Chat Bot

K.M.C.P. Gunasekera

MS IT 05/10005

Dissertation submitted to the Faculty of Information Technology, University of Moratuwa, Sri Lanka for the partial fulfilment of the requirements of the Degree of MSc in Information Technology

March 2011

Declaration

I declare that this dissertation does not incorporate, without acknowledgment, any material previously submitted for a Degree or a Diploma in any University and to the best of my knowledge and belief, it does not contain any material previously published or written by another person or myself except where due reference is made in the text. I also hereby give consent for my dissertation, if accepted, to be made available for photocopying and for interlibrary loans, and for the title and summary to be made available to outside organization.

Name of the Student: K.M.C.P. Gunasekera

Signature of Student:

Date: 15/11/2011

Supervised by

Name of the Supervisor: Dr. GaminiWijayarathna

Signature of Supervisor:

Date: 14/11/2011

Dedication

This thesis is dedicated to Dr. Gamini Wijayarathna with a heart full of gratitude. Without his encouragement, guidance and support from the initiation to the conclusion as the supervisor this thesis would not have been possible.

Acknowledgments

I am heartily thankful to my supervisor, Dr. Gamini Wijayarathna, for his encouragement, supervision and support from the preliminary to the concluding stages of this thesis.

I would also like to thank my parents and friends who have helped me in various ways to make this project a successful one.

Last but not least, I offer my regards to all of the academic and non academic staff members of the University of Moratuwa for their support provided.

Abstract

With the rapid popularity and increased usage of the Internet, online marketing has become a way of selling and purchasing goods through the Internet. This lead to development of various websites dedicated to online marketing and new techniques to support customers and information sharing became a major area of this.

The main objective of this thesis is to propose an efficient way of providing information to clients than the existing systems like shopping charts, operators, etc.

There are well known AI techniques and successful Chat bots and during the initial phase a research was carried out to get an understanding on those techniques and how they are used in the well know Chat bots.

The aim of this Chat bot is to analyze the user queries and to provide successful answers. Analysis is done by matching customer queries with sample queries and then extracting the information from those queries, which will be used to create the answers. The information extracted will be coupled with the predetermined answers and will be presented to the customers. This is also designed in such a way to capture certain information to increase its scope and efficiency.

The proposed Chat bot is in the primary stage and it is limited only for a simple bookshop scenario. Still this can be used for any kind of online shopping with a proper knowledge base attached to it. The proposed chat bot works as a solution provider for single customer queries, and can be improved with some advanced matching mechanisms to maintain a dialog with the customer, which will be much more user friendly and efficient.

Table of Contents

List of Figures

List of Tables