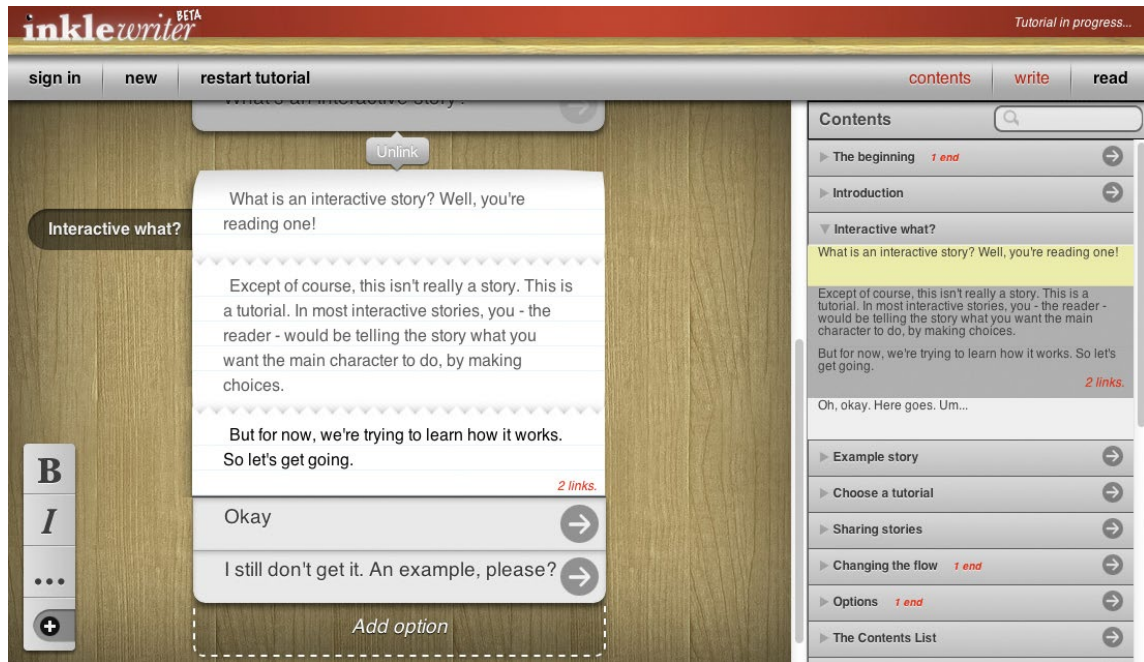


Figure 2.16. Inklewriter

Source: <https://www.inklestudios.com/inklewriter/>

With the help of the free online application Inklewriter, anyone may create and share interactive stories. It maintains order in branching plot so user may focus on the writing, which is what matters. It is ideal for authors who want to experiment with interaction, as well as for instructors and students who wish to combine computer proficiency with creative writing (Inklewriter, n.d.).

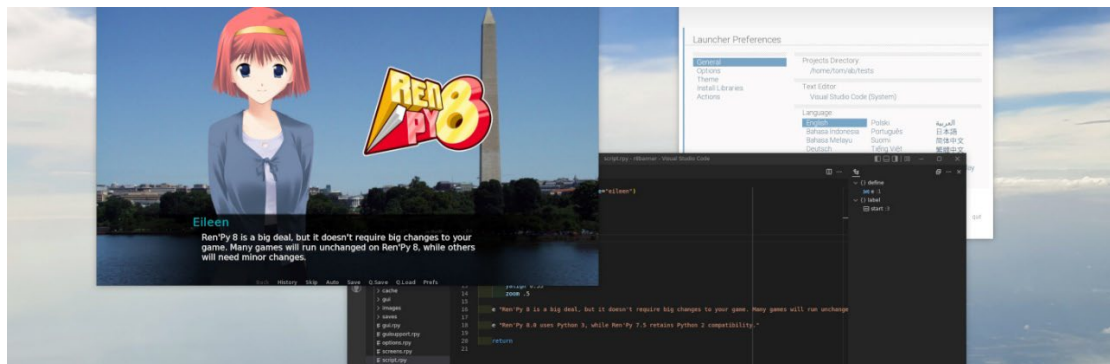


Figure 2.17. Ren'Py

Source: <https://www.renpy.org/latest.html>

Ren'Py is a visual novel engine that enables user to use text, images, and sound to construct interactive stories that run on computers and mobile devices. It is used by thousands of authors worldwide. Visual novels and life simulation games are two examples of this. Large visual novels can be efficiently written by anyone using the simple scripting language, and complicated simulation games may be created with Python programming alone. The commercial use of Ren'Py is free and open source (What is Ren'Py? n.d.).

Often referred to as a "game architecture" or "game framework," a "gaming engine" is a software development environment that has settings and configurations to make it easier and more efficient to create video games in a variety of programming languages. A gaming engine can be a sound engine that controls sound effects, an animation engine, a physics engine that simulates real-world activities, a rendering engine for 2D or 3D graphics that supports a variety of import formats, artificial intelligence (AI) that responds to player actions automatically, and many more features. Rendering engines used in early video games were specially designed for a specific game. Over time, game engines have evolved from proprietary internal engines to widely utilized commercially supplied engines. By using commercially developed game engines, game developers—who are in high demand—can expedite and speed up the game creation process, whether they are making new games or bringing old ones to new platforms (What is a gaming engine? n.d.). To put it simply, game engines function by giving users the building blocks that enable creating something (such a video game or digital twin technology) easier than if they had to start from scratch. Although the foundation provided varies from engine to engine, game engines frequently include a 2D or 3D rendering engine. Game developers initially developed game engine software to make the process of creating new games more streamlined and convenient. But now, because to these potent rendering tools, different industries have the chance to depict data, goods, and processes in new and interesting ways and to come up with innovative ways to interact and innovate (The Complete Game Engine Overview, n.d.). For the development of PC, console, and mobile games, a variety of game engines are available. The most widely used gaming engines nowadays are listed below according to Schardon (2022):



Figure 2.18. Unity

Source: <https://dotnet.microsoft.com/en-us/apps/games/unity>

Having been in the independent gaming sector since 2005, the Unity game engine has become a standard. The engine has outstanding support, with yearly additions of major new features like Unity Reflect as well as frequent upgrades. Because so many companies and developers have created useful SDKs for the engine, it is not just a popular choice for VR and AR development, but it is also appropriate for all kinds of 2D and 3D games. Unity also boasts a substantial user community and an easily navigable Asset Market with both free and premium components. It is a very strong engine that is free for developers earning less than \$100,000 annually, making it a great choice for beginners producing any kind of content.

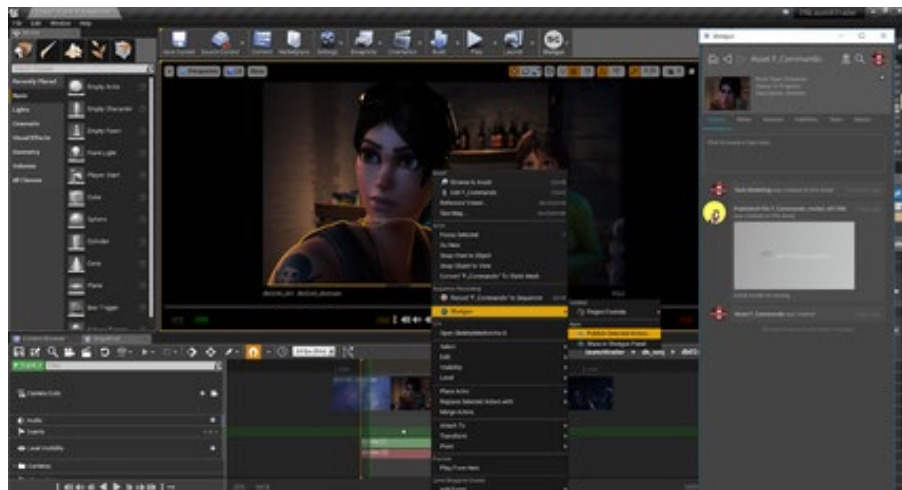


Figure 2.19. Unreal Engine 4.20

Source: https://en.wikipedia.org/wiki/Unreal_Engine

Because of its potent visual capabilities with lighting, shaders, and other features, Unreal Engine powers many of the most well-known triple-A games out there today. Because it is widely used in that business, the engine has been specifically engineered to handle numerous intricate jobs more effectively than other engines. Like the other engines on our list, this one is also open-source, meaning that the community is actively working to improve it. Unreal is a real powerhouse that can do nearly anything, including virtual reality (VR), and has visual blueprinting, which makes game design accessible to even non-programmers. Similar to Unity, there is a marketplace where users can get free assets.

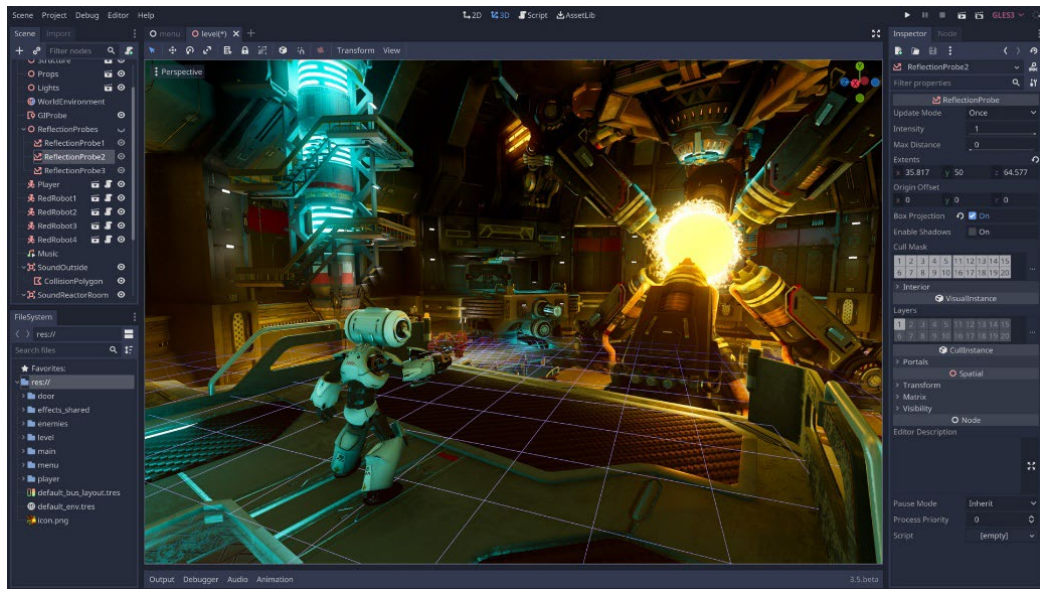


Figure 2.20. Godot

Source: <https://github.com/godotengine/godot>

Although godot has been active since 2014, its popularity has only now begun to grow significantly. Because the Godot game engine is open-source and free, users are free to alter and promote their games in any way they see fit. This makes it an outstanding gaming engine. The engine's dual 2D and 3D capabilities allow it to accommodate any kind of game that a developer wishes to make. Godot additionally employs an innovative

technique with its node and scene architecture to express certain game elements, which helps it stand out from similar competitors and simplify things for a large number of users. There is a devoted following for the engine.



