



Faculty of Computer Science and Information Technology

**BABY'S DAILY ACTIVITIES REMINDER AND TRACKER  
MOBILE APPLICATION**

**Johnathan Lai Chang Shin**

**Bachelor of Computer Science with Honours**

**(Software Engineering)**

**2020**

**BABY'S DAILY ACTIVITIES REMINDER AND TRACKER MOBILE  
APPLICATION**

JOHNATHAN LAI CHANG SHIN

This project is submitted in partial fulfilment of the  
requirements for the degree of  
Bachelor of Computer Science with Honours

Faculty of Computer Science and Information Technology  
UNIVERSITI MALAYSIA SARAWAK

2020

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APPLICATION**

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Projek ini merupakan salah satu keperluan untuk  
Ijazah Sarjana Muda Sains Komputer dengan Kepujian

Fakulti Sains Komputer dan Teknologi Maklumat  
UNIVERSITI MALAYSIA SARAWAK

2020

UNIVERSITI MALAYSIA SARAWAK

THESIS STATUS ENDORSEMENT FORM

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**ACADEMIC SESSION:** 2019/2020

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I hereby declare that the project report entitled “Baby’s Daily Activities and Tracker Mobile Application” submitted to Encik Mohamad Johan bin Ahmad Khiri which is my supervisor and Dr. Yanti Rosmunie Binti Bujang which is my examiner. I assure the project is my original work and did not copy from other people or sources except the cited sources.

Lai

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## **ACKNOWLEDGEMENT**

First and foremost, I would like to thank my supervisor Encik Mohamad Johan bin Ahmad Khiri for his patient guidance and support throughout my final year project. Encik Johan provided me a lot of useful ideas and comments for my project. Besides that, I would also like to thank my Final Year Project's coordinator, Prof. Dr. Wang Yin Chai, for his guidance on project guidelines.

Moreover, I would like to thank my family that support me throughout my final year project. They have given me unlimited support by providing suggestion on what should I do in my final year project.

Finally, I would like to thank my friends and family again that encouraged me throughout my final year project journey by giving me positive mentality support. Without them, I wouldn't be standing where I am today. Thus, I will always remember them no matter where I am in the future.

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## **ABSTRACT**

*Nowadays, both parents are working to provide best support for their family. Therefore, they might face many problems of taking care of their baby as they are busy with their works. Due to this they always lost track of their baby's daily activities such as milk feeding, diaper changing, sleeping duration and medicines. baby's daily activities such as milk feeding is very important for the health, growth and development of baby. Therefore, Baby's Daily Activities Reminder and Tracker Mobile Application help the parent to record down and keep track of their baby's daily activities by using QR code method. It also able to show overall statistics of frequency for every baby's activities in certain duration and there is a note section provided for parent to record down the important note of the baby. This mobile application can help to reduce the burden of the parent and also ensure the health and growth of their baby.*



## ABSTRAK

Kini, kedua-dua ibu bapa bekerja untuk memberi sokongan terbaik untuk keluarga mereka. Oleh itu, mereka mungkin menghadapi banyak masalah menjaga bayi mereka kerana mereka sibuk dengan kerja mereka. Oleh itu, mereka selalu kehilangan jejak aktiviti harian mereka seperti menyusu, penukaran lampin. Aktiviti harian bayi seperti memberi susu adalah sangat penting untuk kesihatan, pertumbuhan dan perkembangan kanak-kanak. Oleh itu, "*Baby's Daily Activities Reminder and Tracker Mobile Application*" membantu ibu bapa merakam dan menjejaki aktiviti harian bayi dengan menggunakan kaedah kod QR. Ia juga dapat menunjukkan statistik keseluruhan untuk setiap aktiviti bayi dan terdapat seksyen nota yang disediakan untuk ibu bapa untuk merakam nota penting bayi itu. Aplikasi ini boleh membantu mengurangkan beban ibu bapa dan juga memastikan kesihatan dan pertumbuhan anak mereka.

