2D ANIMATION THE LITTLE FOX: SHARING

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# FACULTY OF COMPUTING & INFORMATICS LABUAN INTERNATIONAL CAMPUS UNIVERSITY MALAYSIA SABAH 2014



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### ABSTRACT

This thesis discussed about all the phases in developing 2D animation project entitled "The Little Fox: Sharing" which is about the story of three friends who have different personalities encounter a conflict in which one of the main characters does not want to share her toy with her friends. At the end of the story, the three main characters have realized that sharing is caring. Friendship is never anything but sharing. The main objectives and purposes of this animation are to use 2D animation as the learning tool in Malaysia to encourage and develop children's learning and to produce a 2D animation that delivers the message of sharing is caring and the importance of friendship. Overall, 22 children aged 7-11 years old who have been tested like the story and can understand the message that is delivered to them. In conclusion, this 2D animation aims to teach children about the moral value sharing is caring and it has achieved the desired goals and objectives. This animation is recommended that it will be shown in series in future where it may consists of many short stories of other moral values which act as a tool to cultivate moral values among the children.



### ABSTRAK

### THE LITTLE FOX: SHARING

Tesis ini membincangkan fasa-fasa yang terlibat semasa menjalankan projek animasi yang bertajuk "The Little Fox: Sharing" yang berkisah tentang 3 sahabat baik yang mempunyai personaliti yang berlainan menghadapi konflik apabila salah satu sahabat tidak sanggup berkongsi anak patung dengan sahabat-sahabatnya. 3 sahabat ini dapat memahami maksud perkongsian adalah bermakna di akhir cerita. Tujuan dan objektif utama animasi ini adalah untuk menggunakan animasi 2D sebagai alat pembelajaran untuk menggalakkan dan membangunkan pembelajaran kanak-kanak di Malaysia dan untuk menghasilkan animasi 2D yang menyampaikan mesej perkongsian adalah bermakna dan kepentingan persahabatan. Secara keseluruhannya, kanak-kanak yang berumur antara 7 hingga 11 tahun yang melalui ujian suka cerita ini dan boleh memahami mesej yang disampaikan kepada mereka. Kesimpulannya, animasi 2D ini yang bertujuan untuk mengajar kanak-kanak nilai moral iaitu perkongsian adalah bermakna dan telah berjaya mencapai objektif yang ditetapkan sebelum ini. Animasi ini disyorkan bahawa boleh disambungkan dalam siri yang mempunyai banyak cerita pendek yang mempunyai nilai-nilai moral yang lain pada masa hadapan yang boleh menjadi sebagai satu peralatan untuk memupuk nilai-nilai moral dalam kalangan kanakkanak.



### **TABLE OF CONTENTS**

### PAGE NUMBER

ACKN	OWLDEGEMENT	i
ABSTE	TAAT	ii
ABSTI	RAK	iii
TABLE	OF CONTENTS	iv
LIST	OF TABLES	ix
LIST	OF FIGURES	x
	TER 1: INTRODUCTION	1
-		
1.1 1.2	Introduction	1
1.2	Problem Statement Aims	3
1.5	Objectives	3
1.5	Project Scope	4
1.6	Target Audience	5
1.7	Project Description	5
1.8	Project Methodology	5
1.8	1 Pre-Production (Analysis & Design)	5
1.8	.2 Production (Development & Implementation)	6
1.8	.3 Post-Production (Evaluation)	6
1.9	Project Timeline (Gantt Chart)	7
1.10	Project Structure Outline	7
1.11	Conclusion	9
CHA	PTER 2: LITERATURE REVIEW	10
2.1	Introduction	10
2.2	Background Research	11
2.2	2.1 History of Animation	11
2.3	Animation Techniques	12
2.3	3.1 Traditional Animation	UNIVERSITI MALAYIYA SABAH

