A Mini Project Report on

MedXpert

Submitted in partial fulfillment of the requirements for the award of the degree of

Bachelor of Engineering

in

COMPUTER

by

Ishanee Revankar(19102040)
Chirag Hegde(19102035)
Nidhi Heniya(19102041)
Nidhi Singh(19102042)

Under the Guidance of

Prof.Shafaque Sayed

Department of Computer Engineering
A.P. Shah Institute of Technology
G.B.Road, Kasarvadavli, Thane(W),
Mumbai-400615
UNIVERSITY OF MUMBAI

Academic Year 2020-2021

Approval Sheet

This Mini Project Report entitled ***"MedXpert"*** Submitted by ***Ishanee Revankar(19102040) Chirag Hegde(19102035), Nidhi Heniya(19102041), Nidhi Singh(19102042)*** is approved for the partial fulfillment of the requirement for the award of the degree of ***Bachelor of Engineering*** in ***Computer*** from ***University of Mumbai.***

Prof. Sachin H. Malave
Head of Department
(Computer Engineering)

Prof.Shafaque Sayed
Guide

Place: A. P. Shah Institute of Technology, Thane
Date:

CERTIFICATE

This is to certify that the mini project entitled ***"MedXpert"*** submitted by ***Ishanee Revankar(19102040) Chirag Hegde(19102035), Nidhi Heniya(19102041), Nidhi Singh(19102042)*** for the partial fulfillment of the requirement for award of a degree ***Bachelor of Engineering*** in ***Computer,*** to the University of Mumbai, is a bonafide work carried out during academic year 2020-2021.

(Name)
Guide

Prof. Sachin H. Malave
D.Kolekar Head of Department
(Computer Engineering)

Dr. Uttam
Principal

External Examiner(s)

1.

2.

Place: A. P. Shah Institute of Technology, Thane
Date:

Declaration

We declare that this written submission represents our ideas in our own words and where others' ideas or words have been included, We have adequately cited and referenced the original sources. We also declare that We have adhered to all principles of academic honesty and integrity and have not misrepresented or fabricated or falsified any idea/data/fact/source in our submission. We understand that any violation of the above will be cause for disciplinary action by the Institute and can also evoke penal action from the sources which have thus not been properly cited or from whom proper permission has not been taken when needed.

——————————————

(Signature)

——————————————

Ishanee Revankar(19102040)
Chirag Hegde(19102035)
Nidhi Heniya(19102041)
Nidhi Singh(19102042)

Date:

Abstract

Our project aims to develop an application with multiple features for users to organize their healthy lifestyle.

This project mainly includes 3 modules-

- Medicine reminder/Restocking reminder
- Daily exercise/meditation plan
- Diet plan according to the health condition of the user

Med-reminder allows users to add reminders for the medicines and gives the restocking reminders too.

Second module of the application displays certain common exercises/ meditation plans for users to follow.

Finally, third module displays a breakfast-lunch-dinner diet routine on the basis of health condition mentioned by user

Contents

List of Figures

Chapter 1

Introduction

Now-a-days people are living their lives as robots, constantly working, while doing this people often forget to look after their health and personal life. Having someone to look after you is asking for commitment, one cannot rely on another human being to look after them, especially when the subject is about one's health. People living a hectic life often forget to maintain a proper medication routine and a healthy lifestyle. Without constant reminders it is difficult to do certain things. For this we are developing an application which will play the role of a caretaker in one's life. This application aims to set reminders for a proper medication routine and provide a healthy lifestyle by providing diet plans and daily exercise/meditation routine.

1.1 Problem Definition

In this project, the aim is to implement a Application that will help individuals set reminders for their medicines, improve their lifestyle by providing daily exercise, meditation plan and a diet plan.

1.2 Objectives

To develop a mobile application that provides a platform to help the user get a habit of practising a healthy routine by setting the reminders for medications.

To develop an application that monitors the user's daily water intake, daily exercise and meditation.

To set a routine for certain things that has to be done on a daily basis to improve the health condition the user is suffering from.

