UNIVERSITI TEKNOLOGI MARA

Arcx Tech & Enterprise Ordering Systems With Collaborative Filtering

Ihsan Bin Ismail

Thesis submitted in fulfilment of the requirements for Bachelor of Information Technology (Hons) Information Systems Engineering Faculty of Computer and Mathematical Sciences

August 2021

SUPERVISOR APPROVAL

ARCX TECH & ENTERPRISE ORDERING SYSTEMS WITH COLLABORATIVE FILTERING

By

IHSAN BIN ISMAIL 2018653644

This paper was prepared under the supervision of the project supervisor, Sir Mohd Shukor Bin Abd Rahman. It was submitted to the Faculty of Computer and Mathematical Sciences and was accepted in partial fulfillment of the requirements for the degree of Bachelor of Information Technology (Hons.) Information Systems Engineering.

Approved by

Sir Mohd Shukor Abd Rahman

Project Supervisor

August 2021

STUDENT DECLARATION

I certify that this paper and project to which it refers is the product of my own work that any idea or quotation from the work of other people, published or otherwise are fully acknowledge in accordance with the standard referring practices of the discipline.

IHSAN BIN ISMAIL

2018653644

August 2021

ABSTRACT

Arcx Tech & Enterprise founded by En. Ismadi Bin Ismail in November 2016. The business does sales on new and refurbished PC, notebook, printer, cable, toner and accessories. Currently, the business does promoting on Facebook and Whatsapp. Any order received will be stored in either waveapps or excel form. Due to the different location of order storage, the process needed to trace back the order became tedious. It is time-consuming to search for an order with two different storage point. Next problem, Customer lost interest to buy the product promoted by the stakeholder because there is lack of information regarding the product review or rating. Therefore, this project created with the aims to develop Arcx Tech & Enterprise Ordering System (ATEOS) with collaborative filtering. The methodology used in this waterfall is iterative waterfall model. This model includes three phases, which are requirement gathering, and analysis phase, design phase, and implementation phase. Interview and gathering relevant records method are the collection method to gather requirement. In the requirement analysis phase, all the requirements will be analysed by using CRUD Technique that consists of "create", "read", "update", and "delete". Then, several diagram will be constructed and compiled in Software Requirement Specifications (SRS). Based on the discussion on the three type of recommendation system, which is content-based, collaborative and hybrid filtering, collaborative filtering based on product is chosen for this project. This system function is to recommend to the user several top sell product table for each category. In the design diagram, storyboard will be developed and several diagram will be constructed and compiled in Software Design Document (SDD). The last phase which is implementation phase, ATEOS will be developed. In recommendation for future work, several improvement could be made to ATEOS in the future such as implement several payment method and implement sent activation link or reset password link to real email account.

TABLE OF CONTENTS

CONTENT	PAGE
SUPERVISOR APPROVAL	II
STUDENT DECLARATION	III
ACKNOWLEDGEMENT ABSTRACT TABLE OF CONTENTS LIST OF FIGURES LIST OF TABLES	IV
	v
	VI
	X
	XII
CHAPTER ONE: INTRODUCTION	1
1.1 Background of Study	1
1.2 Problem Statement	3
1.3 Project Aim	3
1.4 Problem Objective	4
1.5 Project Scope	4
1.6 Project Significance	5
1.7 Outline of the Proposal	5
1.8 Summary	6
CHAPTER TWO: LITERATURE REVIEW	7
2.1 Ordering System	7
2.1.1 Definition	7
2.1.2 Advantages	7
2.2 Recommendation System	8
2.2.1 Collaborative filtering	8