2.3.	2	Computer Animation	12
2.4	Cor	nparison between 2D and 3D Animation	13
2.4.	.1	Choice Between 2D and 3D	14
2.5	Ani	mation to Deliver Moral Values	15
2.6	His	tory of Anime	16
2.7	Fea	tures of Anime	17
2.8	Ap	olication Review	18
2.8	.1	Dora The Explorer (2000) Series	18
2.8	.2	Doraemon (1969)	19
2.8	.3	Ducktales (1987)	20
2.8	.4	South Park (1997)	21
2.8	.5	Pink Panther (1969)	22
2.9	Co	ndusion	23
CHAI	PTEF	R 3: ANALYSIS	24
3.1	Int	roduction	24
3.2	Fe	asibility Study	24
3.2	2.1	Legal Feasibility	25
3.2	2.2	Social Feasibility	25
3.2	2.3	Professional Feasibility	25
3.2	2.4	Technical Feasibility	26
3.3	Те	chnical Requirements	26
3.3	8.1	Hardware Requirements	26
3.3	3.2	Software Requirements	28
3.3	3.3	Performance Requirements	29
3.4	Da	ta Collection	29
3.4	<b>4.1</b>	Internet	30
3.4	1.2	Observations and Readings	30
3.4	4.3	Questionnaire	30
	3.4.3	1 Findings	31
•	3.4.3	2.2 Analysis of Findings	41
3.5	Co	ndusion	42



CHAP	TER	4: DESIGN	43
4.1	Intr	oduction	43
4.2	Stor	yline	43
4.2.	1	Project Storyline	43
4.3	Scri	pt	45
4.3.	1	Script	· 45
4.4	Cha	racter Design	62
4.4	.1	Character Description	62
4	.4.1.1	Gigi	62
4	.4.1.2	Bobo	63
4	.4.1.3	3 Zuzu	64
4	.4.1.4	Miss Pepe	65
4.5	Env	ironment Design	66
4.5	.1	Fox Town	67
4.5	.2	Classroom	67
4.5	5.3	Playground of the School	68
4.6	Sto	ryboard	68
4.7	Cor	Idusion	69
CHA	PTER	5: IMPLEMENTATION	70
5.1	Int	roduction	70
5.2	Мо	delling Phase	71
5.2	2.1	Characters Modelling	71
5.2	2.2	Environment Modelling	76
5.3	An	imating	78
5.	3.1	Character Animation	78
5.	3.2	Facial Expressions	79
5.	3.3	Lip Sync	80
5.4	Cir	nematography	81
5.5	Ad	ding Sound Effects	83
5.6	Ex	porting Animation	83
5.7	Ed	iting and Rendering	84
5.	7.1	Adding Effects	84
5.	.7.2	Adding Scenes	UNIVERSITI MALAYSIA SABA

5.7.	3 Adding Subtitles	86
5.8	Conclusion	86
СНАР	TER 6: TESTING AND EVALUATION	87
6.1	Introduction	87
6.2	Testing and Evaluation	87
6.2.	1 Pre-Production Testing	87
6.2.	2 Production Testing	88
6.2	3 Post-Production Testing	89
6	.2.3.1 Smoothness Testing	89
6	.2.3.2 User Testing	89
6	.2.3.3 Compatibility Testing	96
6.3	Conclusion	96
CHAI	PTER 7: CONCLUSION	98
7.1	Introduction	98
7.2	Findings and Discussion	98
7.3	Summary	99
7.3	Phase I-Concept Definition, Storyline and Plot	100
7.3	8.2 Phase II-Character and Environment Design	100
7.3	8.3 Phase III-Storyboard	100
7.3	8.4 Report Writing I	100
7.3	8.5 Phase IV-Implementation	101
7.3	3.6 Phase V-Testing and Evaluation	101
7.3	8.7 Report Writing II	102
7.4	Project Constraints	102
7.5	<b>Recommendations of Future Enhancement</b>	102
7.6	Conclusion	103

REFERENCES

104

107

## APPENDIX A (I)

APPENDIX A (II)



APPENDIX B	109
APPENDIX C	110
APPENDIX D	111
APPENDIX E	112



## LIST OF TABLES

Table 3.1:	Hardware Specifications Used	27
Table 3.2:	Software Requirements	28
Table 6.1:	Results for Software Testing	89
Table 6.2:	Results for Smoothness Testing	90
Table 6.3:	Results for Compatibility Testing	97



