Universiti Teknologi MARA

Using Intelligent Agent in Electronic Bulletin Board System

Shahrizan Uyo @ Shahrizan Shapiee

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

April 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.

APRIL 28, 2006

SHAHRIZAN UYO @ SHAHRIZAN SHAPIEE
2004632794
ACKNOWLEDGEMENTS

First and foremost, praise be to Allah S.W.T the most gracious and most beneficent. I would like to extend my deepest appreciation to my supervisor Puan Shamimi Binti A.Halim for her help, concern, continuous advice and also encouragement throughout the course of the research. Not forgetting my gratitude to my coordinator, Puan Marina Binti Yusoff for the encouragement and support that enabled the research to materialize and contribute to its success.

I would also like to record my sincere thanks to personnel of FTMSK (Faculty of Information Technology & Quantitative Sciences, UiTM, Shah Alam) especially Puan Hanizah for all the precious assistances given to me to ensure the completeness of my research.

My gratitude also goes to my fellow friends for all the helps and ideas provided during the course of carrying out the research and development of this thesis.

Last but not least to my loving parents and family for their patience, understanding and support during the whole period of the research.

Thank you.
# TABLE OF CONTENTS

ACKNOWLEDGEMENT iii

LIST OF TABLES viii

LIST OF FIGURES ix

LIST OF ABBREVIATIONS x

ABSTRACT xi

CHAPTER 1: INTRODUCTION

1.1 Research Overview 1
1.2 Problem Statement 2
1.3 Project Objectives 2
1.4 Project Scope 3
1.5 Significance of the Research 5
1.6 Limitation of the Research 5

CHAPTER 2: LITERATURE REVIEW

2.1 Introduction 6
2.2 The usage of Electronic Bulletin Board 7
2.3 Bulletin Board Samples 8
   2.3.1 phpbb 8
   2.3.2 miniBB (minimalist bulletin board) 9
ABSTRACT

The research is about using intelligent agent in bulletin board system. This intelligent agent will provide useful information and instruction to the users in an interactive way and also displaying useful information about the system. The development of the intelligent agent is to change the traditional interface of the websites that are so much inhuman into an artificial life that can interact with the users. The main objectives of the research is to identify characteristic and the features of current bulletin board based on literature review, determine which intelligent agent that can be used within the bulletin board system and identify information that can be displayed by the virtual assistant intelligent agent. The scope of the project is including the development of the intelligent bulletin board prototype. The researcher have done some review of literature on previous research that very important to the development of this research. The development of the system will use the System Development Life Cycle (SDLC) approach. This approach includes system planning, system analysis, system design and implementation. The development of the intelligent agent is based on several artificial intelligent functions including natural language processing, document summarization, document indexing and knowledge base generation. The findings that can be gain by this research is the similarities and the differences between several top user rated bulletin board and the user's acceptance towards the intelligent agent features. So, in conclusion, the researcher sees that the intelligent bulletin board will be well accepted and used by the users. For further research, it is recommended for the next researcher to focus more on other type of intelligent software agents besides virtual assistant agents such as filtering agents or web agents to be implemented not only in the bulletin board system, but also in other websites generally.