

SUPERVISOR'S APPROVAL

Mobile Application for Patient Monitoring System

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This report was prepared under the supervision of the project supervisor, Nur Suhailayani Binti Suhaimi. It was submitted to the Faculty of Computer Sciences and Mathematical was accepted in partial fulfillment of the requirements for the degree of Bachelor of Information Technology (Hons.) Information Systems Engineering.

Approved by

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JULY 30, 2015

STUDENT'S DECLARATION

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

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ABSTRACT

This research was about implementing technology usage in the health care area by using mobile applications in monitoring the patient and notified the doctor which patient they have been assigned. The problem statement was lack of efficiency in terms of performance and time. The medical record was recorded in manual written and consuming time when doctor want to review patient medical record. There were three (3) objectives that need to be achieved which were, to study the business process of the Surgical Ward in Hospital Melaka, to design mobile application architecture using three-layer architecture and to develop mobile application for patient monitoring using Android Programming. This project only focused on the Surgical Ward department of Hospital Melaka. The user of this system was only for the doctor and nurse in the Surgical Ward. This project also focused on developing the mobile application, which was covered for medical record of the patient. On top of that, this mobile application used PHP, Java, and XML language to develop the system. Furthermore, this mobile application used Internet to interact with the online database. The manual based monitoring was the most traditional patient monitoring based system. The computer-based system was invented from paper-based system. The computer-based system was the current patient monitoring system and has been implemented for few hospitals. However, the computer-based system was lack in terms of mobility of the system. The system can access in one place. But the mobile application patient monitoring system was more reliable than computer-based system in terms of mobility and their security. Besides that, monitoring the patient using mobile application also has been introduced to make their work faster and efficiently. There was three (3) aspect has been compared to each other. Those three (3) aspects was interface, mobility and their flow of showing the information. After that, the Iterative Methodology was implemented in this project. The findings of this project were to allocate the system in the Surgical Ward of Hospital Melaka. The constructions of the system begin with defining the architectural design of the system. The analysis was done to make sure the objective stated in Introduction, was achieved. The analysis of this project was seen from aspects their role and their business process. This was to make sure the system running follow the business process. Their business process shows the medical record was very private and confidential. Their content also limited to the nurse and the doctor only. Last but not least, the conclusion and the recommendation of this project was defined.

TABLE OF CONTENTS

CONTENTS

PAGE

SUPERVISOR’S APPROVAL	i
DECLARATION	ii
ACKNOWLEDGEMENT	iii
ABSTRACT	iv
TABLE OF CONTENTS	v
LIST OF FIGURES	x
LIST OF TABLES	xi
LIST OF ABBREVIATIONS	xiii

CHAPTER ONE: INTRODUCTION

1.1 Background of Study	1
1.2 Problem Statement	3
1.3 Project Aim	4
1.4 Research Objective	4
1.5 Scopes	4
1.6 Project Significance	5
1.7 Organizational Chapter	5

CHAPTER TWO: LITERATURE

2.1 Manual Patient Monitoring System	8
2.1.1 Definition of Paper-Based System	8
2.1.2 Characteristics of Paper-Based System	9
2.1.3 Advantages of Paper-Based System	11
2.1.4 Disadvantages of Paper-Based System	12
2.2 Automated Patient Monitoring System	13

2.2.1	Definition of Computer-Based System	14
2.2.2	Characteristics of Computer-Based System	14
2.2.3	Advantages of Computer-Based System	16
2.2.4	Disadvantages of Computer-Based System	18
2.3	Mobile Phone Application Monitoring System	19
2.3.1	Definition of Mobile Phone Application Monitoring System	19
2.3.2	Developing of Mobile Phone Application Monitoring System	20
2.3.2.1	Define goal	20
2.3.2.2	Start sketching	21
2.3.2.3	Research	21
2.3.2.4	Create a storyboard	22
2.3.2.5	Define the back end of application	22
2.3.2.6	Test your prototype	22
2.3.2.7	Build the back end of application	23
2.3.2.8	Design the application interface	24
2.3.2.9	Test	24
2.3.2.10	Preview and continue to build	25
2.3.2.11	Release	25
2.3.3	Advantages of Mobile Phone Application Monitoring System	26
2.4	Related Works	27
2.4.1	The Advanced Traveler Information System (ATIS)	27
2.4.1.1	Application Development	29
I.	Transmission of Geographic Location	29
II.	Sending and Receiving Data from the Web Services	30
III.	Getting Information about the Traffic	30
2.4.2	The Health Feed	30
2.5	Discussion	34
2.5.1	Comparison between Computer-Based System and Mobile Phone Application Monitoring System	34
2.6	Overview of Iterative Methodology	35
2.7	Chapter Summary	36