## LIST OF FIGURES

Figure 1.1	: The Overall Methodology for The Project	7
Figure 2.1	: Dora the Explorer with Her Animal Friends	18
Figure 2.2	: Doraemon with All His Expressions	20
Figure 2.3	: Ducktale	21
Figure 2.4	: South Park	22
Figure 2.5	: Pink Panther	23
Figure 3.1	: Gender of the Children	33
Figure 3.2	: Age Group of the Children	34
Figure 3.3	: Number of Children that Loves to Watch Cartoon	35
Figure 3.4	: Frequency of Children Watch Cartoon	36
Figure 3.5	: Number of Children that Watch Cartoon via Television	37
Figure 3.6	: Number of Children that Prefers Animal Characters or Humanized Animal Character	38
Figure 3.7	: Number of Children Likes Watching Cartoon with Narration or Without Narration	39
Figure 3.8	: Number of Children those Will Share Favorite Toys with Friends	40
Figure 3.9	: Number of Children that Will Quarrel with Friends If Friends Do Not Want to Share Toys with Them	41
Figure 3.10	): Number of Children that Learn Moral Values after Watching 2D Animation	42
Figure 4.1	: Character Design of Gigi	63
Figure 4.2	: Character Design of Bobo	64
Figure 4.3	: Character Design of Zuzu	65
Figure 4.4	: Character Design of Miss Pepe	66
Figure 4.5	: Environment Design of the Fox Town	67
Figure 4.6	: Environment Design of Classroom	67
Figure 4.7	: Environment Design of Playground in School	68
Figure 5.1	: Front & Back Model in Layers of Character Gigi	72
Figure 5.2	: Side & Quarter Model in Layers of Character Gigi	73
Figure 5.3	Front & Back Model in Layers of Character Bobo	73 Vi S MALAYSIA SABAH

Figure 5.4 : Side & Quarter Model in Layers of Character Bobo	74
Figure 5.5 : Front & Back Model in Layers of Character Zuzu	74
Figure 5.6 : Side & Quarter Model in Layers of Character Zuzu	75
Figure 5.7 : Front & Back Model in Layers of Character Teacher Pepe	75
Figure 5.8 : Side & Quarter Model in Layers of Character Teacher Pepe	76
Figure 5.9 : Classroom	77
Figure 5.10 : Playground	77
Figure 5.11 : Slope	78
Figure 5.12 : Animating Main Characters	79
Figure 5.13 : Happy, Sad and Angry Facial Expressions	80
Figure 5.14 : Lip Drawn Based on 'a' 'e' 'i' 'o' 'u' Vowels	81
Figure 5.15 : Walking Cycle Replaced With Camera Movement	82
Figure 5.16 : Hand Action Replaced With Camera Movement	82
Figure 5.17 : Video Editing	84
Figure 5.18 : Adding Effects	85
Figure 5.19 : Gigi Passes Dolls to Bobo & Zuzu	86
Figure 6.1 : Understandability of the Story	89
Figure 6.2 : Evaluation on the Story	90
Figure 6.3 : Evaluation on the Animation	91
Figure 6.4 : Evaluation on the Characters	91
Figure 6.5 : Evaluation on the Environment Design	92
Figure 6.6 : Evaluation on the Sound Effects and Background Music	92
Figure 6.7 : Evaluation on the Moral Values Learned	93



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### **CHAPTER 1**

### INTRODUCTION

### 1.1 Introduction

"Animation is actually a series of still images that are linked together and usually photographed by a camera to create the illusion of motion. When the still images are played back in rapid succession which is 24 frames per second, the still images show slightly changes between individualized frames that show a smooth and seamless movement" (History of Multimedia Animation, 2003). Animation can be divided into several types which include traditional (cel animation), stop motion, animatronics, performance animation (puppetry), anime and computer animation.

