CHAPTER SEVEN

CONCLUSION AND RECOMMENDATION

7.1 Introduction

This chapter states the research outcomes and the future commendation that can be useful for future researches.

7.2 Outcomes of the Research

The following explains the research outcomes that are initially set as the objective of this research:

7.2.1 Recommended guidelines

A list of 34 most recommended guidelines on web designing for the elderly is gathered from various published studies. The repeated guidelines were eliminated and some of them were merged to produce the recommended set of guidelines.

Table 7.1: Most Recommended Guidelines for the Elderly Web Pages

The Most Recommended Guidelines for Elderly Website Design	
A. CONTENT	
A.1	Colour
1	Colour to avoid blue, yellow and green
2	Background contrasted with appropriated font and avoid patterned background
3	Choose complementary colours
A.2	Font
4	Typeface Sans serif (not condensed)
5	Large font size, use 12-14 point font
6	Use capital and bold only in headlines
7	Intense enough to read
A.3	Content Design

8	Information clear and familiar and positive statements
9	Simple language/terminologies as simple as possible
10	Break lengthy document in short sections or separate pages
11	Minimize irrelevant screen information
12	Clear organization of content:
13	Help and Information
14	On-line aiding and support documentation
В.	LAYOUT AND STYLE
15	Justification to the left
16	1.5 or double space for all body text
17	Consistent layout
18	Page design as simple as possible
19	Do not use a deep hierarchy and group information into meaningful categories
20	Provide ample time to read information
C.	NAVIGATION MECHANISM
21	Reserve underlines for links only
21 22	Reserve underlines for links only Step by step navigation procedures, label and link carefully
	·
22	Step by step navigation procedures, label and link carefully
22	Step by step navigation procedures, label and link carefully Mouse: Single click
22 23 24	Step by step navigation procedures, label and link carefully Mouse: Single click Avoid automatic scrolling
22 23 24 25	Step by step navigation procedures, label and link carefully Mouse: Single click Avoid automatic scrolling Site map provided
22 23 24 25 26	Step by step navigation procedures, label and link carefully Mouse: Single click Avoid automatic scrolling Site map provided Hyperlinks set as icons with text
22 23 24 25 26 27 28	Step by step navigation procedures, label and link carefully Mouse: Single click Avoid automatic scrolling Site map provided Hyperlinks set as icons with text Hyperlinks in bold type of a different colour than the rest of text
22 23 24 25 26 27 28	Step by step navigation procedures, label and link carefully Mouse: Single click Avoid automatic scrolling Site map provided Hyperlinks set as icons with text Hyperlinks in bold type of a different colour than the rest of text Labelled links to promote ease of navigation
22 23 24 25 26 27 28 D.	Step by step navigation procedures, label and link carefully Mouse: Single click Avoid automatic scrolling Site map provided Hyperlinks set as icons with text Hyperlinks in bold type of a different colour than the rest of text Labelled links to promote ease of navigation MULTIMEDIA AND ANIMATION
22 23 24 25 26 27 28 D.	Step by step navigation procedures, label and link carefully Mouse: Single click Avoid automatic scrolling Site map provided Hyperlinks set as icons with text Hyperlinks in bold type of a different colour than the rest of text Labelled links to promote ease of navigation MULTIMEDIA AND ANIMATION Avoid moving text
22 23 24 25 26 27 28 D. 29	Step by step navigation procedures, label and link carefully Mouse: Single click Avoid automatic scrolling Site map provided Hyperlinks set as icons with text Hyperlinks in bold type of a different colour than the rest of text Labelled links to promote ease of navigation MULTIMEDIA AND ANIMATION Avoid moving text Icons should be simple and meaningful and distinguishable
22 23 24 25 26 27 28 D. 29 30 31	Step by step navigation procedures, label and link carefully Mouse: Single click Avoid automatic scrolling Site map provided Hyperlinks set as icons with text Hyperlinks in bold type of a different colour than the rest of text Labelled links to promote ease of navigation MULTIMEDIA AND ANIMATION Avoid moving text Icons should be simple and meaningful and distinguishable Photo/graphic should be relevant only

