

BORANG PENGESAHAN STATUS TESIS*

JUDUL: 2D EDUTAINMENT FOR CHILD'S RIGHT BRAIN DEVELOPMENT

SESI PENGAJIAN: 2007/2008

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2D EDUTAINMENT FOR CHILD'S RIGHT BRAIN DEVELOPMENT

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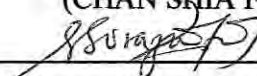
**This report is submitted in partial fulfillment of the requirements for the
Bachelor of Computer Science (Interactive Media)**

**FACULTY OF INFORMATION AND COMMUNICATION TECHNOLOGY
UNIVERSITI TEKNIKAL MALAYSIA MELAKA
2007**

DECLARATION

I hereby declare that this project report entitled
2D EDUTAINMENT FOR CHILD'S RIGHT BRAIN DEVELOPMENT

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

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DEDICATION

Especially for my beloved parents

Chan Lye Huat and Goh Gaik Ean
“I’m nobody without both of you”

My supervisor

Pn Norazlin Mohammed
“Thank you for supervising”

My sisters

Chan ShiaWah and Chan Shia Wen
For your neverending support

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ABSTRACT

The purpose of this project is to develop 2D Edutainment For Child's Right Brain Development. This edutainment by its name already have the meaning on delivering educational content together with amusement. This is a linear edutainment. This edutainment educational content is delivering about colors and shapes. Basic shapes and colors are taught to the kids at 5 and 6 years old. Shapes like square, triangle, rectangle, circle and oval. The characters will play with the shapes and come out with a drawing like building and more. This is all just by combining the shapes. For color, it teaches about basic color such as red, blue and yellow. The colors are then mix to come out with new color. The color is then comparing to the surrounding to get objects with same color. Funny character will help in kids learning through activity by the character. At the same time, it helps in trigger child's creativity and imagination. The adorable characters in the edutainment will attract the children attention. This edutainment is developing according to timeline by applying the video production methodology. The current system approach and problem analysis is explained in detail.

ABSTRAK

Tujuan projek ini adalah untuk membangunkan 2D Edutainment For Child's Right Brain Development. Edutainment ini oleh namanya telah ada makna di menghantar pendidikan kandungan serentak dengan hiburan. Ini adalah satu edutainment yang linear. Kandungan pendidikan edutainment ini adalah menghantar mengenai warna-warna dan bentuk-bentuk. Asasi bentuk-bentuk dan warna-warna adalah diajar kepada kanak-kanak di 5 dan berusia 6 tahun. Bentuk-bentuk seperti persegi, segi tiga, segi empat, bergerak dalam bulatan dan bujur. Watak-watak akan bermain dengan bentuk-bentuk dan keluar dengan sebuah lukisan bangunan suka dan lebih. Ini adalah kesemua adil dengan menggabungkan bentuk-bentuk. Untuk warna, ia mengajar warna perkara asas seperti merah, biru dan kuning. Warna-warna adalah kemudiannya bercampur untuk muncul dengan warna baru. Warna kemudian membandingkan untuk keliling mendapat benda-benda dengan warna serupa. Watak lucu akan membantu dalam pembelajaran kanak-kanak aktiviti terus oleh watak. Pada masa yang sama, ia membantu dalam mencetuskan kreativiti dan imaginasi kanak-kanak. Watak-watak dihormati dalam edutainment akan menarik perhatian kanak-kanak. Pada masa yang sama, ia membantu dalam mencetuskan kreativiti dan imaginasi kanak-kanak. Watak-watak dihormati dalam edutainment akan menarik perhatian kanak-kanak. Edutainment ini adalah berkembang menurut had masa oleh penyelenggaraan kaedah penerbitan video. Pendekatan sistem semasa dan analisis masalah dijelaskan dengan terperinci.

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LIST OF ABBREVIATIONS

| | | |
|-------------|---|---|
| MP3 | - | MPEG-1 Audio Layer 3 |
| VCD | - | Compact Disc digital video |
| MHz | - | Mega Hertz |
| RAM | - | Random access memory |
| GB | - | Gigabyte |
| JPEG | - | Joint Photographic Experts Group |
| CD | - | Compact Disc |
| CS | - | Creative Suite |
| MX | - | Maximize |

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CHAPTER I

INTRODUCTION

1.1 Project Background

Edutainment is a kind of entertainment that devised with educational intention. The educational content will be delivered to the audiences and at the same time they are amuse.