Figure 2.21. Phaser

Source: <https://www.gamelab.id/news/13-mengenal-game-engine-phaser>

Phaser was first made available in approximately 2013, however Phaser 3, a brand-new release, has only been accessible since 2018. In spite of this, a lot of people still appreciate the framework, especially those who wish to make games for the web or mobile platforms. Because Phaser is built on the same technology as web development, it is also a rather reliable framework, even when new versions are introduced. Beyond this, Phaser has physics and all the other sorts of advancements that any engine should have, so users may use it to develop any number of games, even massively multiplayer online role-playing games, with the right upgrades.

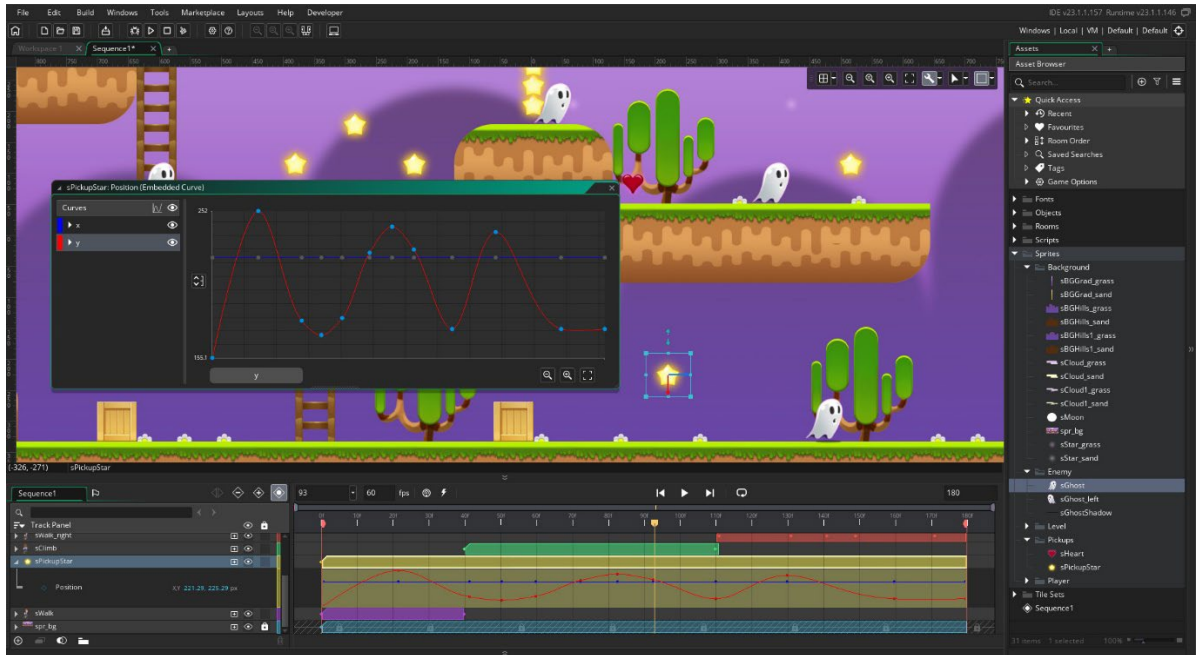


Figure 2.22. GameMaker Studio

Source: Steam

This well-known video game engine was created in 2017 and is the most recent iteration of GameMaker Studio, which has been around since 1999 under a number of other names and versions. Several platforms that use GameMaker support even the Nintendo Switch. Because it primarily uses a drag-and-drop visual scripting language that was created to allow users of all skill levels to create their dream games, it is also a very user-friendly solution for individuals without coding experience. However, it also makes its GameMaker Language available to programmers who wish to write code in order to develop original behaviors that surpass the capabilities of visual programming. Generally speaking, the engine is fairly beginner-friendly and allows nearly anyone to create games.

Within the Southeast Asian video game industry, Indonesia has generated a number of avant-garde and cultural games since 2019. Virtual SEA is a non-profit endeavor started by freelance writers from Indonesia, Germany, and the Philippines (Virtual SEA - Games from Southeast Asia, n.d.) with the goal of showcasing Southeast

Asian game development. It offers reviews, news, and updates on the newest independent games from the Southeast Asia region (Meet the team, n.d.). According to Virtual SEA (n.d.), the following are a few examples of Indonesian video games using visual novel and branching story elements:



Figure 2.23. Coffee Talk

Source: <https://www.agi.or.id/id/berita-terbaru/coffee-talk-dari-toge-productions-masuk-nominasi-dice-awards-2021>

Coffee Talk – In the game Coffee Talk, players are asked to listen to the troubles of others and then provide a warm beverage using the available ingredients. With a cast that includes characters other than only humans, the game attempts to portray life as realistically as possible. The game, created and released by Toge Productions, was motivated by the peaceful sensations of sipping warm beverages alone or with others in the middle of a chilly wet night. The game's graphic style was influenced by 90s anime, vintage pixel art adventures, and the mellow imagery sometimes found in lo-fi chillhop music. The game's branching storylines allow players to make decisions based on how they treat and serve their café's patrons rather than on the dialogue options they select (Coffee Talk, n.d.).

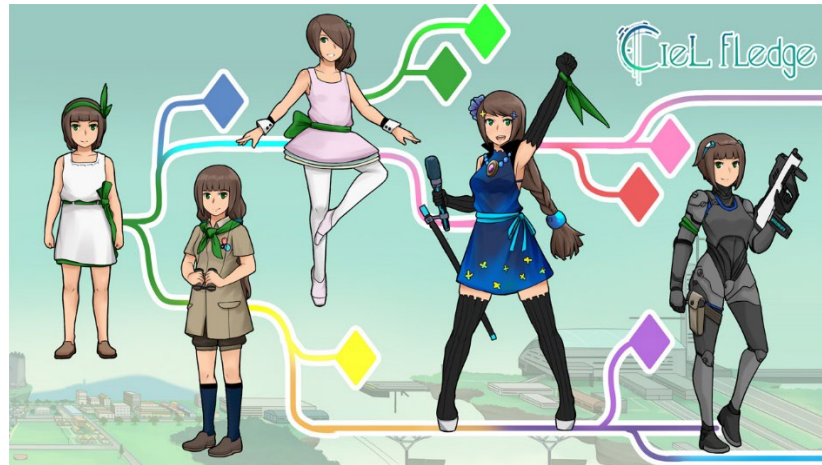


Figure 2.24. Ciel Fledge

Source: <https://studionamaapa.com/game/ciel-fledge/>

Ciel Fledge – The Daughter Raising Simulator Ciel Fledge, created by Studio Namaapa, features intricate management gameplay and a fantastic City Pop music. Take a young girl under players' wing, and help her grow up. Ciel's growth is impacted by every decision. With hundreds of attainable character attributes that can influence Ciel's interactions and combat skills, players can keep tabs on their progress each week and see how her connections and stats have changed. In a future in which humanity has left Earth, the decisions players make for their daughter will affect how humanity turns out (Ciel Fledge, 2020).



Figure 2.25. Lingering

Source: <https://ceylonentertainment.itch.io/lingering>

Lingering – An LGBTQ+ mystery visual novel called Lingering features pixel-styled backgrounds and comic panel graphics. Players can revisit their decisions from several points of view while experiencing the story via multiple sets of eyes. Lingering was lovingly created by Ceylon Entertainment to tell the stories they were interested in conveying. As a result, it may touch on more uncomfortable subjects including depictions of mental illness and LGBT relationships. A mature audience might find some topics and content more appropriate (Lingering, 2023).



Figure 2.26. Cursed Mansion

Source: Steam

Cursed Mansion – A horror role-playing game, Cursed Mansion focuses on subtleties and unsettling feelings throughout the journey. In order to progress through the game and avoid unanticipated circumstances that can result in the protagonist's bad luck, the player will look for hints, essential items, etc., and solve riddles and puzzles. There are many different areas to explore in Cursed Mansion. Each region contains events that can be interacted with to cause death as well as occasionally riddles or puzzles. Players will

receive knowledge or objects from the interactable that they can utilize to move through the story's puzzles and riddles. Events that have already occurred may or may not repeat themselves each time the game restarts. Every encounter and choice matters because there are several possible story endings to explore (Cursed Mansion, 2021).



Figure 2.27. EDDA Café

Source: <https://mushroomallow.itch.io/edda-cafe>

EDDA Café – Visual novel EDDA Café was created by Mushroomallow Studio. It is a sweet and endearing, but strange, love story with a Valentine's theme for the Valentine VN Jam 2021 event. This visual novel instead explores the fallout from losing a loved one, particularly through the eyes of its protagonist Mina. In the mystical EDDA Café, the player must assist Mina in examining her past and assisting her in moving on. The game's narrative is enhanced with wonderful artwork that has a graphic book or Webtoon comic appearance to it, which is all brought together by a warm color scheme (Bashir, 2021). The three chapters of the EDDA Café narrative each have an option that results in one of two possible outcomes.



