

CHAPTER 1

INTRODUCTION

1.1 Background

Video game has become the part of our life. We can now find video games everywhere: computers, websites, mobile phones, video game consoles. If we look back, the history of video games is still short. But the evolution of video is quite fast. The first widely available video game available is *Spacewar!*, in 1961 [1]. Now in 2011, video game has reached the seventh generation. In just around 50 years, the video game has transformed immensely. In the beginning, video game runs in mainframe computer which cost very high and very simple graphic, mostly in wireframe. Now, video game runs on game console with low price such as Playstation 3, Xbox 360 or Wii. It has more detailed graphic than before and motion sensing controller.

I think that one of the supporting factors of the evolvement of video game is the Moore's law. As Moore's law [2] stated, that the number of transistors in microchips increase exponentially every two year. This means that people can get more powerful computers with the same price. The results of this is cheap netbooks have also appearing in the market. Other result is the booming of computer game center. We can see many game centers on the side of the road as we travel through Jakarta. It's becoming a recreation place for children in big cities such as Jakarta because it's easy to access, more fun and not expensive.

The researcher also often see people that play with their own gadget such as cellphone (e.g. iphone) or portable video game consoles (e.g. PSP, Nintendo DS). One of the effects of this is that traditional games such as *petak umpet*, *bentengan*, and *gerobak*

sodor become abandoned. In Malang, when a community an event of Indonesian traditional games, many children doesn't know about it and how to play it [3].

Bentengan is one of the traditional games that we used to play when we were kids. This game is similar to capture the flag game. The main difference is the objective of the game. The objective of bentengan is to capture the enemy *benteng*(fort). The fort also serves as a jail to hold the captured enemies. The opposing force can free their captured friends.

By using the advantages of people playing with their gadget or gaming platform, the researcher will develop a video game based on bentengan. With this approach, the researcher hopes that children will be familiar with traditional game and attracted to it.

1.2 Scope

The scope of the game is:

- To develop a working prototype and playable 4 versus 4 multiplayer first person bentengan game using Unity3D engine.
- The game will be for local network.
- The platform will be PC.
- The music and sound effect will be outsourced
- Some of the 3d models will be outsourced.
- Target users are video game enthusiasts, teens and adults.

1.3 Aims and Benefits

The aim of this project is to develop a video game that based on bentengan. With the development of this game, the researcher intends to create a new and unique gameplay. The game is a multiplayer game. This is decided because with multiplayer game, teamwork will be exercised.

The benefits of this research are:

- To disseminate the fun of traditional games to children, to reminisce the game for adults,
- How to work together to achieve a goal.
- It also can be used as the base of video game with the theme of traditional Indonesian game.

1.4 Structures

This thesis will be divided into 7 chapters which are:

- Chapter 1: Introduction

Introduction to this thesis, why this topic is chosen

- Chapter 2: Theoretical Foundation

This chapter explains theoretical foundation to support the solution of the problem. It also provides theoretical frameworks.

- Chapter 3: Methodology

This chapter defines how the research will be carried.

- Chapter 4: Game Design Document

This chapter explains on game design

- Chapter 5: Testing and Implementation

This chapter explains the implementation of the game and the testing.

- Chapter 6: Discussion

This chapter explains on how are the results of the test and problems during the development.

- Chapter 7: Conclusion

The conclusion of the thesis; is the game unique or not. There are also recommendations to improve the game.