

# CHAPTER 1

## INTRODUCTION

### 1.1 Background

Ever since the handheld or mobile phone was invented by John F. Mitchell and Martin Cooper back in 1973, the world view to mobile phone and internet development has been completely different. The existence of mobile phones and internet changed the technology evolution in many ways. Now, users of mobile phones and mobile apps can enjoy interacting with friends and relatives, online shopping and even booking taxi (Meadows, 2017). Example of mobile apps that support daily activities in 2017 are mobile banking, online shopping, online payment system, social networking sites, and etc.

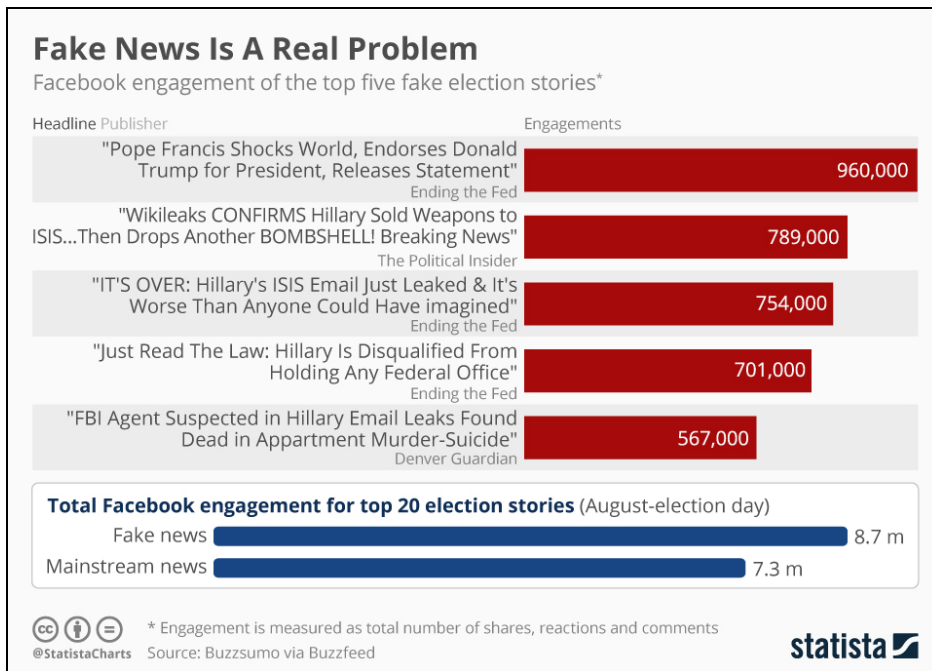
According to (Kaplan & Haenlein, 2010), there are six types of social media according to its social presence/media richness and self-presentation/self-disclosure. The six types of social media and examples are: Blogs (personal and fashion blog), Collaborative Projects (Wikipedia), Social Networking Sites (Facebook), Content Communities (YouTube), Virtual Social Worlds (Second Life), and Virtual Game Worlds (World of Warcraft).

Since “the higher the social presence, the larger the social influence that the communication partners have on each other’s behavior” (Kaplan & Haenlein, 2010; Short, Williams, & Christie, 1976), in the social media world users have more freedom to create and share their opinion to influence others without getting ruled. Ironically saying, lately, social media has ended up hurting our democracies for the very reason it was once greeted with enthusiasm: because anyone can create a blog, post a YouTube video or send out a tweet, established media outlets no longer have a lock on creating or distributing the news (Samuel, 2017).

Users of social media, according to the theory of self-presentation and self-disclosure aim themselves to influence others to gain reward and to create an image to reach certain personal identity in the media presence (Kaplan & Haenlein, 2010; Schau & Gilly, 2003). In brief, that seemed like a great and powerful thing, but it’s also the social media has become the overwhelming distribution network for fake news and other

forms of misinformation regarding to the freedom of opinion and accessibility to self-presence.

Article entitled “Fake News Is A Real Problem” by Martin Armstrong states that, Fake news has been hitting the genuine headlines since the US election. From August until the election day, fake news stories had more engagement on Facebook than mainstream stories did (see Figure 1.2). The most 'popular' story falsely stated that Pope Francis had endorsed Donald Trump for the presidency - receiving almost one million engagements (shares, reactions and comments). This situation raised questions about whether fake news articles passed around on the site could have influenced the US presidential election results.



**Figure 1.1 Top Five Fake Election Stories**

(Source: Armstrong, M. 17 November (2016). Fake News is a Real Problem. (Online). Accessed on 15 May 2017 from <https://www.statista.com>)

In order to solve this false information/hoax problem on social media, it is important to understand variety of hoax and the motivation behind posting falsified information. One of the main motivations why there are fake news on social media is

that it is one of the easiest way to build traffic and generate revenue through their platform. Publishers have been under immense pressure to generate views, and have taken shortcuts in content creation to do this. Hyper partisan viewpoints that confirm existing biases and sensational clickbait headlines have been one easy way to build traffic, and it seems that getting a story out first has become more important than verifying its validity (Jeff Desjardins, 2017). Authors realized how common those situations are and therefore decide to develop a platform to address the issues.

Gooru is an android-based application in the form of social networking media that provide a platform for posting content (text and image) in the form of basic post and Q&A post to discuss topics ranged from general to specific knowledge, including art, technology, and politics, etc. The apps will embrace its user to think smart and support a better digital media literacy especially in differentiate between false and real information, and how to debunk false information.