Figure 2.28. Ann

Source: <https://rongrong.itch.io/ann>

Ann – The puzzle-based horror game Ann created with RPG Maker offers four endings, chase scenes, and puzzles that lead to death. When Ann, an art student, unintentionally breached one of the school's rules, she became stranded within the building. Before Ann moves in permanently, the player must assist her in finding her way outside and learning the school's mysteries with the aid of the security guard. As a freeware that anybody can just pick up and play after a long, tiring day of school or work, the game's author, Jason "Rong Rong" H., intended for everyone to enjoy the game in the same way as they did the old classic RPG maker horror games that were popular, such as Ib, Ao Oni, and Mad Father (Ann, 2021).



Figure 2.29. *The Sun Shines Over Us*

Source: <https://eternal-dream.itch.io/the-sun-shines-over-us-menggapai-matahari>

The Sun Shines Over Us – The Sun Shines Over Us is a moving, sympathetic story game set in an Indonesian high school with numerous possible outcomes. Players take on the role of Mentari, a bullied victim who recently changed schools and is working to overcome her trauma. Players will assist her in the game as she makes decisions throughout her time at school and encounters dramatic occurrences that will have an impact on her future. When the player takes on the role of Mentari, they will encounter other personalities that have various perspectives on mental health and are not the only ones who struggle with these issues. Players can go back and play the game to locate new scenes they missed the first time, and they might find them the second. By selecting a different choice, players might access various scenes and further interactions with various characters. The game explores stories based on empathy and learning instead of twitch skills. The game was created by Eternal Dream Studio, the sole video game studio in Lampung, Indonesia, for players who like a moving narrative centered on teenage mental health and relationship issues with distinctive characters (The Sun Shines Over Us, 2022).

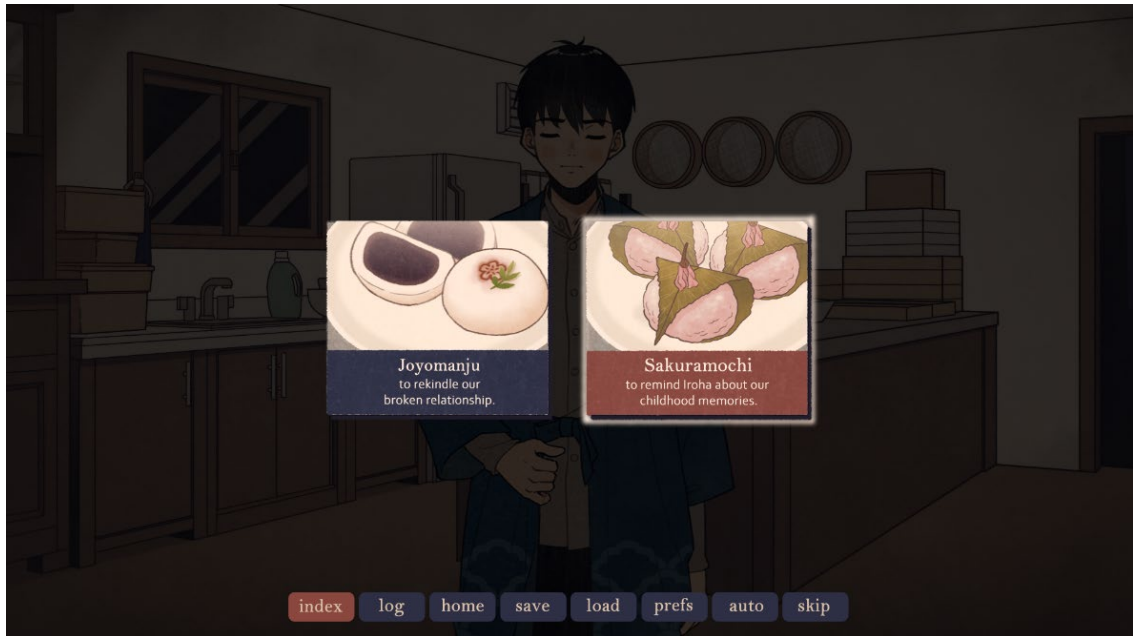


Figure 2.30. Kohana

Source: <https://mushroomallow.itch.io/kohana>

Kohana – Mushroomallow Studio created Kohana, a brief visual novel, in just one month for the Spooktober VN Jam 2021 competition. Ren and Iroha, two estranged childhood friends from two distinct worlds, are the subject of this endearing tale. By choose between two distinct Japanese confections that Ren can prepare for Iroha at two crucial periods in the narrative, players can alter the outcome. Each delicacy has a particular connotation or feeling associated with it that will either bring back memories of Iroha and Ren's former relationship or persuade her to forge a new one with him in the present. This mechanism was so much entertaining because Japanese treats play a big role in how people interact with one another. This gives the selections a lot more emotional weight than they would have with more conventional visual novel choices. The game's exquisite graphics, which use a softer, almost hand-drawn approach to give it a nearly storybook-like appearance, fit in perfectly with its inspirations from Japanese folklore. Throughout, there are also a few entertaining small animations that assist bring some of the more dramatic sequences to life (Kohana Indie Game Review, 2021).

2.1.15 Writing Style

Writing is a reflection of the unique verbal communication style of the writer. An author's writing style can be identified in part by their voice, personality, and overall tone. A writer's style might change depending on the kind of writing being done, the audience it is intended for, and the writer themselves. For instance, a blogger will write substantially differently than a news writer (MasterClass, 2021). Writing style is determined by two factors:

1. Voice: The persona writers adopt when writing is known as voice. That is the viewpoint from which they are delivering a story.
2. Tone: A written piece's tone can be determined by the attitude it expresses. Grammar, phrase construction, and word choice are all tools that writers use to establish tone.

According to renowned literary historian M.H. Abrams, style is conventionally described as "the manner of linguistic expression in prose or verse—it is how speakers or writers say whatever it is that they say," as said by Brundage (n.d.). Features of style include the following:

- diction (word choice)
- sentence structure and syntax
- nature of figurative language
- rhythm and component sounds
- rhetorical patterns (e.g. narration, description, comparison-contrast, etc.)

Narrative, descriptive, persuasive, and expository writing styles are the four categories identified by Glatch (2022) in traditional rhetorical analysis. A fifth style, the creative style, is mentioned by Writers.com because creative works can make choices and use features that are typically not available to other writing styles. The following list of five writing styles is provided by Glatch (2022):

1. Narrative is a simple synonym for storytelling. In order to convey a plot with characters, places, and ideas, narrative writing styles use certain storytelling

techniques. The following are examples of common literary forms that employ narrative: Journalism, fiction, creative nonfiction, narrative poetry, legal writing, philosophy, marketing, and brand building.

2. The goal of descriptive writing is to arouse sensory experiences. This kind of writing is concerned with the appropriate use of imagery, including non-visual types of imagery like sounds, sights, tastes, scents, and kinesthetic and organic pictures. Journalism, fiction, creative nonfiction, poetry, medical writing, marketing, and brand development are all popular fields where descriptive writing is employed.
3. Writing that is persuasive aims to sway the reader's opinion. Persuasive authors attempt to persuade readers that their interpretation or argument is correct by using logic, argumentation, and numerous rhetorical techniques. The following genres frequently employ persuasive writing techniques: journalism, fiction, creative nonfiction, legal writing, philosophy, marketing, and research.
4. Expository writing attempts to present information to the reader in an impartial manner. By delivering information as objectively and interpretively as possible, expository writing adheres to the facts in order to be instructive. Be aware that prejudice exists everywhere and that it is essentially impossible for any text to be fully free of bias. In the following fields: journalism, literature, creative nonfiction, philosophy, research, and legal writing, expository writing styles are frequently used.
5. The previous four categories of writing are combined in creative writing; a creative writer may use expository, narrative, descriptive, or persuasive techniques in their writing. People may have noticed that the categories of writing that use the aforementioned four styles frequently include creative genres such as fiction, nonfiction, and poetry. This is due to the fact that in order to tell stories well, authors need to use a range of techniques. Yet in addition to utilizing the

aforementioned four genres, creative writing aims to explore new linguistic possibilities. Poetry is a prime example since line breaks and stanzas influence how language is perceived and understood. Yet, there are also a ton of examples of prose experimentation, from the use of stream-of-consciousness to the Oulipian $n+7$, in which the author takes an existing poem and replaces each of its substantive nouns with a noun that is found seven nouns away in the dictionary. A creative writer uses language very freely in ways that are unique to creative writing, which aims to exploit the diverse range of human experience. The following are instances of creative writing being used frequently: Lyric essays, poetry, fiction, creative nonfiction, and journalism with lyrics.

According to a MasterClass (2021) article titled "Complete guide to different types of point of view: Examples of point of view in writing," point of view is the "eye" or narrative voice used by writers to tell stories. When creating a narrative, authors must choose who and to whom they are addressing their work. The story can be told by a character who is actively involved in it, or it can be seen and heard from the perspective of someone who is not a character but is acquainted with every one of them. Point of views can be categorized into three categories:

First-person perspective: In first-person perspective, one of the characters tells the story. This typically comes across by using first-person pronouns and the "I" sentence structure. The reader is under the impression that this character who either the protagonist or a close friend has a direct bearing on the story's events. First-person narrative has its limitations due to the subject's limited view, but it may also be intimate and provide readers a deeper insight into the thoughts of the character. They are limited to reporting only what they could fairly know about the story, and this limitation is further imposed by their own viewpoint.

Second person point of view: The "you" pronoun serves as the foundation for second person point of view, which is less prevalent in novels. Due to the narrator's direct address to the reader, second person can assist in involving the reader in the story and give

them a sense of participation in the event. Writing in the second person for an extended period of time is difficult and will put writing abilities to the test. Second person POV is another name for second person point of view.

Third person point of view: The author uses the pronouns "he/she" to refer to the characters while telling a story about them. Third person limited and third person omniscient are two variations of this point of view. Third person POV is another name for third person point of view. The story's and its characters' every detail is known by the omniscient narrator. This third-person narrator has the freedom to travel through time, enter anyone's head, and share both their own thoughts and observations with the reader as well as those of the characters. Imagine that the omniscient narrator is looking down on the characters from heaven; they know more than the characters do. When an author stays primarily focused on one character while remaining in third person, it is known as a "close third" or third person limited point of view. The capability to experience a character's thoughts, sentiments, and sensations firsthand through this style can help readers develop a more in-depth understanding of the character and scene.