7.2.2 Blue Air Travel Website

Blue Air Travel website for the elderly using user centered approach was developed. Key activities carried out during the process of developing the Blue Air Travel website is shown on the diagram in chapter 3 (section 3.5). Participation of elderly users was emphasized in all iteration of user centered design lifecycle model. Three iterations were conducted throughout the development. Different techniques as stated on the diagram were employed at various stages of the user centered design lifecycle model. The recommended guidelines formulated earlier were incorporated during the design of software prototype. Usability testing was carried out at the end of all three iteration to get feedback from the elderly users.

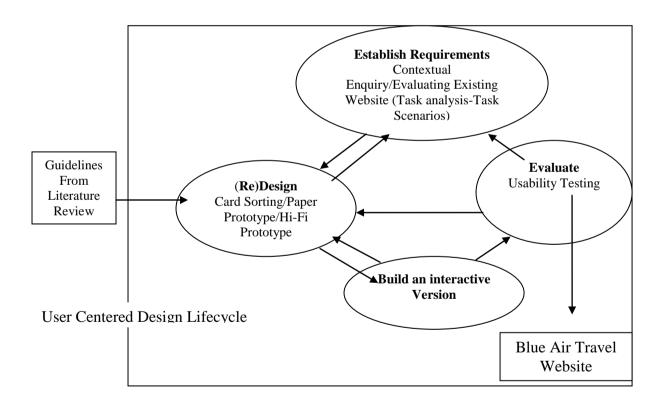


Figure 7.1: The Research Approach to Produce Blue Air Travel Website

7.3 Future Work and Recommendation

This research is a stepping stone for more research conducted on elderly websites. Even though Blue Air Travel is deemed to be successful website among the elderly, yet there are areas which still can be improved in the research. As technology advances in daily basis nowadays, there is certainly room for improvement on every aspect of browsing. It can be either website, hand phone, other media like kiosk which considerations have to be given to elderly users. The following suggestions are recommended by the researcher for the future researches.

7.3.1 Sound Off and On Button

At the moment, Blue Air Travel prototype Implementation does not support hearing disability among elderly. Thus it is recommended to have a sound button which reads each word in the website to help these elderly to understand the content of the web page.

7.3.2 Website designed for Lower Education Background Elderly

Since this study was conducted on educated background elderly as there were many limitations in finding elderly who are computer literate at that age group. There are still room for improvements when it comes to the lower education background elderly and beginners to the Internet. The focus could be on how to help this group of elderly to learn and adapt learning to use the Internet faster and easier.

7.3.3 Language Proficiency in other Major Languages in Malaysia

In future, this website can be further studied to cater to other major ethnic groups in Malaysia. Thus, language should not be a barrier to them to explore the virtual world.

There are needs to have the same website but in different languages like Bahasa Malaysia, Mandarin and also Tamil. The researcher is very sure it will encourage a very large group of elderly users.

7.3.4 An Asian Elderly Web Design Guideline

The recommended list of guidelines can have additional suitable features to make the list compact yet covers all aspects of usability for the elderly users in Asia. Thus, there will be a need for producing Asian elderly web design guidelines.

7.3.5 Participant from non-Internet Experienced Background

In the future studies with wider group of elderly participants involving the non-Internet experienced users should be considered. This is to find unexpected details of their needs towards the websites.

7.4 Research Contributions

There are two main contribution of this research, the first one produces a compiled list of the most recommended web design guidelines for the elderly users and the second one is a travelling website prototype for the elderly users in Malaysia. The guidelines contribute to web designing for the elderly. The elderly website prototype is a stepping stone for emergence of other websites to be designed targeting elderly users in Malaysia.