1.3 Scope

This project is an android-based application.
Once the user opens the application, he/she will have to create an account on the application, if already existing user opens the app, they will simply have to Login.Once the user logs in, they will be redirected to homepage, where user will be able to see things like Daily medicine reminder, Select a diet plan and daily exercise/meditation.User will get to access other modules of the application via the navigation bar on the bottom of the homepage.
User can add medicine reminders, get restocking reminders, get a daily exercise/meditation routine and a diet routine according to health conditions.

Task 1- 10 Health Conditions to be included in application.

1. Heart Condition-
2. Asthma-
3. Thyroid-
4. Blood Pressure
5. High Cholesterol -
6. Diabetes-
7. Obesity-
8. lactose intolerance
9. Osteoporosis
10. Fatty liver

1.4 Existing System/Project

Though the concept of Healthcare already exists, none of them offer the service of providing a proper diet and workout routine for improving the health condition faced by the user. This application provides a module which sets out a diet plan, effective workout routine and do's and don'ts related to the health condition mentioned by the user.
Some of the existing projects are-

1. Medisafe(Health and fitness tracker)
2. Therapy (Medication reminder and pill tracker)
3. Healthy diet
4. smart dietitian
5. Health Tracker

Chapter 2

Technology Stack

The project will be using **KOTLIN** language to implement this dynamic android based project.
The user-interface shall be available on an Application.
The code will be implemented in **Android Studio.**
Firebase for database management will be used.
The project will be implemented on Windows 64-bit operating system
1)Kotlin
Kotlin is a cross-platform, statically typed, general-purpose programming language with type inference. Kotlin is designed to interoperate fully with Java, and the JVM version of Kotlin's standard library depends on the Java Class Library.
2)Android Studio
Android Studio is the official integrated development environment for Google's Android operating system, built on JetBrains' IntelliJ IDEA software and designed specifically for Android development.
3)Firebase
Firebase is a platform developed by Google for creating mobile and web applications.

Chapter 3

3.1 Benefits

Nowadays, due to hectic daily life schedules, people often forget to take care of their health. With having to rush 24x7 people tend to forget important things like taking their medication. Often people maintain reminders by writing them down in their diaries. But maintaining a diary is not only difficult but also in some way bad for the environment, since all that paper's used for making a single diary.
But with MedExpert we aim to help people with not only their health but also provide a handy application to get reminders about medication and exercises.

