

Universiti Teknologi MARA

**Self-Report Sports Injury Mobile
Application with Chatbot**

Mohamad Hakimi Bin Mohamad Noor

**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

SELF-REPORT SPORTS INJURY MOBILE APPLICATION WITH CHATBOT

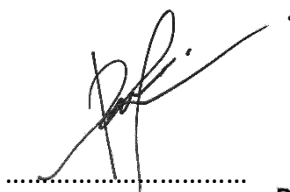
By

MOHAMAD HAKIMI BIN MOHAMAD NOOR

2018297666

This paper was prepared under the supervision of the project supervisor, Dr. Raihah Binti Aminuddin. 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

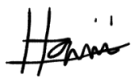


.....
DR. RAIHAH BINTI AMINUDDIN
Pensyarah Kanan
Fakulti Sains Komputer dan Matematik
Universiti Teknologi MARA
Kampus Jasin
Melaka
Dr Raihah Binti Aminuddin
Project Supervisor

AUGUST 1, 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.



.....

MOHAMAD HAKIMI BIN MOHAMAD NOOR

2018297666

AUGUST 1, 2021

ABSTRACT

Students from Faculty Sport Science and Recreation having difficulty to finish their assessment due to Covid-19. All classes are conduct online. Hence, they cannot diagnose injured athletes or person face-to-face. This project aims to develop Self-Report Sports Injury Mobile Application with Chatbot (SRSIMAC) for Faculty Sport Science and Recreation students as part of their learning and training using the SOAP notes method. Musculoskeletal Disorder (MSD) is degenerative diseases and inflammatory conditions that cause pain and impair normal activities. It affects many different parts of the body include Upper Limb Disorders (ULD), Lower Limb Disorders (LLD), and also back (upper and lower). MSD involves soft tissue. Sometimes, there are no visible signs of injury. These assessments are about self-reported or evaluation process.

The developer implements a modified waterfall and uses four phases out of seven during develops the project. It includes requirement gathering and analysis, design, implementation, and testing. The developer uses an online questionnaire and interview method to collect information. Then, rule the question for the third party chatbot using `kommunicate_flutter` packages in the mobile application. After finish developing the project, stakeholder will test the mobile apps based on the test cases. Once the test pass, SRSIMAC is ready to use by Faculty Sport Science and Recreation students and lecturers to diagnose and plan rehabilitation treatment for injured athletes or persons.

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
1.1 Background of Study	1
1.2 Problem Statement	5
1.3 Project Aim	6
1.4 Project Objectives	6
1.5 Project Scope	7
1.6 Project Significance	7
1.7 Summary	8
CHAPTER TWO: LITERATURE REVIEW	9
2.1 SOAP notes	9
2.1.1 Definition	9
2.1.2 Current Process and Challenges	10
2.2 Chatbot System	10
2.2.1 Chatbot History	10
2.2.2 Advantages and Disadvantages of chatbot	11
2.2.3 Existing Chatbot	12