Tone, which can refer to the author's language's mood or how the text affects readers, is a bit more elusive but no less significant quality of good writing. Tone usually refers to the feelings that a text can evoke in a reader, or it can relate to the mood that a writer suggests through language and word choice. A piece's tone can convey a wide range of feelings. It can also be written in a variety of textual forms, from the terse to the prosaic. Moreover, tone is connected to several aspects of writing, such as voice, intonation, cadence, mood, and style. Tone of voice can be expressed in a variety of ways. One might consider their tone to be one or more of the following if they are writing a novel, a short story, or a poem: Happy, Dry, Assertive, Puckish, Lighthearted, Facetious, Regretful, Funny, Pessimistic, Nostalgic, Joyful, Sarcastic, Persuasive, Uneasy, and Inspiring.

2.1.16 Character Lore

Every story needs a few fundamental components, and one of those components is a character. Any person, object, figure, inanimate item, or animal can be a character. Fiction authors use character to drive and build storyline, narrate and create the novel and stories, and express ideas. A character's attribute can also be demonstrated through behavior, conversation, appearance, and thought (Andriana & Rohmah, 2019).

In the article "Writing 101: All the Different Types of Characters in Literature" by MasterClass (2021), it was stated that the foundation of any great story is a captivating variety of character types. For readers and viewers to be able to spend hours with a major character without growing bored of them, they must be compelling and multifaceted. Characters that provide support, such as romantic interests, sidekicks, parents, villains, and anti-heroes, are as crucial. Three methods of character type classification listed below were provided by MasterClass (2021).

The first method makes use of archetypes, which are broad definitions of the different kinds of characters that comprise narrative in humans. Character types can be classified according to their roles in a novel, such as the foil, the love interest, the deuteragonists, the protagonist, the antagonist, the tertiary characters, and so on.



Figure 2.31. Protagonist – Katniss Everdeen from Hunger Games

Source: <https://www.deviantart.com/len-yan/art/HG-huntress-306040782>

- Protagonist: The protagonist is the main figure in the narrative. Characters should be carefully created, with a believable past, distinct motivations, and a character arc that unfolds as the narrative progresses. The tale is usually told

from their point of view because they are the one that the audience cares about the most.



Figure 2.32. Antagonist – Lord Voldemort from Harry Potter series

Source: <https://www.deviantart.com/fakelore/art/Voldemort-155620007>

- Antagonist: An antagonist is the primary villain in a story. Noting that an antagonist is not the same as an anti-hero and that anti-heroes are villains who pose as heroes.

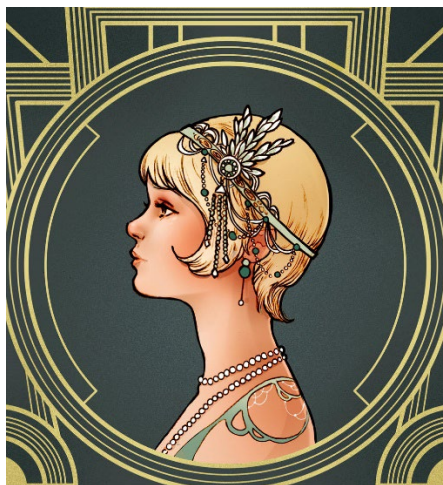


Figure 2.33. Love interest – Daisy Buchanan from Great Gatsby

Source: <https://www.deviantart.com/simonabonafinida/art/Daisy-Buchanan-The-Great-Gatsby-art-deco-951842270>

- Love interest: The love interest is the main character's object of desire. An attractive romantic partner should be captivating and fully formed.



Figure 2.34. Confidant – Horatio (standing, dressed in red) from Shakespeare’s Hamlet

Source: [https://en.wikipedia.org/wiki/Horatio_\(Hamlet\)](https://en.wikipedia.org/wiki/Horatio_(Hamlet))

- Confidant: Such a figure would be the protagonist's closest friend or sidekick. Though not necessary for every novel, the confidant often aids the protagonist in achieving their goals.



Figure 2.35. Deuteragonists – Samwise Gamgee from Tolkien’s Lord of the Rings trilogy

Source: <https://www.movieguide.org/news-articles/why-samwise-gamgee-is-one-of-the-greatest-heroes-in-cinema-history.html>

- Deuteragonists: Frequently, these people run across confidants. A close friend of the protagonist whose character development has nothing to do with the story's main plot is known as a deuteragonist.



Figure 2.36. Tertiary characters – Other toys from Toy Story Quadrilogy

Source: <https://www.shorescripts.com/tertiary-characters-the-unsung-heroes-of-cinema/>

- Tertiary characters: Although they might show up in the story's universe, tertiary characters aren't usually related to it. These supporting actors have a range of responsibilities and differ in terms of their level of dedication.



Figure 2.37. Foil – Captain Kirk and Mr. Spock from the Star Trek series

Source: <https://medium.com/serious-scrum/do-you-approach-complex-problems-like-captain-kirk-or-mister-spock-a6f1c1f7c95a>

- Foil: The main purpose of a foil character is to highlight the protagonist's positive traits. This is due to the fact that the foil is the protagonist's opposite.

The second method is to categorize characters based on the parts they perform in the story as a whole. One way to classify characters is to look at whether or not they change during a novel. Character types that can be grouped in this way based on character development include the dynamic character, the round character, the static character, the stock character, and the symbolic character.



Figure 2.38. Dynamic character - Huck and Jim from Mark Twain's The Adventures of Huckleberry Finn

Source: <http://www.inquiriesjournal.com/articles/1668/the-father-son-relationship-of-jim-and-huck-in-mark-twains-adventures-of-huckleberry-finn>

- Dynamic character: A character that grows during the story is considered dynamic. Therefore, a dynamic protagonist makes for an engaging story.



Figure 2.39. Round character - Konstantin Levin from Anna Karenina

Source: <https://tolstoytherapy.com/reasons-to-read-anna-karenina-part-1-levin/>

- Round character: Round characters are important characters that show flexibility and the ability to evolve from the first time readers meet them. They are closely related to dynamic characters. Conversely, other dynamic protagonists remain unchanged until the events of the plot force them to do so. People with circles can be respectable.



Figure 2.40. Static character - Parental figures in Roald Dahl's children's books

Source: <https://newrepublic.com/article/171098/roald-dahl-childrens-book-factory>

- Static character: A static character doesn't change all that much throughout the course of a narrative. These individuals, often known as flat characters, usually play supporting parts in narratives. Numerous evildoers are likewise unchanging; they will continue to act badly today and tomorrow in addition to what they did yesterday.



Figure 2.41. Stock character - Sir Andrew and Sir Toby from Shakespeare's Twelfth Night

Source: <https://www.nationalgalleries.org/art-and-artists/8407/scene-shakespeares-twelfth-night-act-3-scene-4-sir-toby-and-sir-andrew>

- Stock character: A standard character is an archetype possessing a preset set of traits from their personality.

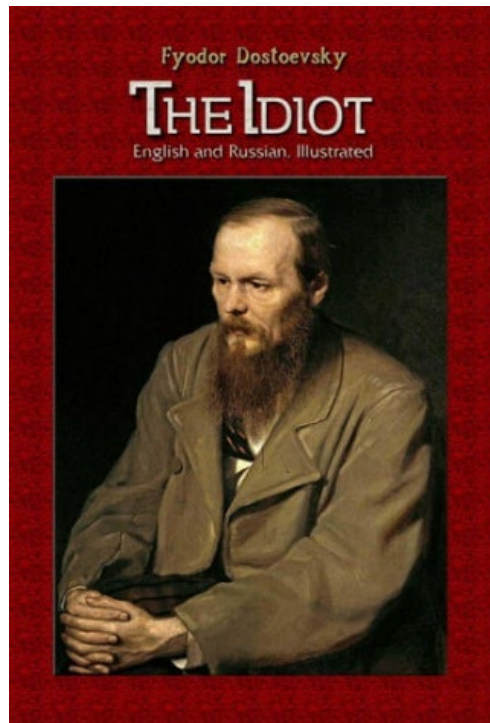


Figure 2.42. Symbolic character - Dostoevsky's The Idiot

Source: <https://www.kobo.com/gr/en/ebook/the-idiot-62>

- Symbolic character: A symbolic individual stands in for an idea or subject that transcends their own limitations. Despite their liveliness, they also subtly direct the attention of the audience toward abstract concepts. While supporting characters predominate in most stories, some do feature symbolic heroes.

The third method involves classifying characters based on their traits and detailing how they change or stay the same throughout a story. Most fictional characters can be divided into archetypes. Many authors, screenwriters, and storytellers throughout history have classified these archetypes, including the Swiss psychologist Carl Jung, the American literary theorist Joseph Campbell, and many others.



Figure 2.43. The Lover – Romeo and Juliet

Source: https://en.wikipedia.org/wiki/Romeo_and_Juliet

- The Lover: The passionate lead character who listens to his heart. Their finest qualities are their conviction, passion, and humanism. They are prone to naiveté and irrationality.



Figure 2.44. The Hero - Achilles

Source: <https://nationalgeographic.grid.id/read/133661462/achilles-prajurit-terhebat-dalam-perang-troya-yang-tewas-mengenaskan?page=all>

- The Hero: The main character who overcomes adversity and prevails. Their qualities of honor, courage, and tenacity make them strong. Their hubris and overconfidence are their flaws.



Figure 2.45. The Magician - Gandalf

Source: <https://www.digitalspy.com/tv/ustv/a41040562/rings-of-power-meteor-man/>

- The Magician: A powerful individual who has successfully applied the universe's laws. Perhaps their strengths are omniscience, omnipotence, and discipline, and their flaws are corruptibility and arrogance.



Figure 2.46. The Outlaw – Han Solo

Source: <https://www.cnnindonesia.com/hiburan/20180522162834-220-300410/han-solo-penyelundup-galaksi-dan-penakluk-hati-putri>

- The Outlaw: The renegade who refuses to conform to social expectations. Although not always, the outlaw can be a wicked character. The outlaw is capable of autonomous thought and skepticism. Their flaws could be criminality and self-involvement.