2D animation is more entertaining and unrealistic, therefore 2D would be a better choice in creating cartoon characters which are fantasy and interesting. Developers have planned to develop 2D animation project entitled "The Little Fox: Sharing". This animation will have about 7 to 10 minutes duration. The animation conveys the message of sharing is caring to the audiences. This 2D animation is considered very suitable in the animation industry in Malaysia since there is not much 2D animation in Malaysia that is used to cultivate moral values among the children. Animation in series will attract children to anticipate the next episode and therefore they can learn moral values while watching this animation.

The characters of the animation are more into cartoon genre because developers use animal as models instead of humans. Developers have planned to integrate exaggerated expression aspect from anime into this 2D animation.



Emphasize on the expressions of the characters can create the mood and setting of the story.

### **1.2 Problem Statement**

# • 2D animation is an effective tool to nurture moral values among the children during their childhood.

"Children develop most of their brain cell tissues that controls human activities during their early childhood which is considered as the golden age. Children's moral concept and behaviour are believed to be developed at an early age. Therefore it is important to pay much attention to children's education from an early age, including their moral education" (Husni & Maila, 2012). Moral values need to be nurtured among the youngsters during childhood so as they can wellbehaved and willing to share and care about others. 2D animation would be a proper teaching tool for children as children nowadays watch a lot of cartoon. According to the Faculty of Education & Social Studies of VIA University College in Denmark (2013), children learn fast and effectively when they enjoy what they are doing. Animation is a fun and best tool to encourage and develop children's learning because it is the combination of visual and sound elements. It says" children can develop skills and competencies in story telling, visual communication, cognition, emotional, ethic and asthetics aspects, observation and sensory aspects, concentration, problem-solving and innovative aspects through animation."



# Not many 2D animation that teaches moral values in the Malaysia's animation industry.

According to F. P. Chew, & Z. Ishak (2010), the evolution of children story books in Malaysia has shown an increase in numbers. However, there are not many 2D animation product that teaches moral values in Malaysia. Usop Sontorian, Anakanak Sidek, Kampung Boy, Keluang Man, Bola Kampung, Mat Gelap, Din Teksi, Sang Kancil, Silat Legenda, Putih and Budak Lapok are the examples of 2D animation in Malaysia (History of Animation in Malaysia, 2008).

### 1.3 Aims

- To produce a 2D animation that can help to cultivate moral values among the children during their childhood.
- To use animation as a method of learning to develop childrens' skills and competencies in story telling, visual communication, cognition, emotional, ethic and asthetics aspects, observation and sensory aspects, concentration, problem-solving and innovative aspects.
- To enable the children communicate proficiently in English by using animation as the learning tool.

### 1.4 Objectives

• To produce a 2D animation that delivers the message of sharing is caring and the importance of friendship.

This moral value has been shown on the 3 main characters whereby they are willing to share things together in the end after a conflict has happened between them which threaten their relationship.



## To use 2D animation as the learning tool to encourage and develop children's learning.

2D animation consists of combination of visual and sound elements that are crucial in developing children's learning as they can gain the knowledge more effectively when they enjoy what they are doing.

### 1.5 Project Scope

The project scope refers to the target audience, scope on research about cultivating moral values among the children, types of animation and techniques used that are suitable for the kids' ages.

- i. The target audience's age group is between 7-11 years old.
- The way that how 2D cartoon is influencing the children in terms of cultivating moral values among them.
- iii. The approximated duration for this 2D animation is about 7-10 minutes.
- iv. Basic and simple English vocabularies and terms are used in this animation so that the kids can understand the content.
- v. The functionality of this animation is just a linear presentation, no interaction with the users.
- vi. By developing this 2D animation project based on animation platform under time constraint and limitation on animating capability, the project should be considered not complete or as perfect as compared with the 2D animation that animators having expertise and advanced technology in this field.



### 1.6 Target Audience

The target audience's age group of this animation is in the range of 7-11 years old.

### 1.7 Project Description

This 2D animation is about the story of three friends who have different personalities encounter a conflict in which one of the main characters does not want to share her toy with her friends. At the end of the story, the three main characters have realized that sharing is caring. Friendship is never anything but sharing. The duration of this animation is about 7-10 minutes. The target audience is in the age group of 7-9 years old. This animation aims to deliver message of sharing is caring and the importance of friendship among the kids during their childhood.