This product is a 2D Edutainment for Child's Right Brain Development. 85% to 90% of human population is right handed. From neurological aspect the motor skills of the right side of the body are controlled by the left hemisphere of the brain. As a result to the fact, this project will be about t a child right brain development. This edutainment consists of a few characters whom playing the role of children character and funny. There will be song introductory session for the characters. This song will be the edutainment theme song. The purpose to make the introductory song is to make the children recognize the character by name and by faces. This is part of the right brain stimulation.

The characters are in animals form to attract the children attention. The characters will introduce themselves to the narrator and to the viewers. Then the character will itself busy with colors. The basic color such as red, yellow and blue is taught. The Color mixing meaning the secondary color will be introduced and helping the character to mix the colors around. Playing and giggling of the character sound will be fun. Later shapes will be introduced. Shapes such as square, triangle, rectangle and oval are taught. Imagination and creativity with shapes and color will

be use. These techniques may seem to be simple but it is effective for the right brain development where a child need to synthesize situation using the right brain.

This edutainment takes 3 minutes duration to complete. This is due to a child passion to remain at a place is not long. Therefore the duration is sufficient enough to target on 5 and 6 years old kids.

1.2 Problem statements

The present teaching method emphasizes on reading, writing and arithmetic. These methods will only contribute to the growth on left brain intelligence. Hence, it is important to have a balance brain development. Ever since the teaching method in kindergarten is emphasizing on left brain, therefore this edutainment is to stimulate child's right brain.

Besides that, the teaching is still very formal in kindergarten. The teacher teaches the lesson by using a white or a blackboard for the kids to follow. Then the kids will be access through homework with work book. The teaching will be more interesting if it is embedded with some entertainment especially with edutainment to refresh the kid memory.

Barney and Friends is one of the famous edutainment series shows for children. The show has its way to educate the children and very interesting. According to the Vice-President of Content Development, Mary Ann Dudko, the show focuses on language and cognitive development, physical activity and social interaction. Throughout the show, the viewers are invited to use their imagination in problem solving situation and encouraged them to move around as the cast members sing and dance.

The approach in Dora the Explorer is teaching the audiences basic Spanish words and phrases along with math and music skills and physical coordination. The

viewers are invited to observe the situations and solve the problem together with Dora.

The similarity of these mentioned edutainment approach is that they are more in encouraging the viewers to move around along with the cast members. This approach is good to make the young viewers to stay active. The other approaches like using sing along, observation and problem solving are good in a way to educated children. There is no denying that these edutainment does help in child right brain development but it is indirectly.

Therefore this project will be development not to compare with professional developed animation. It is develop to be able to trigger a child's right brain creativity.

1.3 Objective

The aims of the project are:

- i. To develop an edutainment for 5 and 6 years old kids.
The main objective of this project is to produce an edutainment that can stimulate child's right brain.
- ii. To trigger child creativity.
The edutainment will have the teaching session that will help in developing child's creativity which drawing with combining shapes.
- iii. To make the child become more imaginative
At storytelling session, the characters will imagine themselves as the story character.
- iv. To make the child to react faster.
In teaching session, the character will have to react to the color and not the spelled word.

- v. To educate shapes and color.

At the same time, the edutainment teaches about shapes and color therefore the audience can learn basic shapes and color.

1.4 Scope

This edutainment presentation period is between 3 minutes. The reason to have limited duration is because a child patience to remain at a place is not long. It is important to make sure a child and pay full attention to particular object. Consequently, edutainment with the mentioned time is sufficient enough to keep the child attention.

1.4.1 Target User

The project target user is 5 and 6 years old kids. As kids at the age of 5 and 6 years old is very active and curios of every single thing at their surrounding. Therefore this is the best time to inspire their right brain to become more imaginative and creative.

Besides that, this product is focusing on parents having young children. Parents can use the application teach their children about shapes and color and at the same train the children to become more creative.

This product is also suitable to be use nursery school and kindergarten as a tool to teach children on shapes and color. It can be use as a special treat for the kids to watch animated cartoon but learning at the same time.

1.4.2 Limitation

This edutainment will cover on basic shapes such as square, triangle, rectangular, circle and oval. Those are the common and basic to be learned at kindergarten. For colors, it will cover primary color and secondary color such as red, blue, yellow, purple, green and orange.

The product will be running on Windows platform. The end of the product will be in flash format.