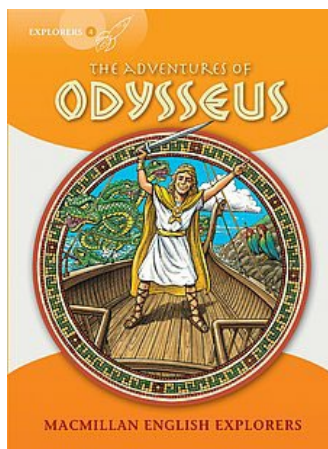


Figure 2.47. The Explorer - Odysseus

Source: <https://www.macmillanenglish.com/id/catalogue/graded-readers/macmillan-english-explorers/explorers-4-the-adventures-of-odysseus>

- The Explorer: A person that is inherently motivated to push limits and discover what comes next. Their positive traits include curiosity, drive, and a desire to better themselves. They are weak because they are fidgety, untrustworthy, and insatiably hungry.



Figure 2.48. The Sage – Obi-Wan Kenobi

Source: <https://www.hipwee.com/hiburan/fakta-star-wars/>

- The Sage: A knowledgeable someone who can answer questions and give information. The sage possesses wisdom, experience, and insight on its own. The sage's excessive caution and reluctance to fully engage in the activity could be a weakness.



Figure 2.49. The Innocent – Lennie Small

Source: <https://www.listal.com/character/lennie-small>

- The Innocent: A person of moral purity, frequently a youngster, with only good intentions. Their virtues include morality, kindness, and sincerity. Their

vulnerability, ignorance, and lack of training are the beginnings of their shortcomings.



Figure 2.50. The Creator - Zeus

Source: <https://www.deviantart.com/genzoman/art/Zeus-105217778>

- The Creator: A driven visionary who produces works of art or structures throughout the story. Their abilities are creative, strong-willed, and convinced. Their shortcomings include a focus on themselves, rigidity, and a lack of practical knowledge.



Figure 2.51. The Ruler – King Lear

Source: https://en.wikipedia.org/wiki/King_Lear

- The Ruler: An individual with authority over others, either legally or emotionally. The omnipotence, prestige, and wealth of the king are among its advantages. Their shortcomings include being distant, being despised by others, and constantly coming off as disconnected.



Figure 2.52. The Caregiver – Samwell Tarly

Source: <https://www.makinggameofthrones.com/production-diary/john-bradleys-samwell-tarly-is-in-the-business-of-saving-the-world>

- The Caregiver: A persona that constantly stands up for others and gives of themselves in their interests. Caregiver virtues include being honorable, charitable, and devoted. They lack leadership and personal ambition, which is one of their disadvantages.



Figure 2.53. The Everyman – Bilbo Baggins

Source: https://en.wikipedia.org/wiki/Bilbo_Baggins

- The Everyman: A personable fellow who seems familiar from everyday life. They have a solid foundation, are down to earth, and are relatable. They often lack specific abilities and are frequently unprepared for what is to come, which are their shortcomings.



Figure 2.54. The Jester - Sir John Falstaff

Source: https://en.wikipedia.org/wiki/John_Falstaff

- The Jester: A deliberately comical character who provides comic relief and occasionally imparts moral lessons. Among one's strengths is the ability to be funny, charming, and insightful. Their capacity for rudeness and superficiality is one of their flaws.

“Writing 101: Guide to Direct and Indirect Characterization”, written by MasterClass (2021), noted that authors employ characterization as a literary device to make characters come to life. Writing a novel or short tale requires strong character development because it helps the reader comprehend the many personalities and points of view of the characters and how they might move the plot forward. A character's appearance, point of view, demeanor, innermost thoughts, and actions are all described in

terms of their characterization. There are two types of characterization in fiction writing: direct characterization and indirect characterization. Together, the two characterizations paint the reader with a whole picture of the characters. Take into consideration that characters, like individuals, have flaws. They must be fascinating even if they are not particularly likeable. Understanding the distinction between direct and indirect characterization can help writers choose which is more suitable for their work.

- Indirect characterization describes a character through their thoughts, actions, speech, and dialogue.
- Direct characterization, or explicit characterization, describes the character through their physical description, line of work, or passions and pursuits.

A writer can give their characters personality features through a variety of methods. For readers to form an accurate opinion of the character, they must accurately interpret the content. Readers can develop accurate understandings of the traits of characters in stories by correctly analyzing the characterization techniques used by an author. A character's personality plays a significant role in the conflicts in a novel, so it is crucial to have a solid understanding of them. Readers can better comprehend the reasons behind how the story develops and why the character's predicament is so challenging by studying these characteristics. Among the resources of “Literary Elements Characterization” offered by Bacon (n.d.) are the following:

- Character’s Name—Names evoke images. Readers have a more positive impression of a character who has a strong name. On the contrary, readers are less likely to like a character who has a poor or unfavorable name since it makes the character appear weak.
- Character’s Looks—Readers will have a more positive impression of a character if they are physically appealing than if they are not. How frequently do people recall a story's hero being short, frail, unattractive, or overweight? To have a protagonist like that would be rare.
- Character’s Job—Readers infer something about characters from the work they do. The readers will have different preconceptions of a character if they work

as a fry cook at a diner as opposed to a neurosurgeon. In the first instance, the character can be seen as illiterate, underprivileged, or unambitious. In the other scenario, it might be assumed that the character is highly intelligent, prosperous, and ambitious.

- Character's Home—Readers could make conclusions about a character based on the setting in which they dwell. For instance, if a character lived in a highrise apartment in a high-rent area rather than a mobile home in a trailer park, people may assume different things about them.
- Character's Habits/Actions—The actions of a character can reveal a great deal about them. For instance, if a character bites his nails, we may assume that he or she feels uneasy or insecure. The phrase "Actions speak louder than words" comes to mind.
- Character's Dialog—Readers can learn a lot about a character through what they say to or about other people. It's important to take into account both the characters' actual words and their delivery.
- Character's Thoughts—Much like language, a character's inner thoughts can show their nature. Thoughts are like an interior dialogue for a character.

2.1.17 Audio

From ancient Greece, philosophers have been interested in how music affects our emotional state. Music has been referred to as the "language of feelings" and its impact on human emotional state. Its rapid spread in our daily lives demonstrates its remarkable capacity to access our emotions, which is plainly noticeable to everybody. It can make people feel happy while watching a live orchestra play a beautiful classical piece, frustrated while waiting in line at the grocery store, elated while dancing to their favorite song in a club, or upset while playing a horror game. All media uses music's ability to evoke emotions and even as a type of therapy to treat the symptoms of a variety of mental diseases, including schizophrenia, autism, and ADHD. A key component of making music is emotion, and many musicians start out as musicians in part as a result of their emotional experiences. The game experience is tied to an emotional journey, much like how one

links past events with feelings. According to Smith (2020), music is a fundamental tool for enhancing the player experience because it is a powerful emotional conveyer.

Sounds serve a variety of communicative purposes, according to Shanahan (n.d.). They are capable of communicating both literal and figurative information. Literal sounds have a specific meaning that points the listener toward the source of the sound. Hearing footsteps, for instance, alerts the listener to a person moving—either walking or running. The literal sound is referred to as source-connected or diegetic sound when viewers can see or hear the source of the sound, such as footsteps or a character speaking. In contrast, nonliteral sound is source-disconnected sound or nondiegetic sound, which means the viewer cannot perceive the source of the sound and is not made aware of it. As the speaker cannot be seen, voiceovers and narrations are examples of detached sources. Nonliteral sounds also include music and sound effects that are used to elicit feelings, images, and abstractions. In addition to providing information, sounds can also be used for aesthetic reasons by evoking strong emotions in listeners, setting a mood, and expressing emotion. Sound can be used as a tool to attract, concentrate, focus, and sustain viewers' interest over time, which will increase their degree of involvement with the multimedia or film. Also, sound can help viewers understand how various bits of information are related to one another and can communicate details like the scene and the atmosphere.

In the article "Audio Influence on Game Atmosphere during Various Game Events," Anderson, Danny, King, and Gunawan (2021) described how audio is a crucial component of every aspect of our lives, including video games. This is known as game audio. Video game audio now includes a wide range of components and has grown in popularity. Game audio can be regarded as the practice of creating and arranging sounds for interactive or video games. A game's audio is made up of a number of different components that work together to form a whole in terms of sound. The audio in video games goes beyond the music. The audio in video games is composed of a wide variety of components. There are three categories of game audio, including background music, ambient noises, and sound effects.

- Video games often have background music playing in the background. Instruments or digital tools are typically used to generate it. There are always built-in music tracks to produce background music when people utilize the video creation applications.
- Ambience sounds, such those from airport, harbor, highway, or other surroundings, are typically shorter than background music. In video games, ambient sounds are typically inserted into certain and noteworthy scenes. These noises are typically not produced with instruments, but rather by taking a recording of the local natural sounds.
- Sound effects are brief, focused audio snippets that are inserted into a brief scenario. Examples include the beep of a computer, the sound of footsteps, the crow of a rooster, and many more sounds. These noises are typically connected to what characters are doing in a scenario.

2.1.18 Visual

The field of computer graphics is broad and diverse, overlapping the domains of design and computer science. From creating digital three-dimensional models to texturing, rendering, and lighting those models to digitally showing those renderings on a screen, every stage of the creation of computer-generated imagery excites it (What is computer graphics? n.d.). There has been widespread use of computers in all spheres of life. The social economy is currently being driven forward by the ongoing development and advancement of computers, and the development trajectory of computer technology is expanding. Using computer software to facilitate people's work can significantly increase work efficiency, decrease working hours, and optimize workflow. Designers can use computers to create graphics images more conveniently while also displaying their exquisite and one-of-a-kind originality through computer graphics image design. The techniques for designing computer graphics images need to be updated and enhanced further for the social context of the information era. When creating items, many designers will use various concepts and design ideas. Software for creating computer graphics

images can be utilized to help with the design, which is advantageous for displaying the designer's original thoughts clearly. Software for creating computer graphics images can overcome the constraints of traditional manual design, which is advantageous for designers looking to market and create goods. By using a variety of design techniques, products can be displayed in a way that enhances their decorative and marketing effects (Bowen and Hua, 2021).