# CHAPTER 1: INTRODUCTION

## 1.1 Introduction

In today's world, both parents in a family are working not only in the families with poor economic situations but also in wealthier ones. Most people believed that they could provide best support for their baby in the future as both of parent work. However, both parents working might face many problems for taking care of their baby. Not only they might be new parents who are inexperienced of taking care their baby but also, they will be exhausted from their works. Due to this, they have lost track of their baby's activities such as milk feeding, diaper changing, sleeping duration and medicines. According to Corley, H., the definition of baby is refer to any child from birth to age 4 years old. Baby's activities are very important to know the condition of the baby. For example, baby feeding practices rank among the most effective improvement for baby's health. Adequate nutrition during infancy helps to ensure the health, growth, and development of baby to their full potential. Besides that, inappropriate nutrition can cause of obesity which is an increasing public health problem in many countries. Therefore, baby feeding is very important and crucial for a baby to grow healthy in the future (World Health Organization, 2009). Therefore, "Baby's Daily Activities Reminder and Tracker Mobile Application" that can help parent to record down and keep track of their baby's daily activities such as milk feeding, diaper, sleeping, time and medicine. This mobile application can help to record down all the baby's activities such as milk feeding, diaper, sleeping time and medicine and also notify the parents as reminder. Not only that, there is a note section for user to record down the important task or thing that they need to be take note and user can see the overall statistics for the baby's daily activities. With this mobile application, parents will never be lost track of their baby's daily activities and it will help to ensure the health, growth and development of the baby.

## 1.2 Problem Statement

In modern living, parents are busy working and they are not able to remember all the things especially when it comes to their baby's daily activities such as milk feeding, diaper, sleeping time and medicine. This might lead to a very serious problem for example, parents might forget to feed their baby which cause the inadequate nutrition during infancy. Poor nutrition increases the risk of illness, and is responsible directly or indirectly, for one third of the estimated 9.5 million deaths that occurred in 2006 in children less than 5 years of age (World Health Organization, 2009). Besides that, parent might just feed the baby whenever they want since they forgot the last milking feeding time. There are a few problems that might be faced by the baby for drinking too much milk such as constipation, obesity, and iron deficiency. Constipation and iron deficiency happened to baby because they drink too much milk and get filled up for not having any fiber and iron foods.

## 1.3 Project Description

This is a Baby's Daily Activities Reminder and Tracker Mobile Application. This mobile application using the method of QR code to have a quick and easy logging of milk feeding, sleeping schedule and medicine. This system will be able to support parents with more than one child and set reminders prompting notification alerts to the user phone when baby is ready for their next feeding and medicine. There will be a notes section which able to record voice or video for user to record down their needs for next doctor's visit. The parents can also share the information to other users who also help of taking care of the baby such as nanny. This system also able to show the statistics for baby's daily activities so that parents can analyze their babies' data such as feeding time and sleeping schedule. By having Baby's Daily Activities Reminder and Tracker Mobile Application, it helps to reduce the burden of parents for taking care of baby.

## 1.4 Scope

This Baby's Daily Activities Reminder and Tracker Mobile Application is designed to help the parent to record down and keep track of their baby's daily activities. This mobile application can be installed in the smartphone of the parent to use it.

The limitation of this mobile application is that only the people who have smartphone able to use this mobile application. Besides that, the QR code method is only applicable at the places that had the QR code of the baby's daily activities.

## 1.5 Objective Aim

There are three objectives in developing Baby's Daily Activities Reminder and Tracker Mobile Application. The objectives of this mobile application are as the following:

1. To analyze and design a system that help the new parents to monitor the baby's daily activities.
2. To develop a system that can notify user as a reminder for their baby's activities such as milk feeding time and sleeping time.
3. To able show the statistics for history baby's activities such as milk feeding pattern and sleeping pattern.

## 1.6 Significance of Project

The significance of this project are as the following:

1. To helps user to record down their baby's daily activities.

User able use this mobile application to record down the time of their baby's daily activity by using two methods. User can choose either record down the time using button pressed method or QR code Scanning method.

2. To notify the user as a reminder when there is the need to do such as milk feeding and medicine.

Pop-up notification had been used to notify user as period of time had passed. This notification is to notify user that the last milk feeding time and medicine time had passed a certain period and they need to be alert with that.

3. To provide simple way for user to record down and keep track their baby.

User able to record down and keep track of the baby's activities by using their mobile phone. This mobile application provides all the functionalities like record down time of baby's activities and view all the previous records.