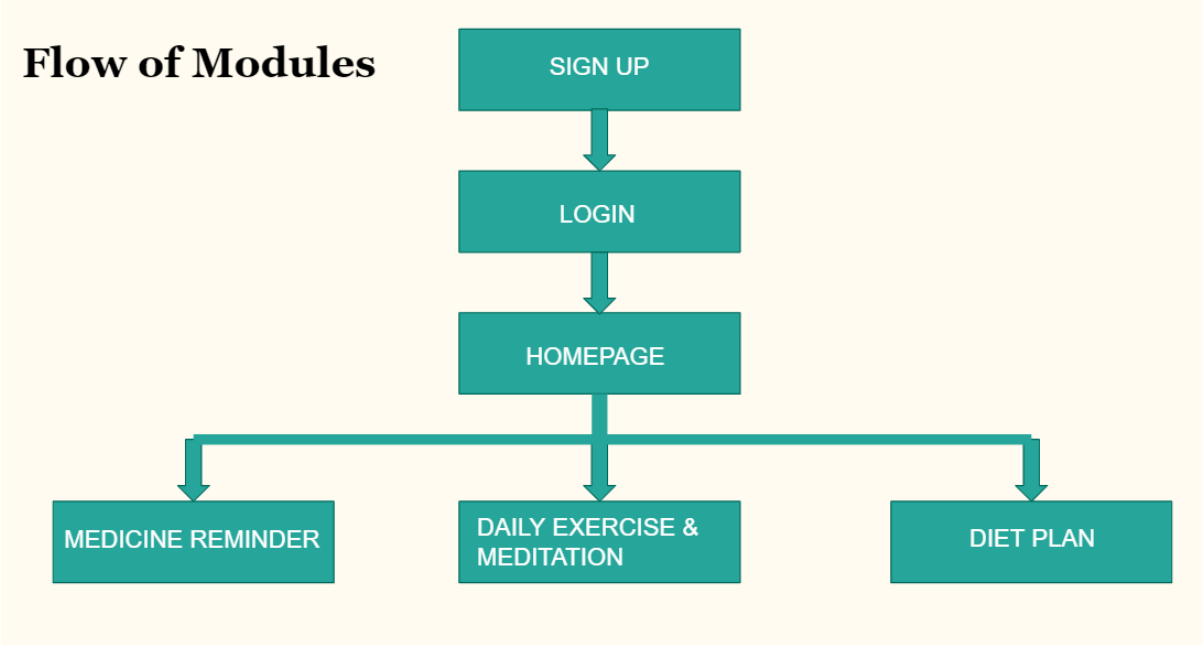
3.2 Applications

Medicine Reminder:
This feature will allow the user to add a number of medicines to get reminders of each on a daily/weekly/monthly basis according to the given input time.
Restocking:
User will have to manually insert the quantity of pills remaining in the inventory and get reminder of restocking it before particular no.of days(set by the user)
Daily Exercise/Meditation
Set of exercises and yoga will be provided of which the user will have to select the routine they want to follow everyday or for that day.
Daily Routine Suggestion according to Health Condition:
This feature will provide a "daily routine" suggestion according to the health condition of the user.
This routine contains a diet plan that will be appropriate for a health disease, water intake, minimum hours of sleep and basic exercise/Meditation routine

