

UNIVERSITI TEKNOLOGI MARA

**ONLINE COLLABORATIVE CREDIT
EXEMPTION SYSTEM**

ANDRITZ LOXLEY ANAK SPANCER

**BACHELOR OF COMPUTER SCIENCE
(HONOURS)**

JULY 2019

ACKNOWLEDGEMENT

Praises and thanks to God because of His Almighty and His utmost blessings, I was able to complete this research within the time duration given. Firstly, my special thanks goes to my supervisor, Dr. Zalilah Binti Abd Aziz for her advice, tips and guidelines in helping me throughout my thesis project.

Next, I would like to thank Dr Marina Binti Ismail, my CSP650 project lecturer, for her guidance and support to prepare for this Final Year Project.

Special appreciation also goes to my beloved parents because of their endless supports in many aspect such as financial, moral support and motivation throughout my studies.

Last but not least, I would like to give my gratitude to my dearest friend which helped and give support in completion of this project.

ABSTRACT

This thesis aimed to solve the process of credit exemption application that involved Faculty of Computer and Mathematical Sciences which are student, coordinator, resource person and admin by developed a web-based system. This web-based system used Strapi for database and Visual Studio Code as an editor. Apart from that, this system (Online Collaborative Credit Exemption System) would automate all the manual tasks of credit exemption application that done by student, coordinator, resource person and admin. So, the test data would involve ten students from Bachelor of Computer Science (Honours). As for the result, this system would be able to solve manual student application. Thus, making coordinator and resource person task become much easier that requires minimal time. This system used Rapid Application Development (RAD) methodology that involve four phases which are initial requirement, data collection, design and development, and testing and evaluation.

TABLE OF CONTENTS

CONTENT	PAGE
SUPERVISOR APPROVAL	ii
STUDENT DECLARATION	iii
ACKNOWLEDGEMENT	iv
ABSTRACT	v
TABLE OF CONTENTS	vi
LIST OF FIGURES	ix
LIST OF TABLES	xi
LIST OF ABBREVIATIONS	xii
CHAPTER ONE: INTRODUCTION	
1.1 Background of Study	1
1.2 Problem Statement	2
1.3 Research Questions	3
1.4 Research Objectives	3
1.5 Research Scope	3
1.6 Research Significance	4
1.7 Summary	4
CHAPTER TWO: LITERATURE REVIEW	
2.1 Introduction	5
2.2 Web-Based Development	5
2.2.1 System Development Methodologies (SDM)	6
2.2.1.1 Rapid Application Development (RAD)	6

CHAPTER ONE

INTRODUCTION

This chapter provides the background of study, problem statement, research questions, research objectives, research scope and research significance of the thesis.

1.1 Background of Study

Online Collaborative Credit Exemption System in general is a process where students can apply for course exemption based on Diploma results. It means that, course that already been taken in Diploma, can be skip in Bachelor Degree. Credit exemption is basically be applied in the first semester. A part of that, credit exemption system is a web-based system, where all process of student application is performed using the system. In the system, there are limit credit hour for credit exemption. In this case, student can only do credit exemption only within the credit hour given. If it exceeds the limitation, student have to take the course again in Bachelor Degree. After student agree with their decision, they click “save and confirm” button and the information are kept and will be sent to the coordinator. Finally, coordinator decide to approve or not approve the course for credit exemption.

On the other hand, if student that are Diploma from other university, their credit exemption is considered by syllabus checking. Student will upload syllabus of the course they applied and then, it will be check by resource person. Student will be given exemption only if the percentage of syllabus matched is equal to 80% or above.