

Development Of Mini Encyclopedia On Solar System

Noorshida Binti Amir

Thesis submitted in fulfillment of the requirements for
Bachelor of Science (Hons) Information Technology
Faculty of Information Technology And
Quantitative Sciences

May 2006

DECLARATION

I certify that this thesis and the research to which it refers are the product of my own work and that any ideas or quotation from the work of other people, published or otherwise are fully acknowledged in accordance with the standard referring practices of the discipline.

May 31, 2006, 2006

NOORSHIDA BT AMIR
2003327154

TABLE OF CONTENT

DECLARATION	ii
ACKNOWLEDGEMENT	iii
ABSTRACT	iv
TABLE OF CONTENTS	v
LIST OF FIGURES	viii
LIST OF APPENDICES	viii
CHAPTER 1 INTRODUCTION	
1.1 Background	1
1.2 Problem Description	3
1.3 Project Aim	5
1.4 Project Objectives	5
1.5 Project Scope	6
1.6 Project Significant	6
CHAPTER 2 LITERATURE REVIEW	
2.1 Introduction	7
2.2 Definition of Encyclopedia	7
2.2.1 Early Encyclopedia	8
2.2.2 Multimedia Encyclopedia	10
2.3 Overview of Multimedia	12
2.4 Interactive Multimedia	14
2.4.1 Patterns of Interactive structure	16
2.4.1.1 Linear Structure	17
2.4.1.2 Modified Linear Structure	18
2.4.1.3 Hierarchical Structure	18
2.4.1.4 Open-ended Web Structure	19
2.4.1.5 Closed Web Structure	19
2.4.2 Interactive Multimedia Learning Environment	20

2.5	Hypermedia	21
2.5.1	Learner Control using Hypermedia	22
2.5.2	Situated Learning of Children	23
2.6	Human Computer Interaction	24
2.6.1	Human Computer Interaction for Children	24
2.6.1.1	Input Device for Children	25
2.7	Children and Multimedia Element	26
2.7.1	Animation and sound effects	26
2.7.2	Children and Text	26
2.7.3	Button	27
2.8	Summary	27

CHAPTER 3 METHODOLOGY

3.1	Introduction	28
3.2	Phase 1: PLANNING	28
3.2.1	Define Scope and Audience	29
3.2.2	Hardware and software Constraint	30
3.2.3	Delivery Platform	31
3.2.4	Budget and Timelines Constraint	31
3.2.5	Determine and Collect Resources	31
3.3	Phase 2: DESIGN	33
3.3.1	Develop Initial content Ideas	33
3.3.2	Task Analysis	34
3.3.3	Do a Preliminary Program Description	34
3.3.4	Prepare a Prototype	35
3.3.5	Create Flowchart and Storyboard	35
3.4	Phase 3: DEVELOPMENT	36
3.4.1	Introduction of the program	36

CHAPTER 1

INTRODUCTION

1.1 Research Background

An electronic multimedia encyclopedia can present information in better ways than a traditional encyclopedia. When interactivity is built into multimedia, control is given to the user. Thus, this interactivity facilitates the user on searching their information s as interactive as multimedia encyclopedia. The user has more fun and learns fast. For instance, an article on World War II can include hyperlinks of countries involved in the war. When a user clicks on a hyperlink, user is redirected to a detailed article about that country. In addition, it can include a video on Pacific Campaign. It can also present images which are maps pertinent to World War II.

The goal of multimedia design is to develop an interface that will allow user control in a way that works with the content while addressing the needs of the user. Influenced in the mid-60s by the educational theories of Jean Piaget and Jerome Bruner, computer technologists and theorists began to study the interactions between computer and user. Their primary motive was to design computers that were more useful and could function as an extension of human consciousness. They discovered that different levels of interactivity, or degrees of interaction, can take place according to a user's need and the sophistication of the technology.