

FAKULTI TEKNOLOGI MAKLUMAT DAN KOMUNIKASI

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*GRADE:*

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B-

UNIVERSITI TEKNIKAL MALAYSIA MELAKA

**KITTY GAMESPLAYER 2D EDUTAINMENT-ADVENTURE GAME**

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**KITTY GAMESPLAYER 2D EDUTAINMENT - ADVENTURE GAME**

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**This report is submitted in patial fulfillment of the requirements for the  
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**FACULTY OF INFORMATION AND COMMUNICATION TECHNOLOGY  
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## DECLARATION

I hereby declare that this project report entitled  
**KITTY GAMESPLAYER 2D EDUTAINMENT-ADVENTURE GAME**

is written by me and is my own effort and that no part has been plagiarized without citations.

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(PN.AZILA OTHMAN)

## **DEDICATION**

To my beloved family, your prayers and love gives me hope and blessing.

To my lecturer, the guidance and support give me strength to keep move on to finish my Projek Sarjana Muda successfully.

## ACKNOWLEDGEMENT

Firstly, thanks to Allah for given me a chance and strength to me for finishes this PSM until the end.

Special thanks to my supervisor, Pn.Aniza Othman for all the guidance and help. I will never forget whatever she encloses to support me and for being really understanding to myself for complete this project successfully.

I would also like to thank to family and all my fellow friends.

## ABSTRACT

The title of this project is Kitty GamesPlayer. This project, which is a combination of edutainment-adventure game, is based on a character (Kitty) where it has to go through an adventure moment to enable her to find the way back to her home. The adventure begins when she get lost in a wood while busy playing and has been given some help by her friends. By solving a series of puzzles, her friends can show her the right way to follow to get back to her home and complete her journey. The purpose of the game is to provide entertainment to children and at the same time, to test their knowledge towards spelling and reading. This project is based on educational and it has been developed with no elements of violence which provide good environment to the children. This game is suitable for young kids at the age from 4 to 7 years of old. The project is a 2D animation and the technique of animation named arch is applied when animating the characters. Kitty GamesPlayer is delivered in the form of CD-ROM as well as, can also be delivered on the internet.



## ABSTRAK

Projek ini dinamakan sebagai Kitty GamesPlayer dan ia dibangunkan berasaskan pengembaraan karektor utama dibantu oleh rakan-rakannya di dalam hutan untuk melengkapkan pengembaraannya pulang ke rumah. Tujuan permainan ini dibangunkan adalah untuk memberi hiburan kepada kanak-kanak disamping menguji pengetahuan mereka terhadap pengejaan dan pembacaan. Projek permainan komputer ini dibangunkan berteraskan permainan yang mempunyai unsur-unsur pembelajaran dan tidak mempunyai elemen keganasan. Projek permainan komputer ini disasarkan kepada golongan kanak-kanak terutamanya yang berumur diantara 4 tahun hingga ke 7 tahun. Dalam membangunkan projek ini, teknik animasi bernama arch diimplementasikan didalam menganimasi karektor-karektor bagi permainan komputer ini. Permainan Kitty GamesPlayer ini akan dimodulkan dalam bentuk cakera padat dan juga boleh diimplementasikan penggunaannya di internet.

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## **CHAPTER I**

### **INTRODUCTION**

#### **1.1 Project Background**

Representation, interaction, conflict and safety is a fundamental characteristics of a game. A game is an active interest or pursuit, especially one involving competitive engagement or adherence to rules. Kitty GamesPlayer provide entertainment to children at aged 4 to 7 years old as the target market. Kitty GamesPlayer used explicit rules means clearly expressed or readily observable for representation characteristic of a game. It also has a collection of parts that interact with each other before the user plays the game as the player needs to solve the puzzle before the player proceeds to the next stage. In the game, the Medias used to represent the reality are static (graphics) and dynamic that change over time (movie and music). The conflict found in Kitty GamesPlayer comes when the player actively pursues some goal while obstacles prevent goals from being achieved. The source for the conflict is the time and the player's own self. The game is a safe way to experience reality. Kitty GamesPlayer is an edutainment-adventure game. It is a story-based game which performs puzzle solving to move the story along. The player will help Kitty to find the way home after all the puzzles are

solved. The result of the game, the player gets the fun of the adventure puzzle they have solved.

The arcs principle of animation will be implemented on the animation part. Arcs concept relates to how things move. More appropriately, how living, organic, non-mechanic things usually move. Arcs of motion refer to how the source of the action moves. Mnatural motions move along a curved path, or an arc, not a straight line. Some of the animation also used anticipation technique to make it more realistic.

Kitty GamesPlayer will be tested based on three terms. The first term is geographic. Kuala Lumpur Kindergarten is a location that has been chosen to be the players of the game. Randomly 20 to 25 persons will be choose to test the product. Second term is psychographics and the last term is demographics. Psychographics consists of players' values, attitudes, perceptions, lifestyle and ways of thinking. That is the reason why the product will be tested in Kuala Lumpur where children will be exposed to Information Communication Technology (ICT) at the early age. Children at the age of 4 to 7 are the target audience and market to the product. All the influence of the games like interface designs, story elements (plot and characters), pace of actions, target levels of difficulties and contents are chosen by the demographics.

## **1.2 Problem statement(s)**

As technologies develop so fast that the specific technology available changes from one week to the next, it is important that the solutions chosen have some generic basis. Parents do realize that using games will enhance children creativities. The problem is when they can't find the right games to their children. Nowadays, adventure games are not suitable for age 4 to 7 years old. Some of the games are exposed to violence or do not perform a good impact to the kids. Parents need something which are fun but educational. Educational games provide serious purposes and there is many of it in the market.