1.5 Project significance

The edutainment that will be produced will signify especially on the young target users who are the 5 and 6 years old children. For the parents and teacher, this project will benefit them on new learning concept of children.

1.5.1 5 and 6 years old children

The young users will be benefit to become more imaginative and has a more creative brain. The user creativity development will be trigger throughout the storyline where imagining and provide answer to the similar object. For instance, the fruits that is red in color and so on. Besides that, the edutainment will deliver the educational content in relation to shapes and color to the viewers. The viewers will be taught basic shapes such as square, triangle, rectangular, circle and oval. For the colors, the viewer will be taught to recognize the color surrounding them such as yellow, orange, red, purple, green and blue.

1.5.2 Kindergarten Teacher And Parent With Kids

For kindergarten teachers, this edutainment can be use as teaching material. This edutainment can be use to teach kids about shapes and color. Furthermore it can be use as a treat to the kids to watch cartoon while the education content is deliver.

1.6 Expected Output

The expected output of the project is an edutainment that helps in child right brain development. The edutainment will start with introductory song. Then follow by story telling and follow be teaching shapes and color session. This edutainment will have a few characters that are in animal form to attract children attention.

The duration of the edutainment will be in 3 minutes. This is adequate enough to make the children to learn and to be entertained at time. The final output is in swf format.

1.7 Conclusion

This chapter is holding the idea of the whole edutainment storyline. At the introduction part, it explains the project in brief. For problem statement, it describes the problems that directly influence the motives of the project. It explains the current teaching method problem and the problem of the existing edutainment. Subsequently to that problem, there are objectives to be achieved at objectives part.

The project will have the target user and limitation and that is explained in scope measurement. The target user is for children, parents and kindergarten for educational purposes. The limitation of the product is it only run on flash player. The implication of the edutainment will benefit the children to develop a creative brain and learning shapes and color at the same time.

The next chapter is on the topic of literature review and project methodology. It will be explaining about the project domain, existing system, technique being use, project methodology and project requirement. It will also include project schedule and milestone.

CHAPTER II

LITERATURE REVIEW AND PROJECT METHODOLOGY

2.1 Introduction

This chapter deliberates on literature review and project methodology. Literature review includes the project domain, existing system and techniques. For project methodology, it states the method being use by the developer. Besides that, it contains the project requirements where the software and hardware specification is stated and follows by the project schedule and milestone. The planning stage will be elemental at this chapter. The outcome of project will fundamentally depend on this chapter.

2.2 Facts and findings

Facts and findings concentrate on findings sources such as journal, article and books regarding the project. Those sources are important to understand and make wise decision to continue with the research in depth.

2.2.1 Edutainment

Edutainment can be defines as an entertainment with educational purposes. The term edutainment is defined in several ways. Hutchison Encyclopedia, for

example, defines edutainment as multimedia-related term, used to describe computer software that is both education and entertainment. The American Heritage Dictionary defines edutainment as “the act of learning through a medium that both educates and entertains.” According to Buckingham and Scanlon, edutainment is “a hybrid genre that relies heavily on visual material, on narrative or game-like formats computer games-education-implications for game developers, and on more informal, less didactic styles of address.” Edutainment can be summarized as a deliverables of messages in an entertaining manner.

This project falls into edutainment domain. Edutainment is a form of educational entertainment. There are several forms of edutainment which are games, 2D animations, 3D animations, interactive CD title, movies, and more which designed to educate the users as well as amuse. The purpose is to create awareness or an understanding of an idea or generating knowledge. This project target user focuses on 5 and 6 years old kids. Kids learn through playing. According to Professor Jerome Singer, Yale University; “Play is the highest expression of human development in childhood, for it alone is the free expression of what is in a child’s soul.” Therefore edutainment is the most suitable for children learning.

This edutainment is in 2D animation. 2D animation can be defined as motion pictures in a two-dimensional environment. It is done by sequencing consecutive images by each image showing the next gradual progression of steps. 2D animation is the simplest animation and it is effective way to illustrate motion picture. 2D is chosen for this edutainment because of its low bandwidth and faster real-time rendering. As the target user is focused mainly on kids, 2D animation is sufficient enough to catch kids’ attention. Moreover, the educational content that is planned to deliver such as shapes and color information can be delivered effectively through 2D animation instead of 3D.

2.2.2 Existing System

The current existing systems for edutainment are like Pocoyo, Blue’s Clues, Dora The Explorer and many more. These three edutainment will take into review