Computer graphics come in a variety of forms, and each is used in a particular specialty, according to the article "Computer graphics: History, types, and principles of operation (2022)". For instance, the majority of games today use three-dimensional graphics, whereas the majority of visuals use two-dimensional images. Computer graphics come in a variety of forms, and for each of these forms:

- A "2D graphic" is a digital, computer-generated image that is commonly created from two-dimensional models utilizing techniques outlined in these models. The main applications for these 2D graphics include programs that were first developed for printing and drawing abilities, such as typography, cartography, industrial drawing, advertising, and more. In certain systems, the visuals function as a useful standalone product in addition to being a representation of reality. These images enable the picture greater immediate control, which is why they are preferred over 3D graphics in previous versions.
- 3D graphics, as opposed to 2D graphics, are a subset of computer graphics that use a three-dimensional representation of the technical data contained in a computer to do calculations and display 2D images.
- Computer animation is the process of using a computer to create stereoscopic images. It is a subset of computer graphics and animation. Yet a visually pleasing display is still possible with machines of medium power. The final output of computer graphics can be used on media such as movies or on electrical devices such as computers. Another name for the technique is computer-generated imagery, or CGI.

According to Kumar (2022), a background is a component of any artwork that is usually situated behind or surrounding the subject. It might be very simple or very complex and sophisticated, but it always offers a meaningful connection and context between the subject and the right environment. The background of the artwork can offer depth, perspective, distance, and visual curiosity in addition to helping to set the mood. In art, backgrounds are important for a number of reasons. They can add to the foreground, highlight the focal point, define the contour of the items in the painting, provide a sense of place for the spectator, and set the mood of the image. Backgrounds can also be used to tell a tale or convey a message. The region that surrounds the focal point in a design, supports it, and elevates it is referred to as the background. The design's background may incorporate artistic components including color, texture, pattern, and light. The region surrounding the subject in the drawing that conveys a sense of space and perspective is referred to as the background. In the drawing, the background is made up of lines, shapes, colors, and textures. There are many various background options, including abstract, interiors, exteriors, cityscapes, and interiors. Each sort of background has distinct qualities that can give the artwork a certain effect.

A character sprite, according to Wirtz (n.d.), is a straightforward 2D video game visual that is included into a larger setting. Daniel Hillis first used the phrase in the 1970s. Sprites appeared to float around because they moved separately from the bitmap, mimicking the alleged behavior of ghosts known as "sprites." These are 2D bitmaps that are a part of the game's general world and can travel apart from it. Apart from the game's environment, sprites move across the screen. People, animals, and even particle effects like explosions and more can all be animated separately from their surroundings. Several different spirit images are displayed in a grid arrangement on sprite sheets. Often, they list every angle from which a sprite can be seen, along with the various things they are capable of. This gives the user everything they need to make their own video games and fictional characters.

According to Deguzman (2021), character design in the visual arts is the comprehensive creation of a character's aesthetic, personality, conduct, and overall visual look. Characters are created by character designers to serve as storytelling tools. This

implies that each element of a character, such as its shapes, color schemes, and specifics, is selected for a reason. Character designers frequently base a character's physical characteristics on the specifics of their personality. An artist can design compelling characters by using ideas from psychology, shape language, color theory, and other fields. The key to a good character design is clarity. This calls for not only having an engaging design but also one that stands out regardless of how we see the character. The three elements of effective character design are silhouette, color scheme, and exaggeration. The driving force behind animated films, television shows, and video games is narrative. Character is what drives stories as well. As a result, engaging, visually interesting, and memorable characters are goals of character design.

Famous illustrator Jon Burgerman provides 20 top character design tips, according to the journal article "Character Design in Games Analysis of Character Design Theory" by Kuntjara and Almanfaluthi (2021). He explains that developing good character design can be challenging and that there are numerous issues that must be tackled. Prominent characters in cartoons, films, and advertisements frequently have unremarkable appearances. Nonetheless, it takes time and work to design figures that appear straightforward. Designers constantly strive to keep a character's simplicity simple so that the intended market remembers it for a long period. The following are Burgerman's 20 character design tips:

- | | | | |
|--|-------------------------------------|--|---|
| 1. Decide who it's aimed at | 6. Use exaggerated characteristics | 11. Focus on facial expression | 16. Swap mouse for pen |
| 2. Decide where it will appear | 7. Choose colors carefully | 12. Give your character goals and dreams | 17. Get feedback from others |
| 3. Research other designs | 8. Add accessories | 13. Build up a back story | 18. Hone, plan and polish your design |
| 4. Make your character distinctive | 9. 2D or 3D? | 14. Experiment! | 19. Create the right environment for your character |
| 5. Use line qualities and style to describe your character | 10. Give your character personality | 15. Make your character design flexible | 20. Fine-tune your figure. |

Figure 2.55. Jon Burgerman's 20 Character Design Tips

Source: Made with Adobe Illustrator

These 20 tips concentrate on the objective of character design. If a character is not created with a purpose, it will have no meaning. A game's entire plot, conflict, obstacles, and

atmosphere will be resolved if the main characters have an objective that players must accomplish on each level. The game's attraction in the eyes of the players will be aided by the elements.

2.1.19 User Interface

Interaction Design Foundation (n.d.) mentioned user interface (UI) design is the process that designers use to build user interfaces in software or electronic devices with an emphasis on style or aesthetics. The goal of designers is to create interfaces that are fun and easy to use. "UI design" refers to both graphical and other types of user interfaces, including voice-controlled interfaces. User interfaces are the points of access that allow users to interact with designs. Three forms are available for them:

1. Graphical user interfaces (GUIs): On digital control panels, users interact with visual representations. The desktop of a computer is a GUI.
2. Voice-controlled interfaces (VUIs): These allow users to communicate with each other vocally. Many smart assistants, like Alexa on Amazon devices and Siri on iPhones, are voice user interfaces (VUIs).
3. Gesture-based interfaces: These allow users to interact with 3D design areas using their bodies, such as in virtual reality (VR) games.

UI design, sometimes mistaken for UX design, is primarily concerned with a design's look and overall feel. One essential part of the user experience that you, as the designer, construct with UI design. The scope of UX design encompasses the entire user experience. Consider UX design as the actual car, and UI design as the dashboard of an automobile. Interaction Design Foundation (n.d.) states that designers ought to consider:

- People quickly form opinions on designs and consider factors like usefulness and likeability. Aesthetics is not as important to them as finishing their work fast and well. Therefore, the design need to be "invisible"; users should instead focus on completing tasks, such as ordering pizza via the Domino's Zero Click app. Therefore, designers should comprehend user contexts and job flows in

order to create the best, most intuitive user interfaces that provide seamless experiences which they can learn from, for example, customer journey maps.

- User interfaces should be enjoyable, or at the absolute least, satisfying and unfrustrating. When the design considers the demands of the user, more personalized and immersive experiences may be had by them. If designers satisfy them, they will return. Gamification elements can provide entertainment value to design when used appropriately.
- Interfaces for users should inspire confidence in the company. Emotional design is good design. Customers are more likely to feel positively about brands that speak to them on all levels and preserve the magic of seamless, pleasurable interactions.

According to Sridevi (2014), the user interface of a computer-based system or product is perhaps the most important part. A badly designed interface can significantly limit the user's ability to utilize the computing power of an application. Indeed, an application that is otherwise well-designed and well-implemented may become ineffective due to a poor interface. Three fundamental ideas inform the design of effective user interfaces: reduce user memory load, maintain interface consistency, and place the user in charge. To construct an interface that satisfies these requirements, a systematic design process must be followed. Prior to creating the user interface, the needs of the user, the task, and the environment are determined. Task analysis is a design approach that defines user tasks and activities using an elaborative or object-oriented technique. After tasks are identified, a set of user scenarios are created and reviewed to identify a set of actions and interface elements. This provides the basis for designing screen layouts that display graphical design and icon placement, defining screen text for descriptive purposes, specifying window titles, and specifying major and minor menu items.

The Journal,” A Study on Understanding of UI and UX, and Understanding of Design According to User Interface Change”, made by Joo (2017) explained that in interfaces, the notions of design and interaction are intimately intertwined. Interface design is crucial when graphical connections are made between system functions. The UX

interface is affected by the system's, content's, and services' utility as well as the value and affinity of the user. The trend design elements in this journal are written in light of the recent UI/UX modifications:

1. Evolution of Minimal Design - The usage of minimalist layouts and a focus on simplicity are still prevalent in designs in 2017. The interface is provided through straightforward visual communication in minimalist design, which puts the user's content first and the user interface second.
2. Increase in Micro Interaction - On the Internet, micro contact was addressed in 2016, and it is anticipated that the trend will continue in 2017. A crucial part of UX design is the implementation of micro interactions, which are typically delicate animations. Particularly each time a user uses an app, millions of micro-interactions will raise the importance of mobile devices.
3. Moving Pictures Become Popular - On the Internet, micro contact was addressed in 2016, and it is anticipated that the trend will continue in 2017. A crucial part of UX design is the implementation of micro interactions, which are typically delicate animations. Thousands of these interactions occur every time a user uses a mobile app, which increases the importance of mobile devices.
4. Rich color and sensuous typography - User interfaces often feature vibrant color and tone. The use of vibrant colors for the UI is also anticipated to make it appear livelier. As a result, the UI is expressed typographically using duotones, crisper color palettes, and vibrant gradient colors.
5. Long scrolling and parallax technique websites - Website users also anticipate long scrolling or limitless scrolling as a standard. Moreover, mobile devices employ greater scrolling on tiny screens in combination with touch control methods.

According to the journal "A Study on Knowledge of UI and UX, and Understanding of Design According to User Interface Change", made by Joo (2017), The UX framework was broken down into five segments by Jesse James Garrett: Strategy, Scope, Structure, Skeleton, and Surface. The segments were created layer by layer starting

from the strategy of determining the user's purpose with the UX interface and ending with the cognitive and sensory features that drive user behavior to the surface. Demands are now the most important factor in UI/UX design interfaces. When a designer presents a plan of action, it starts with empathy. The purpose of this is to understand the customers. Defining the goal as a project or business requires defining the problem in the second phase. The following stage, ideation, is identifying concepts and solutions. As a prototype step, the following step entails developing a UI/UX for the concept or solution that was offered in the previous step. As a last phase, assess the UI/UX and make any necessary decisions.