### 1.3 Objective

- To develop an adventure 2D flash game.
- To use arcs technique (animation principle) in 2D animation into a 2D edutainment-adventure game.

### 1.4 Scope

- Target user of aged between 4-7

Focus on Kuala Lumpur Kindergarten students which are at the age of 4-7 years old as the target users.

- Kitty GamesPlayer content.

The project will use Adobe Flash CS3 and Flash player 9 as the main elements. The product will focus on kid's knowledge of alphabets and spelling. Furthermore story line makes the player feel the reality of adventures and realistic.

- Microsoft Windows platform - Personal computer

Microsoft Windows is the world-leading operating system that powers the most popular computers today from the world's leading computer manufacturers. The personal computer is based on Microsoft Windows operating system.

## **1.5 Project significance**

2D Edutainment - Adventure Games approach in 2D animation helps the player to understand the situation they need to handle to solve the puzzle in a game. Computer game allows entertainment to extend to spaces beyond the traditional life style. Computer game gives the players to increase flexibility and new opportunities for kid's entertainment. Games support learning and creative experiences that are collaborative, accessible, and integrated with the world beyond the syllabus study.

Computer game approaches can enable players to occur at the most appropriate time. It allows players to access games conveniently and flexibly as it can be easily played about, just simply insert the CD-ROM and run the applications.

## **1.6 Expected Output**

Kitty GamesPlayer content present in rich multimedia and dynamically way by using Adobe Flash CS3 and Adobe Flash Player 9. It is capable to provide an edutainment-adventure game genre of computer games term in 2D animation. As a result, it will evoke curiosity and excitement in playing a game for the kids.

## **1.7 Conclusion**

In this chapter, explains the subject of the project to be developing. It also outlines the purpose and objective for the project to be carried out. As a result, it gives the readers briefly overall of the 2D edutainment-adventure games approach of computer games term project that will be developed.

The purpose is to develop the 2D edutainment-adventure game application including 2D animation that will provide kids to learn and think in a creative way.

Thus 2D edutainment-adventure games could enable the good computer games method. Hope that 2D adventure games can adapt to the computer games markets according to the local needs. As a result, it can support and develop innovative approaches to making games accessible and useful to both parents and kids. The next chapter will explain the literature review and project methodology of the edutainment-adventure games.



## **CHAPTER II**

### **LITERATURE REVIEW & PROJECT METHODOLOGY**

#### **2.1 Introduction**

In writing the literature review, the main purpose is to convey to reader what knowledge and ideas have been established on a topic, and what the strengths and weaknesses are. As a piece of writing, the literature review must be defined by a guiding concept. It is not just a descriptive list of the material available, or a set of summaries. Literature review or research is crucial because it provide designer to enhance understanding about the project. [17]

A literature review uses as its database reports of primary or original scholarship, and does not report new primary scholarship itself. The primary reports used in the literature may be verbal, but in the vast majority of cases reports are written documents. The types of scholarship may be empirical, theoretical, critical or analytic, or methodological in nature. Second a literature review seeks to describe, summarize, evaluate, clarify and/or integrate the content of primary reports. [9]

Different methodologies are inevitable, stemming directly from the questions of what constitutes a methodology and what are a methodology's underlying principles. Projects differ according to size, composition, priorities, and criticality. The people on a project have different biases based on their experiences, principles, and fears. These issues combine so that what is optimal differs across projects. [18]

The project methodology was developed based upon an ADDIE (Analysis > Design > Development > Implementation > Evaluation) project management system and is presented in phases.

In the ADDIE model, analysis is the input for the system; design, development, and evaluation are the processes; and implementation is the output. These elements overlap somewhat, depending on the project, and because the system is dynamic, there will be some sharing of duties.

## **2.2 Domain**

The main factor of chosen game as the domain of PSM product is because of the industry facts. America's entertainment software industry creates a wide array of computer and video games to meet the demands and tastes of audiences as diverse as our nation's population. Today's gamers include millions of Americans of all ages and backgrounds. In fact, more than two-thirds of all American households play games. This vast audience is fueling the growth of this multi-billion dollar industry and bringing jobs to communities across the nation. [1] ESA also list down the 10 entertainment software industry facts.

- U.S. computer and video game software sales grew 22.9 percent in 2008 to \$11.7 billion – more than quadrupling industry software sales since 1996.
- Sixty-eight percent of American households play computer or video games.

- The average game player is 35 years old and has been playing games for 12 years.
- The average age of the most frequent game purchaser is 39 years old.
- Forty percent of all game players are women. In fact, women over the age of 18 represent a significantly greater portion of the game-playing population (34 percent) than boys age 17 or younger (18 percent).
- In 2009, 25 percent of Americans over the age of 50 play video games, an increase from nine percent in 1999.
- Thirty-seven percent of heads of households play games on a wireless device, such as a cell phone or PDA, up from 20 percent in 2002.
- Eighty-four percent of all games sold in 2008 were rated "E" for Everyone, "T" for Teen, or "E10+" for Everyone 10+. For more information on game ratings, please see [www.esrb.org](http://www.esrb.org).
- Ninety-two percent of game players under the age of 18 report that their parents are present when they purchase or rent games.
- Sixty-three percent of parents believe games are a positive part of their children's lives.

Based on what ESA research, it may affect Malaysia industry. Based on research on computer and future outcomes in classroom [2] state that computer is the first medium to play games and 82.8% people play games since teen proved that computer game nowadays important to their life.

### **2.2.1 Adventure Games**

An adventure game is a video game or a text mode game in which the player assumes the role of protagonist in an interactive fiction that is driven by exploration and puzzle-solving instead of physical challenges such as combat.[3] The term originates from the 1970s computer game Adventure[4][5] and relates to the style of gameplay pioneered in that game, rather than the kind of story being told.[3] The