4. To provide a method of going paperless to save environment.

User will used to record down the baby's activities by writing into a book or paper. Therefore, with this mobile application, user able to record down all the baby's activities into the mobile application.

5. To provide a method that can help to save time and money.

User can save the money because they won't need to buy pencil and notebook to record down the baby's activities. Record down all the baby's activities using mobile application is much faster if compare with record down by using writing method.

## 1.7 Expected Outcome

The outcome of this project is a mobile application that can help the new parents to record down and monitor the baby's activities easily by using QR code method. The baby information can be shared among the people who are taking care of the baby such as parents, grandparents and babysitters. This mobile application also can notify the user as a reminder to remind the user to do something that they might forget to do. There will be a note section for user to record down the important task or thing need to be take note. Statistics for history baby's activities such as feeding time and sleeping schedule are provided in this system.

## 1.8 Project Schedule

This project had been classified into two parts which are Final Year Project 1 (FYP1) and Final Year Project 2 (FYP2). Final year project 1 is about ideas and requirements of this project while FYP2 is about the build and test the prototype of this project. The full project can be done within two semesters which is around nine months starting from September 2019 till June 2019.

## 1.9 Project Outline

The project outline is categorized into five different chapters as listed below:

i) Chapter 1: Introduction

In this Chapter, the introduction of the project and the objectives had been stated. Besides that, the methodology and project schedule to complete this project were listed in Chapter 1.

ii) Chapter 2: Literature Review

Chapter 2 is all about comparison between Baby's Daily Activities Reminder and Tracker Mobile Application with existing related mobile application. It is compared by its strength and weakness in different perspective.

iii) Chapter 3: Requirement Analysis and Design

This chapter is about the methodology that used to develop the prototype for this project. User requirements for the prototype will be collected during the development by making a survey through questionnaire form. This is an important stage, so every detail part of the requirements in this project must be done properly.

iv) Chapter 4: Implementation and Testing

Chapter 4 is about implementation and testing after the prototype has been developed successfully. Prototype will be tested to check there is any error or bugs occur during the live test. This is one of the stages where the prototype is ready to be launched live after implementation and testing.

v) Chapter 5: Conclusion

The whole project will be summarised and concluded after the project has been successfully developed into a working prototype in this chapter. Every important details of the project must be rechecking before summarization of the project is written in this chapter.

## 1.10 Summary

Baby's Daily Activities Reminder and Tracker Mobile Application is a very helpful for parent which able help them to record down and keep track of their baby's daily activities. It is also able to notify the user as reminder and show the statistics of the history of the baby's daily activities. Besides that, it can be installed in any android mobile phones which is very simple to use and can be use by anyone who got an android mobile phone. Therefore, it can help to reduce the burden of the parents for taking care of their baby.

## CHAPTER 2: LITERATURE REVIEW

### 2.1 Introduction

There are three objectives in developing Baby's Daily Activities Reminder and Tracker Mobile Application. The objectives of this mobile application are as the following:

1. To analyze and design a system that help the new parents to monitor the baby's daily activities.
2. To develop a system that can notify user as a reminder for their baby's' activities such as milk feeding time and sleeping time.
3. To able show the statistics for history baby's' activities such as milk feeding pattern and sleeping pattern.

Nowadays, both parents are working because they believed that they can provide best support for their baby's in the future. However, both parents working might face many problems for taking care of their baby's such as new parents might be inexperienced and no time for taking care of their babies. With that, introducing The Baby's Daily Activities Reminder and Tracker Mobile Application, a mobile application that helps parents to remind and keep track of their baby's daily activities such as milk feeding, diaper changing, sleeping duration and medicines. Mobile application which is also called an "app" is a software program that run on the smartphones. Mobile application development is not an easy task because it must be able to provide values such as cost efficient, easily managed, user friendly and beneficial app to user.

The Baby's Daily Activities Reminder and Tracker Mobile Application is beneficial to parents who had newborn baby as this mobile application able to make their living and life easier. By having Baby's Daily Activities Reminder and Tracker Mobile Application, parents can keep track and be reminded all the baby's daily activities. This mobile application able to