2.2. Literature Review

According to the news article, Inilah Konten yang Paling Dicari Gen Z, Coba Tebak! by Nurulia (2022), Gen Z, born between 1997 and 2012, has qualities that set it apart from earlier generations. Gen Z grew up in a time of fast change in technology and culture. In fact, the eldest members of Gen Z have developed a strong bond with digital technology as a useful part of daily life. To learn more about Gen Z in Indonesia, IDN study Institute and Populix performed study. Their use of media and interests in particular themes are one of the prominent features. The Indonesia Millennials and Gen Z Summit (IMGS) 2022, which took place at The Tribrata in Jakarta on September 29–30, 2022, coincided with the publication of the Indonesia Gen Z Report 2022, which contained these findings.

The survey indicates that, as opposed to hard news, leisure and lifestyle material is what Gen Z readers of digital media sites are most interested in. It's not that Gen Z dislikes news and political information; rather, elder Gen Z (24%) outnumbers younger Gen Z (14%) in terms of percentages. The medium socioeconomic class, rather than the upper middle and lower middle socioeconomic categories, is where most newsreaders are found in all socioeconomic classes. The following is a list of the stuff that Gen Z prefers:

- News and politics: 20 percent.
- Entertainment: 18 percent.

- Exercise: 11 percent.
- Education: 8 percent.
- Music: 8 percent.

The survey also discovered gender differences in terms of choosing content, including a significant gap between Gen Z males and women's intake of digital media. Women are more likely to be interested in news stories about food and cooking, fashion, travel, education, and general entertainment. Men, meanwhile, are more interested in content connected to music, sports, technology, and automobiles. Here is a list of what Gen Z prefers by gender, broken down by survey results (Nurulia, 2022).

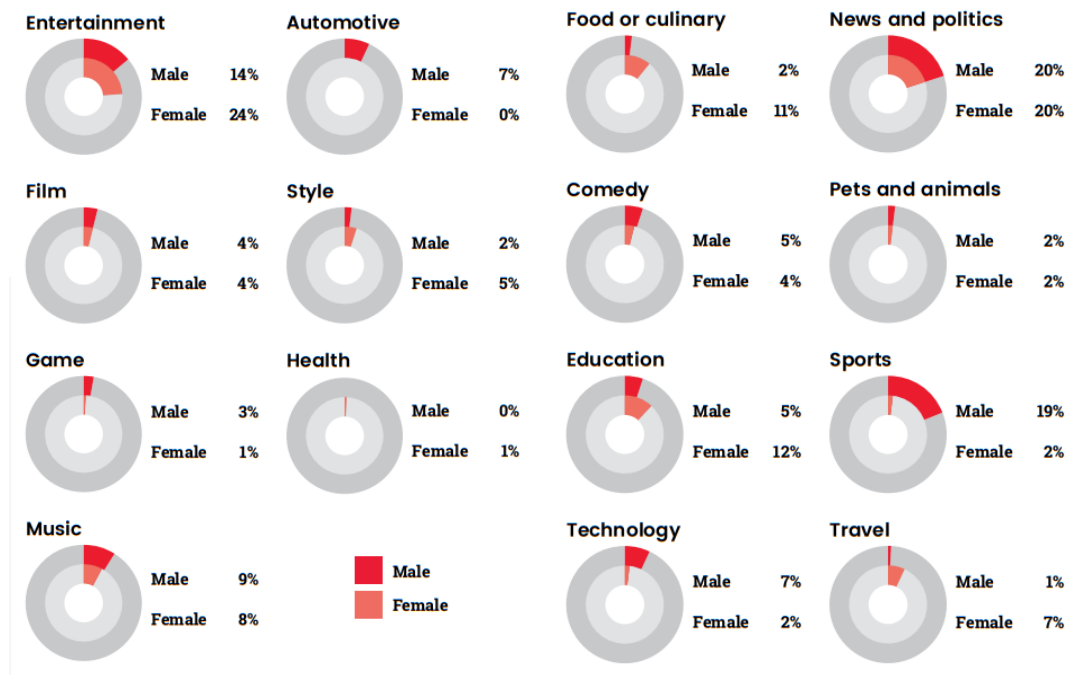


Figure 2.56. Survey Graph of Gen Z's favorite content by gender

Source: <https://www.idntimes.com/news/indonesia/nurulia-r-fitri/inilah-konten-yang-paling-dicari-gen-z-coba-tebak?page=all>

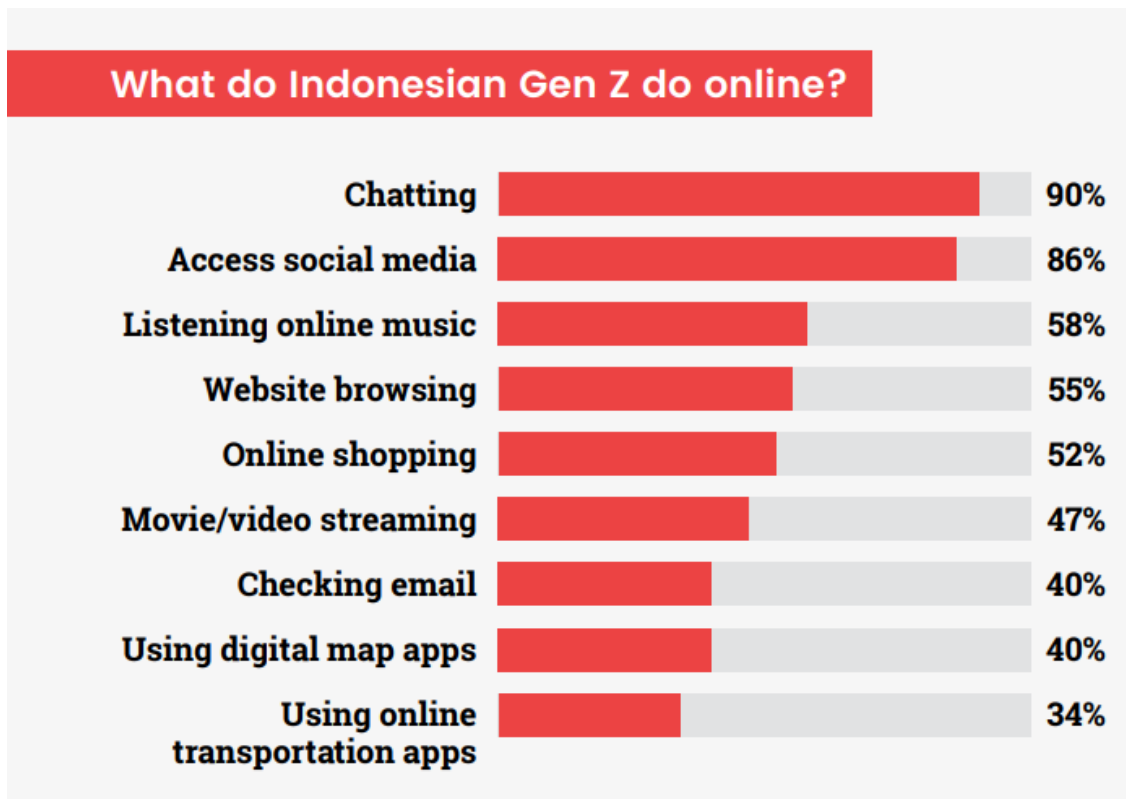


Figure 2.57. Survey Graph of Gen Z's online activity

Source: <https://www.idntimes.com/news/indonesia/nurulia-r-fitri/inilah-konten-yang-paling-dicari-gen-z-coba-tebak?page=all>

The two most popular internet activities for Indonesia's Gen Z generation are chatting and social media. Gen Z now uses messaging apps instead of SMS to communicate, with Whatsapp being the most popular (used by 99 percent of Gen Z), followed by Facebook Messenger (44 percent), and Telegram (44 percent). Despite being dominant in their native countries, the poll also revealed that just 10% of Gen Z, particularly older Gen Z, utilize the messaging apps LINE and WeChat (Nurulia, 2022).

**Telkomsel remains the top provider for Gen Z.
Post-paid services are only used by a minority
(4%) of Gen Z.**

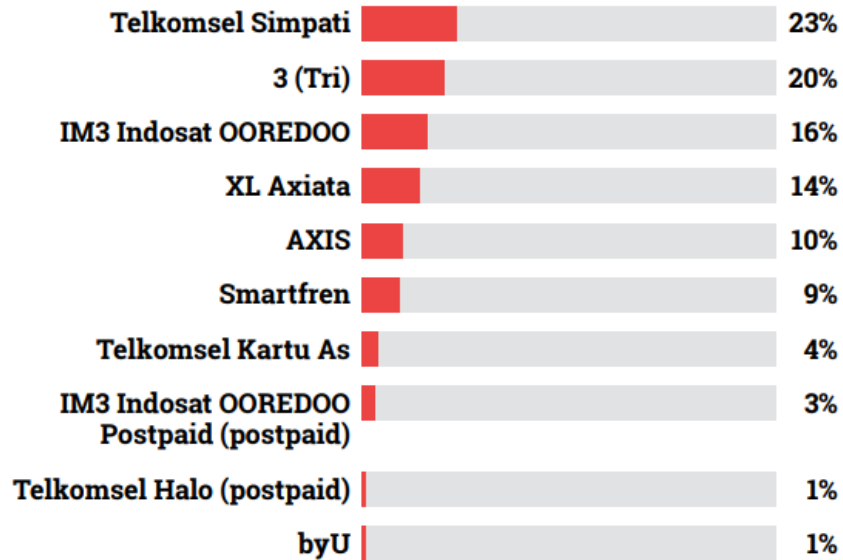


Figure 2.58. Survey Graph of Gen Z's preferred internet provider

Source: <https://www.idntimes.com/news/indonesia/nurulia-r-fitri/inilah-konten-yang-paling-dicari-gen-z-coba-tebak?page=all>

The results of the poll show that up to 99 percent of people use cellphones to access the internet. Only 18% of people use laptops or other similar devices to access the internet. According to information from We Are Social and Hootsuite: Digital 2021 Indonesia, there were 202.6 million internet users in Indonesia in 2021, representing 74 percent of the country's population. Mobile internet users accounted for 195.3 million of those users. Choosing the correct provider is essential because Gen Z in the country relies on mobile devices for their digital activities. Due to convenience or brand loyalty, 76% of Gen Z members claim they don't want to switch service providers (Nurulia, 2022). This may be a result of some service providers' patchy coverage in some areas.