User has the facility to report Hoax or untrue post and answer to avoid the spread of false information in the society. Moreover, to motivate users on generating useful and high quality User Generated Contents (UGC), authors decide to apply gamification concept to Gooru. A collection of research on gamification shows that a majority of studies on gamification intended to leverage people's natural desires for socializing, learning, mastery, competition, achievement, status, self-expression, altruism, or closure (Lieberoth, 2015).

Early gamification strategies use rewards for players who accomplish desired tasks or competition to engage players. Types of rewards include points, achievement badges or levels, the filling of a progress bar, or providing the user with virtual currency. Making the rewards for accomplishing tasks visible to other players or providing leaderboard are ways of encouraging players to compete. These concepts are applied to Gooru by using points and levels method from gamification to encourage users to participate and generate UGC with useful content quality.

Gooru is made as an android application. According to International Data Corporation (IDC), Android dominated the smartphone market with a share of 86.8% of global smartphone user. By doing so, authors hope that Gooru can reach a more

common market among user and be an application that is widely known as a platform that is useful and support a better digital media literacy towards hoax.

## **1.2 Problem Definition**

From the background mentioned above, we found some key problem to be solved. Results from this research is expected to answer the following questions:

1. How to develop a social media that support media literacy to differentiate fake and real news or information?
2. How to apply gamification concept into social media platform that would encourage users to generate UGC with useful and high content quality?

## **1.3 Objectives and Benefits**

### **1.3.1 Objectives**

- Provide specific tag features for false information or hoax posts to support better digital media literation.
- Provide a social networking media platform with reliable content using gamification concept. With gamification, also encourage and inspire people to share and exchange their knowledge, using interesting and unique approach.
- Using gamification concept to implement “reward & punish” system to avoid fake and false news.
- Providing moderation function, to ensure good and high quality content in the application with quality control over UGC.
- Verified account feature for user authentication to prevent fake and spam user account.

### **1.3.2 Benefits**

- Users can gain facility as verified moderator from their level as result of sharing and maintain useful UGC inside the apps.
- Questioners could get the answer for their questions or problems.
- Enhance the society ways of thinking to be more critical and broad-minded.

- Users are able to broaden their knowledge by comparing what they know to each other in the environment.
- User could easily distinguish between real and factual information and information that might contains hoax.
- This application is applicable to anyone and any topics.

## **1.4 Scope of Work**

The scope of work of this thesis is the development of social media that will provide user a platform for post and share information, either general post or open question post with categories they can tags into their post to assist user finding the right type of content inside the application. This application intended to minimize the spreading of false information by promoting digital media literacy among users, and also encourage them to generate useful and high quality UGC using gamification. In general, the application focuses on:

- Tags for hoax and false information post.
- Apply gamification concept on user engagement (levels, points).
- Post search.
- Flag/report suspicious post.
- User able to create, vote, categorized and comment post.
- User able to create, vote, categorized, and answer question, and
- User authentication using Gmail account.
- Accessible from mobile device with Android OS.

## **1.5 Methodology**

### **1.5.1 Analysis Methodology**

The analysis methodology shall be covered in three steps:

- Literature Study

The method is implemented by collecting and accumulating related information regarding the subject and some programming tools that are used in the development of the project. Information will be assembled from literature

media like books, websites, journals and other sources that are useful for the fundamental of application development.

- **User Requirement Analysis**

The method will be done by disseminating questionnaires to acquire important information details that will be entailed in the development of the application. After the results arrive, we will evaluate it and discuss what users really need and then develop features that users demand.

- **Similar Applications Analysis**

The method is executed by examining the features of similar applications that currently exist, analyze its strengths and weaknesses then assign the course of applications to be enhanced. The reasonable one will be maintained then fix and improve the troubled things.

### **1.5.2 Application Design Methodology**

The application has a system that will be delivered by using waterfall method which is consist of five phases:

- 1. Planning**

This is the first phase of the stage where we decide what programming language will be used, features & specifications of the application and the design.

- 2. Analysis**

In this phase, we will define the expectations and goals of the project also analyze its risks, strengths and weaknesses. We also determine the product requirements and the outcome of the project.

- 3. Design**

This phase is done by creating Unified Model Language (UML) diagrams which is a member of design notations that has become the de facto standard software design language. The diagrams are in form of use case diagrams, sequence diagrams, activity diagrams, and class diagrams. For the software, we use java programming language for the coding using Android Studio integrated development environment (IDE).

- 4. Implementation**

In this phase, the applications will be developed according to the detailed design and perform initial unit test before the integration to the fully completed system.

## **5. System**

This phase covers the system testing, system deployment and system maintenance. For the system testing, we will test the functionality of every components of the project then test the fully integrated system. Then after the system is tested and deployed, the system maintenance will be held in form of regular updates, verification and debugging of the software.

## **1.6 Organization of Report**

The thesis consists of five chapters:

### **CHAPTER 1 INTRODUCTION**

This chapter is the first chapter and it contains explanations of the background, social media impact in daily life, problem definition, scope of work, objectives and benefits, and the research methodology of the application.

### **CHAPTER 2 LITERATURE REVIEW**

This chapter will talk about some general and specific theories referring to the development of the application. The topics includes android, diagrams (activity diagram, sequence diagram, etc.) , waterfall model, etc.

### **CHAPTER 3 METHODOLOGY**

This chapter contains the study of the methodologies applied in the development of the application covering analysis of current available system, the analysis of user requirement, waterfall, and application design.

### **CHAPTER 4 RESULT AND DISSCUSSION**

This chapter talks about the outcome of the project which includes the specification of the application, procedures, screenshots of application, testing results and evaluation of application.

## **CHAPTER 5 CONCLUSION**

This chapter is the last and it includes the conclusion of the application project and some recommendation regarding the advance of the application.