### 1.8 Project Methodology

### 1.8.1 Pre-Production (Analysis & Design)

In the pre-production phase, we did analysis and design. In the Analysis level, we thought through our idea by continually weigh the purpose or goal against the feasibility. We determined the target users and developed the idea that can meet the needs of the users by doing research on the current problems. We planned the concept and theme of the animation and determined the multimedia elements that are needed in our project. We determined the platform that we used as well as the software. A storyline was made and a basic structure was formed. The synopsis of the 2D animation was then evaluated and improved so that it can achieve goals and objectives. Then, a script was formed. We did Gantt chart to lay out all the elements along a timeline to make sure that the works could be completed on time. The feasibility of this project was reassessed. We studied the functionality of the animation and did feasibility study by doing research online and prototyping. Besides



we did data collection in this phase via survey and distributed questionnaires to target audience.

In the Design phase, we determined the overall arts concept besides building the characters and environment as well as the storyboards. The storyboard was the visual interpretation of the screenplay and consisted of many images and production notes. The overall interface design had to be made sure that our target audience can understand the message delivered in the story. Animatics, background music, sound effects and the approximated time duration for the project were determined.

### 1.8.2 Production (Development & Implementation)

In the production phase, development and implementation were taking place where we implemented all the elements developed in pre-production. The aspect ratio of the size of the project was determined. This project was in the size of 1024 pixels X 768 pixels which was the projector's resolution. We used the character design and the environment done in the preproduction phase as our main elements of animation. The character was developed in all perspective of views; different expressions were also drawn to create personality for that character. Animating the characters were done first, and then aligned it with some voice recording. We recorded the narration with the script written in the pre-production phase. In this process, we had to animate the actions of the character until it was synchronized with the narration. The background was also created for surroundings and effects. At this phase, the camera position and relative depth of the layers was taken into consideration.

### **1.8.3 Post-Production (Evaluation)**

For the post production phase, we made evaluation. We evaluated our final products and did editing if we have discovered any dissatisfaction. At this phase, we had to ensure all works were completed as planned. Then the final product was delivered to



target audience, and it was copyrighted. The whole project methodology can refer to figure 1.1.



Figure 1.1: The Overall Methodology for The Project

### 1.9 Project Timeline (Gantt Chart)

Overall Gantt Chart can refer to APPENDIX A (I).

FYP 1 Gantt Chart can refer to APPENDIX A (II).

### **1.10 Project Structure Outline**

The first chapter was about the introduction of the project to the reader. It contained a brief summary and history about animation. Besides that the problem statement, aims, objectives of the project, and the target audience of this project was written clearly. The project methodology and the project scope were included as well into the introduction as part of planning of the project. Furthermore, the process flow of this project was presented through the Gantt Chart and overview of the report structure.



In the Second chapter, it was about the literature review which includes doing the background research of 2D animation. The animation techniques and the comparison between 2D and 3D animation were also being researched in deep. Application review was done in this chapter so as we can improve our animation by reviewing the good animation productions that are in the current market.

The Third chapter was about the analysis of the project. We studied the functionality of the animation and did feasibility study by doing research online and prototyping. Besides we did data collection in this phase via survey and distributing questionnaires.

The fourth chapter was all about the design of the project. Besides developing the characters and their features, the storyboard and scripts were also included in the design phase.

The fifth chapter was about the implementation of the animation. The post production took place in this phase where the audio editing and the final rendering process were done. Camera movements and lighting were also revised.

The sixth chapter was the testing and evaluation phase where testing of the final product was done, problems that occur will be solved and the solution of the problems were reported clearly. The evaluation techniques for the testing were explained in detail.

The final chapter was the conclusion part which included a summary of the whole project. The projects constraints and recommendations of future enhancement were also included.



### 1.11 Conclusion

In conclusion, the planning of this project had been conducted in order to make sure that it was successfully developed. The problem statement that causes developers to develop this animation had been researched to make sure it achieved the objectives planned before within the scope and duration by following the gantt chart using the specific methodology.



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