Tick tick scroll! Indonesian Gen Z and daily social media use

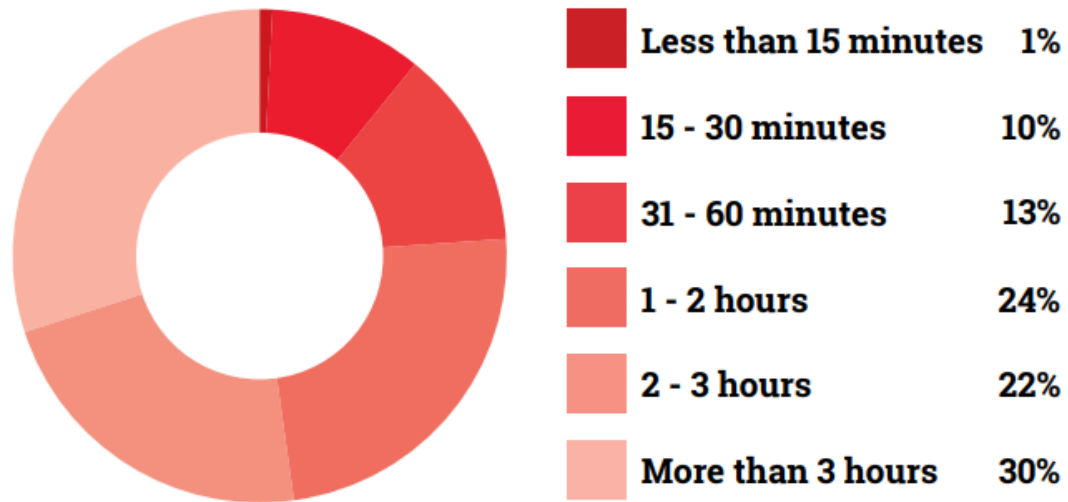


Figure 2.59. Survey Graph of Gen Z's use of social media

Source: <https://www.idntimes.com/news/indonesia/nurulia-r-fitri/inilah-konten-yang-paling-dicari-gen-z-coba-tebak?page=all>

It turns out that the majority of Gen Z users of social networking apps spend more than an hour daily, with more than a quarter reporting daily usage of more than three hours. Given that Indonesia is still enforcing limitations, even though they are currently more lax, this number may rise during a pandemic (Nurulia, 2022).

Interactive media had also helped to improve education and make it more worthwhile. Bartrum (n.d.) noted that the possibility to construct an interactive classroom is becoming simpler than ever thanks to new educational technology tools being developed every day. Before everyone sees things like individual tablets on each student's desk or interactive whiteboards in every classroom, it may still be some time. However, more and more schools are implementing interactive technology to transform how their students learn because it will allow for greater flexibility in teaching strategies, more

engaged students, improved communication skills, the ability to provide additional resources for quick learners, and an improvement in students' technological knowledge and abilities. Bartrum (n.d.) added that while investing in interactive technology is crucial, it should not be hurried and should be customized for each educational provider. The precise benefits of interactive technology for their own pupils and teachers must be determined by decision-makers. This article just provides a broad overview of how new technologies may affect schooling in the future. It is up to individual schools to take control of their own destinies and alter how their kids are taught.

Games and visual novels have been used in research and problem-solving. Video games offer a way to enhance a person's cognitive talents, claims the research paper *Using Video Games to Improve Capabilities in Decision Making and Cognitive Skill: A Literature Review* by Reynaldo, Christian, Hosea, and Gunawan (2021). Numerous cognitive subcategories are impacted by different gaming genres. This paper aims to investigate whether playing video games can improve cognitive skills and decision-making, as well as which kinds of games influence different cognitive functions. The authors assess past studies on the relationship between cognitive abilities and video games. The article looked at 27 experimental and literature reviews. The review's conclusions showed that video games do improve judgment and cognitive capacities. Respondents' cognitive skills, including perception, attentional control, and decision-making, increased after receiving video game training. In terms of cognitive flexibility, real-time strategy (RTS) players outperform first-person shooter (FPS) players; nevertheless, FPS players usually have lower switching costs at work. Healthcare personnel, such as nurses and doctors, showed improved risk assessment and decision-making when taught with realistic simulation games. Students in high school and college who played video games fared better on cognitive ability tests than their non-playing peers.

Reynaldo, Christian, Hosea, and Gunawan (2021) also brought up the possibility that playing video games can affect our intelligence. We are always looking for amusement these days, and even the average individual who is not a serious gamer enjoys playing casual video games. Nevertheless, they are often played on smaller platforms like as

smartphones. There are several talents that this exercise might improve on. Playing video games compels individuals to acquire new abilities in a way. People who play games can improve their decision-making, reasoning, and time management skills. Through actions and puzzles that require quick thinking and problem-solving, video games have the ability to train a person's brain, improving their cognitive, time-management, and problem-solving abilities. Video games do, however, offer advantages and cons of their own, just like everything else. Despite the fact that they can instruct us in novel ways, game addiction is harmful. A poor habit of playing video games for extended periods of time is neglecting one's responsibilities. While playing video games can help us improve our brains, the best results come through controlled training. Based on the studies, it is recommended that future study create a video game that a teacher can control to enhance students' cognitive development. By purposefully creating this objective, students can enhance their cognitive abilities by participation in supervised gaming activities.

While there have been many great reviews and meta-analyses looking at the impact of video game trainings as methods to improve wellbeing, most of them have focused on the impacts of digital games on children's cognitive decline or brain plasticity, according to the article *Video Games for Well-Being: A Systematic Review on the Application of Computer Games for Cognitive and Emotional Training in the Adult Population* by Pallavicini, Ferrari, and Mantovani (2018). On the other hand, there is just one meta-analysis that looks at the adult population, and it only looks at how training with action video games impacts the cognitive capacities of healthy persons. Finding scientific information about how playing video games affects healthy adult populations' emotional and cognitive abilities—such as processing and reaction times (RTs), memory, task-switching/multitasking, and mental spatial rotation—was the aim of this systematic review. A multi-component analysis of variables related to the study, the video games, and the training outcomes was conducted based on important previous research. The databases used in the search were PsycINFO, PubMed, Scopus, and Web of Science (Web of Knowledge). After fulfilling the inclusion criteria, 35 studies were added and further divided into the different analytic variables. The majority of the studies that could be found employed video games that were purchased, with action games being the most commonly used and puzzle games coming in second. The effect sizes of training with

video games on cognitive skills were generally between 0.06 and 3.43: for processing and RTs, from 0.141 to 3.43; for memory, from 0.06 to 1.82; for task switching/multitasking, from 0.54 to 1.91; and for mental spatial rotation, from 0.3 to 3.2. The effect sizes of training with video games on emotional skills were between 0.201 and 3.01. Overall, studies indicate that playing video games can enhance the emotional and cognitive functioning of participants, especially young adults in good health. The efficacy of commercial brain-training programs and video games, both non-commercial and commercial, has been demonstrated.

According to Schrier (2016), knowledge games have the potential to be very effective because they may inspire a large group of problem solvers inside a dynamic system while also utilizing the creative data processing and computing capabilities of games. It's common knowledge that video games contribute to social issues, but what if this were not the case? Karen Schrier tackles this question in her book *Knowledge Games*, which looks at the benefits and drawbacks of using games to learn new ideas, solve real-world issues, and get a better grasp of the cosmos. For example, scholars are already using so-called knowledge games to obtain insights in psychology, science, and humanities. Examples include the protein-folding puzzle game *Foldit*, the crowdsourcing bullying intervention platform *SchoolLife*, and the mobile game *Reverse the Odds*, which allows users to examine breast cancer statistics. According to Schrier, knowledge games may be developed in the near future to comprehend and foretell, among other things, voting behavior, concerns about the environment, historical viewpoints, online harassment, depression susceptibility, or the best advertising tactics.

According to Pratama, Gunarti, and Akbar's (2017) case study *Understanding Visual Novel as Artwork of Visual Communication Design*, a visual novel is a type of audiovisual game that provides visual strength through the narrative and visual characters. The Visual Novel (VN) Project Indonesia developer community identified a small local game developer that creates visual novels in Indonesia. The production of visual novels in Indonesia was also more affected by Japanese anime or manga than other influences. Because they combine graphic design expertise with the creation of visual characters, visual tales, and the development of an interactive narrative using audiovisual media,

visual novels can be regarded as works of visual communication design. Line, shape, field, color, texture, texture, space, and motion are just a few of the artistic and design components that are combined in visual novels to create games that are visually appealing. In order to achieve visual dominance, which will serve as the focal point, the unification of the entire element must still adhere to the principles of art and design, such as harmony, balance, contrast arrangement, and harmony as the essential proportions. Because it invites players to read a story with multiple "endings," full of mystery, sound effects, and vibrant pictures, the story's strength in visual novels also serves as their key draw. The decisions made by the visual characters' actions, reactions, and speech lead to a number of nonlinear experiences. The presentation of the story arc is typically more accurate and fictitious in visual novels with historical backdrops. The names of historical persons and facts are actually left alone, but the insertion of new characters to the plot can be regarded as fiction. This study has effectively demonstrated that poor local designers' or creators' knowledge, comprehension, and experience levels might contribute to the constraints of visual novel production in Indonesia. Visual novels have the potential to be products in the creative industries as visual communication design artwork. There is still a need to comprehend design principles and have the ability to incorporate sign structure inside visual novels, as evidenced by a case study of visual communication design students at Indraprasta University PGRI Jakarta that demonstrates the level of knowledge, comprehension, and experience on visual novel games is still below 50%. Students can begin to develop the development of visual novel artwork with a deeper understanding of the visual novel through an understanding of sign structure. This study can serve as a scientific resource for local producers, students studying visual communication design, and the community of people who like playing interactive games using audiovisual media. Additionally, it is anticipated that this study would promote the development of visual novels that reflect Indonesian cultural ideals.