A Development of Chat Room System Prototype

Mohammad Firdaus bin Othman

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

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 28, 2006

MOHAMMAD FIRDAUS OTHMAN
2004220284
ACKNOWLEDGEMENTS

Assalamualaikum w.b.t

All praises to Allah S.W.T, for all His bless that I had during the completion of this project. I would like to express my sincere gratitude to those who had involved in contributing their help and support either directly or indirectly in making this project a successful reality. It has been my good fortune to have the advice and guidance of many talented people, whose knowledge and skills have enhanced this project in many ways.

First of all, I would like to address my deepest appreciation and sincere thanks to my dedicated supervisor, Pn. Marina Yusoff, for the guidance, encouragement, comments, ideas and tolerance that led to a better quality of my project. May I also take this opportunity to express my sincere to my ITT 599 lecturer, Pn. Shuzlina Abd. Rahman and also to other lecturer that teach me lot of thing from the beginning as a degree student in UiTM.

I also would like to give a special thanks to my family for their support in terms of encouragements, advices and money during my project and to myself also in completing this project. To all my friends who helped me along the way in completing this project, I wish them success and thank you. Finally, to all mentioned here, may God bless you all.

Thank you. Wassalam.
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>CONTENT</th>
<th>PAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>APPROVAL</td>
<td>i</td>
</tr>
<tr>
<td>DECLARATION</td>
<td>ii</td>
</tr>
<tr>
<td>ACKNOWLEDGEMENT</td>
<td>iii</td>
</tr>
<tr>
<td>TABLE OF CONTENTS</td>
<td>iv</td>
</tr>
<tr>
<td>ABSTRACT</td>
<td>vi</td>
</tr>
</tbody>
</table>

## CHAPTER 1: BACKGROUND

1.0 Background of the problem 2  
1.1 Problem Description 3  
1.2 Objective of the research 3  
1.3 Scope of the research 3  
1.4 Significance of the research 5

## CHAPTER 2: LITERATURE REVIEW

2.0 Introduction 7  
2.1 Virtual Communities 7  
2.2. Chatbots: The Artificial Intelligent Chatting Agent 15  
2.3 Community 16  
2.4. Factors influencing Virtual Communities 22  
2.5. Intelligent Agents 23  
2.6. Intelligent agents of the future 30

## CHAPTER 3: METHODOLOGY

3.0 Introduction 33  
3.1 Problem Assessment 34  
3.2 Project Overview 35  
3.3 Knowledge Acquisition 36
Abstract

Traditionally villagers communicate with each others via face to face. However there are few constraints such as distance, weather and time limitation. Therefore the researcher proposed a development of chat room system as an alternative medium of communication with an abusive word filtering as part of the features. This project applied waterfall model. The researcher also carried out a questionnaire to 100 villagers from a different background as research's respondents. From the questionnaire researcher find out that although the selected community have the awareness of using chat as part of communication medium, but it still can be improve more to ensure community can fully utilize the application in various type of fields. This system utilized an open source application included the combination of Apache as the web server, PHP as the web base programming tools and MySQL as the database. The system allowed user to communicate online in real time. In addition, any abusive word was filtered by agent. As a conclusion, the significant of the chat system is to bring together community members on the internet and decrease a digital divide among citizens. This system also can be expanded to any other web portal in order to broaden the virtual community.