



FINAL YEAR PROJECT REPORT

**PERSONALIZED HEALTH ASSISTANT
WITH NOTIFICATION
TO RELEVANT INTEGRATED SYSTEM**

**In fulfillment of the requirement
For degree of
BS (Information Technology)**

By

**CHAMAN RAZA
FATIMA BATOOL
RIDA KAZMI**

**57354 BSIT
57333 BSIT
57352 BSIT**

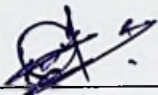
SUPERVISED

BY

**MUHAMMAD MAROUF
BAHRIA UNIVERSITY (KARACHI CAMPUS)
2022**

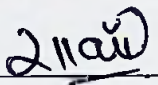
DECLARATION

We hereby declare that this project report is based on our original work except for citations and quotations which have been duly acknowledged. We also declare that it has not been previously and concurrently submitted for any other degree or award at Bahria University or other institutions.

Signature : 

Name : Chaman Raza

Reg No. : 57354

Signature : 

Name : Fatima Batool

Reg No. : 57333

Signature : 

Name : Rida Kazmi

Reg No. : 57352

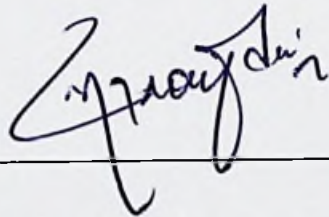
Date : 06 July, 2022.

APPROVAL FOR SUBMISSION

We certify that this project report entitled “PERSONALIZED HEALTH ASSISTANT WITH NOTIFICATION TO RELEVANT INTEGRATED SYSTEM” was prepared by CHAMAN RAZA / FATIMA BATOOL / RIDA KAZMI has met the required standard for submission in partial fulfilment of the requirements for the award of Bachelor of **Bachelor of Information Technology** at Bahria University.

Approved by,

Signature :



Supervisor: Mr. M. Marouf

Date :

06 July, 2022

The copyright of this report belongs to Bahria University according to the Intellectual Property Policy of Bahria University BUORIC-P15 amended on April 2019. Due acknowledgement shall always be made of the use of any material contained in, or derived from, this report.

© 2022 Bahria University. All right reserved.

Specially dedicated to
My beloved grandmother, mother and father
(Fatima Batool)
My beloved grandmother, mother and father
(Chaman Raza)
My beloved parents, teachers and mentors
(Rida Kazmi)

ACKNOWLEDGEMENTS

We would like to thank everyone who had contributed to the successful completion of this project. We would like to express my gratitude to my research supervisor, **Mr. M. Marouf** for his invaluable advice, guidance and his enormous patience throughout the development of the research.

In addition, we would also like to express my gratitude to our loving parent and friends who had helped and given me encouragement.

PERSONALIZED HEALTH ASSISTANT WITH NOTIFICATION TO RELEVANT INTEGRATED SYSTEM

ABSTRACT

Mobile applications are widely adopted as they provide great ease of use as well as a personalized sense to the user's particular needs. As a result, there is a great number of applications available in the domain of assisting, supporting and providing a useful tool for different groups of health issues.

Due to the vast enlargement of various technologies, today's Healthcare is not limited in just hospitals. Mobile applications for health care make the humans lives much easier and also make it possible to track their important vitals when they are integrated with some sensors and hardware system.

The objective of this project is to develop a health care mobile application which helps to improve the health care environment. This report defines the different benefits, objectives, methodology and also the future scope of this application.

The services of our health mobile application are based on the software structure which provides an easy access to all the medical history of the patients, allows the patient to easily get the doctor's appointment from their report locations at any time, set the reminders for the appointments, show all the healthcare metrics, maintain your physical fitness with the help of exercising videos and it also helps the doctor to better understands the patient's health situation also improve the all over health management environment.

This online health care application will have each user's portal which is specially designed according to their needs. This application is designed to mainly help to provide a user- friendly system for the patients and doctors to improve the health care environment and fills the holes of some current problems.

TABLE OF CONTENTS

DECLARATION	1	
APPROVAL FOR SUBMISSION	2	
ACKNOWLEDGEMENTS	5	
ABSTRACT	6	
TABLE OF CONTENTS	7	
LIST OF TABLES	9	
LIST OF FIGURES	10	
LIST OF SYMBOLS / ABBREVIATIONS	11	
LIST OF APPENDICES	12	
 CHAPTER		
1	INTRODUCTION	13
	1.1 Background	13
	1.2 Problem Statements	13
	1.3 Aims and Objectives	14
	1.4 Scope of Project	14
	1.4.1 Final Deliverable of the Project	14
	1.4.2 Benefits	15
2	LITERATURE REVIEW	16
	2.1 Overview	16
	2.2 Mobile Healthcare Applications Are More Convenient Than Traditional Healthcare	16
	2.2.1 Distance Doesn't Matters	16
	2.2.2 More Cost Effective	16
	2.2.3 Efficient Record Maintaining	17
	2.2.4 More Environment Friendly	17
	2.3 Comparative Analysis between Mobile Health Care Application and Traditional Health Care	18
	2.4 Existing Health Care Applications	18

	2.4.1 Comparative Analysis between Our Application and Existing Health Care Applications	19
3	DESIGN AND METHODOLOGY	20
	3.1 Data Analysis and Consideration	20
	3.2 Data Gathering	20
	3.3 Designing Process	20
	3.3.1 Modules	20
	3.4 Project Methodology	21
	3.4.1 Benefits of Agile Development Methodology	22
	3.5 Work Flow Diagram	23
	3.6 Use Case Diagram	23
4	IMPLMENTATION	24
	4.1 Development Process	24
	4.1.1 Front-End	24
	4.1.2 Back-End	24
	4.2 Software Requirements	25
	4.3 Hardware Requirements	25
5	TESTING AND EVALUATION	26
	5.1 Test Plan	26
	5.2 Testing Strategy	27
	5.3 Test Cases and Evaluation	27
6	CONCLUSION AND FUTUER WORK	28
	6.1 Conclusion	28
	6.2 Future Work	28
	REFERENCES	29
	APPENDICES	30