

**UNIVERSITI TEKNOLOGI MARA**

**Mobile Application for Dental Clinic Appointment  
(Tooth Fairy)**

**NURUL HANANI BINTI MOHD ADAN**

**BACHELOR OF INFORMATION  
TECHNOLOGY (Hons.)**

**JULY 2021**

## **ACKNOWLEDGEMENT**

In the name of Allah, the Most Gracious and the Most Merciful.

First and foremost, my deepest gratitude goes to my wonderful supervisor, Madam Suzana binti Zambri for her time, patience, guidance, never-ending support, helpful advice as well as unceasing ideas that have helped me tremendously at all times during the completion of my final year project. It has been a great pleasure and honour to have her as my supervisor.

Next, I would like to sincerely give my warmest thanks to my final year project lecturer, Dr. Emma Nuraihan Mior Ibrahim for her insightful comments and the endless support that she gave to all her students. Honestly, every effort and time she spent to guide her students in completing this Project (CSP650) cannot be repaid. I am really grateful to have her as my final year project lecturer. Apart from that, I am particularly grateful to Dr. Surya Sumarni Hussein, my examiner, for her insightful comments and suggestions on this final year project. Her favourable answer has given me further insight into how this report might be improved.

I also want to extend my special thanks to my family especially my dearest mother, Julia, and my beloved father, Mohd Adan for their great understanding and have given me a lot of motivation as well as endless support during this online distance learning period. Surely, it would be possible to complete this final year project proposal without their good cooperation and powerful prayers during my studies.

Last but not least, I would like to express my biggest appreciation to all my dearest friends for always being there through thick and thin and always give advices and consistent supports towards the completion of my final year project. I thank them wholeheartedly.

## **ABSTRACT**

Oral health care is important for maintaining overall health and well-being. This project develops a mobile application that allows user to book an appointment with the dental clinic. The objectives of this project are to identify the user requirement for Tooth Fairy, to design Tooth Fairy, and to develop and demonstrate Tooth Fairy mobile application. The project solely focuses on developing a mobile application for the dental patients that have any procedure regarding tooth and in need of appointment. This project adopts the Mobile Application Development Lifecycle (MADLC) approach and covers from the identification phase up until the testing phase only. The features of the Tooth Fairy mobile application include booking with upload image, reminder calendar, user profile, location map, and feedback. The testing is done using the system usability scale (SUS). The significance of this project is to ease appointment booking process for the dental patients and avoid any future problems. For future enhancement, it is suggested to allows the dental patients to see slot date and time availability to make it easier for them to decide for an appointment.

**Keywords:** Android, Mobile Application Development Life Cycle (MADLC), Online Booking Appointment, Reminder Calendar, System Usability Scale.

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# CHAPTER ONE

## INTRODUCTION

### 1.1 Project Background

Dental and Oral health is a very important thing that we must take really good care of in our life as technically, our mouth is the most important part of our overall health and well-being. Poor oral health may lead someone to experience dental cavities, gum disease, and surprisingly it is also linked with heart disease, cancer, and diabetes (MD, 2018). Apart from that, it can affect our ability to eat, smile, talk, and somehow it will also worsen our work performance as well as attendance at work. Tooth loss gives difficulties for someone to communicate, limiting social interaction, detracting from physical appearance, and lowering self-esteem (Parker et al., 2020). Many countries have claimed that oral diseases pose a major health burden where it affects people's schedule throughout their lifetime which resulting in pain, discomfort, disfigurement, and for extreme cases, it can cause death (*Oral Health*, n.d.). According to ("Global, Regional, and National Incidence, Prevalence, and Years Lived with Disability for 354 Diseases and Injuries for 195 Countries and Territories, 1990–2017," 2018), it is estimated that 3.5 billion people worldwide have been affected by oral diseases and it shows how serious this disease if we are not practicing oral hygiene and not getting treatment. This is why it's critical to get our tooth treated promptly especially if it's causing us extreme pain. Therefore, all the patients who have problems with their teeth need to have their self-initiative to find a nearer dental clinic and solve their problem immediately. Hence, the dental clinic should provide an efficient platform for the patients to book an appointment, or else they will just ignore the treatment as the booking procedure is either inconvenient or difficult to handle.

When the patients want to find a dental clinic to get treatment, obviously they preferred ones that are easy to keep track of and well-managed especially when it comes to booking procedures. Moreover, patients will proceed and stick to the dental clinic that they feel comfortable and easy to deal with. In the management of a dental practice, an appointment system is really important and should be managed efficiently as it is the main centre of the office as well as a key factor to decide the dental clinic's future (Das et al., 2018). Usually, the dental clinic will record all the patients' information including their treatment history, prescription, and many more. There is some dental clinic who still implementing telephoning method as their way to keep in touch with patients. If we could see, by using that method it is crystal clear that both dental clinic and patients will have hard times in proceeding with the