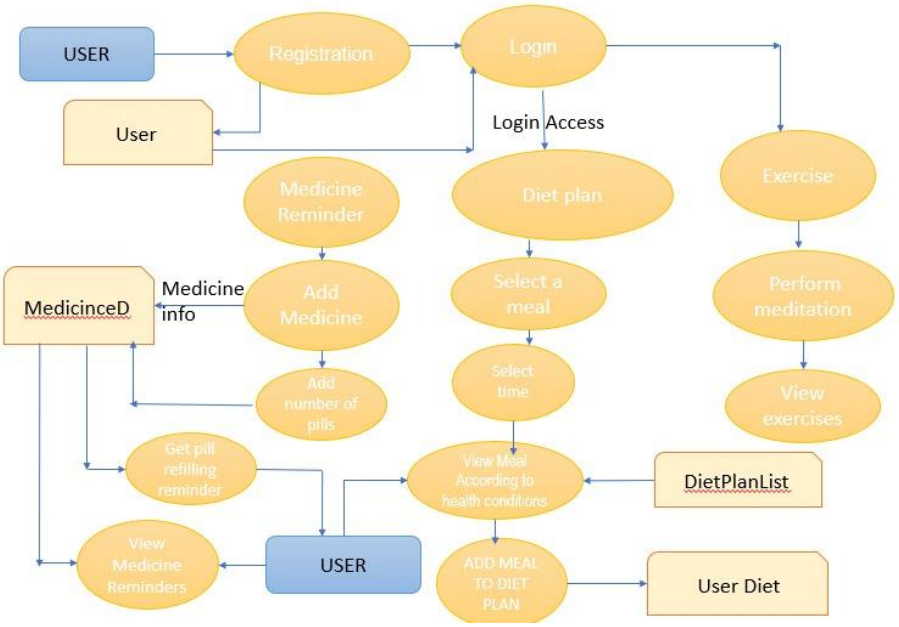
Chapter 4

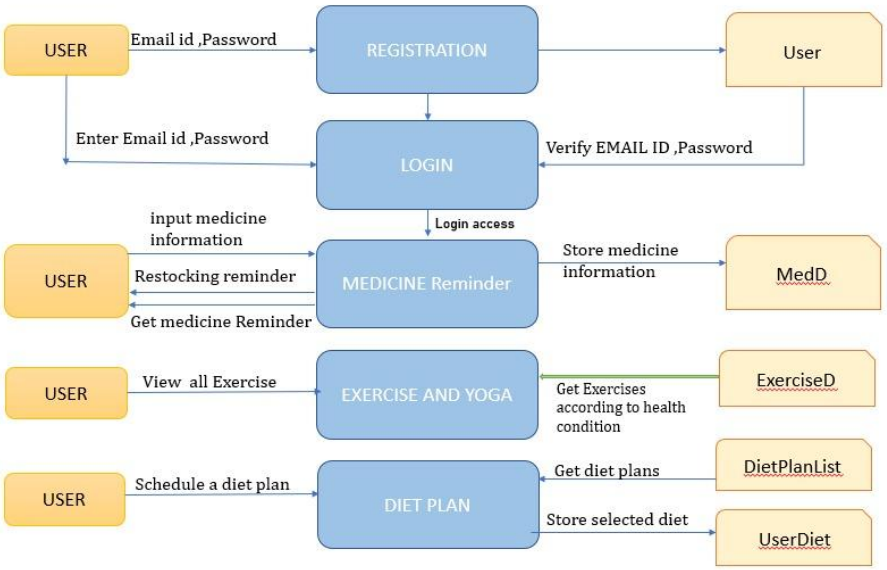
Project Design

4.2



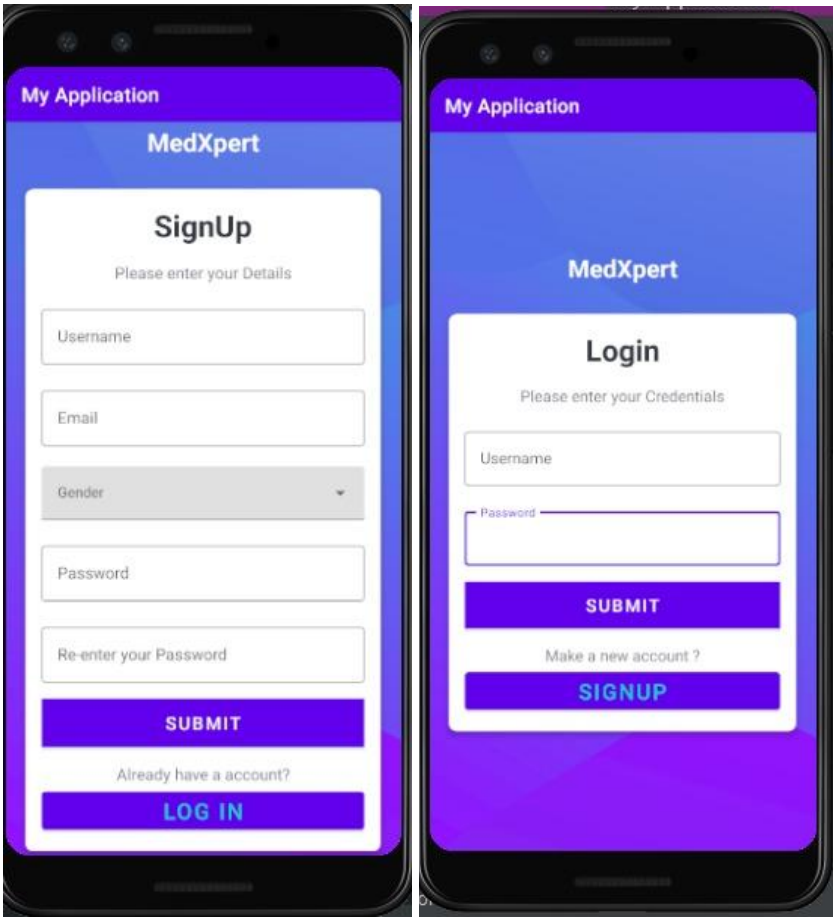
4.3 Data Flow Diagram

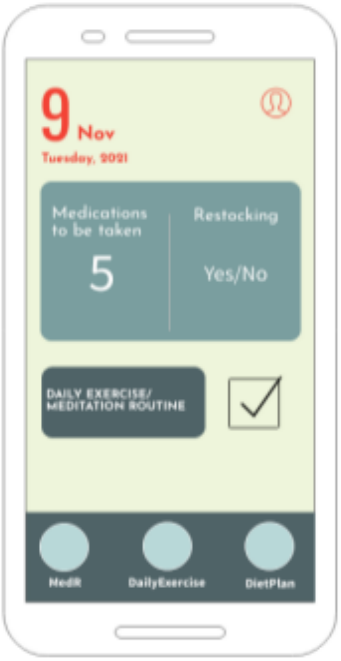


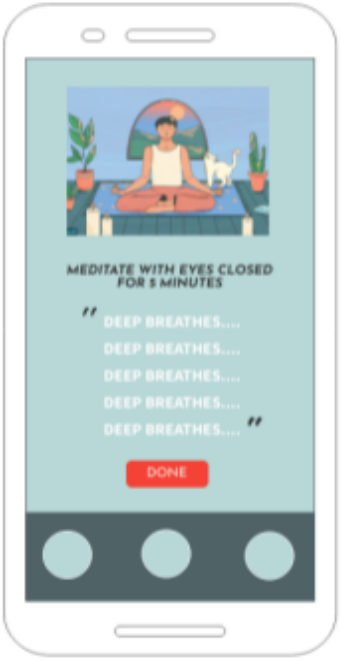


Chapter 5

Implementation




9 Nov
Tuesday, 2021
Medications to be taken
5
Restocking
Yes/No
DAILY EXERCISE/ MEDITATION ROUTINE
MedR
DailyExercise
DietPlan


MEDITATE WITH EYES CLOSED FOR 5 MINUTES
DEEP BREATHES....
DEEP BREATHES....
DEEP BREATHES....
DEEP BREATHES....
DEEP BREATHES....
DONE


Daily Workout
FOLLOW THE GUIDE CHART ABOVE AND PERFORM 10 REPS
DONE


DAILY ROUTINE OF MEDITATION, EXERCISE & YOGA IS DONE

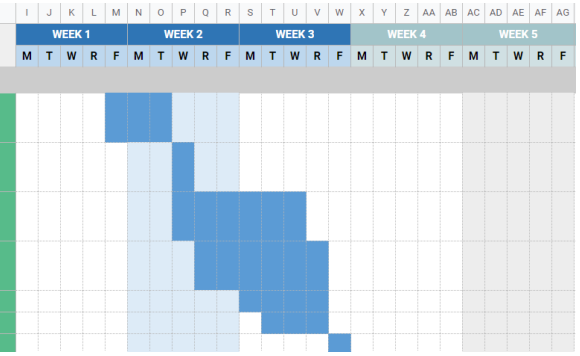

RESTOCKING
No.of pills left as of today:
Name of the med
MED1
MED2
MED3
ADD REMINDER


DIET PLAN
BREAKFAST
LUNCH
DINNER
MORE ABOUT YOUR CONDITION

Chapter 6

6.1 Gantt Chart

WBS NUMBER	TASK TITLE	TASK OWNER	START DATE	DUE DATE	DURATION	PCT OF TASK COMPLETE
1	**Project Conception and Initiation**					
1.1	Group Formation	Ishanee R, Chirag H, Nidhi S, Nidhi H	08/26/21	8/28/21	2	100%
1.2	Topic Decision	Ishanee R, Chirag H, Nidhi S, Nidhi H	8/28/21	9/3/21	5	100%
1.3	PPT Making	Ishanee R, Chirag H, Nidhi S, Nidhi H	9/4/21	9/10/21	6	100%
1.4	Report completion	Ishanee R, Chirag H, Nidhi S, Nidhi H	9/11/21	9/15/21	4	100%
1.4.1	Introduction	Ishanee R	9/16/21	9/18/21	2	100%
1.4.2	Benefits and applications	Chirag H	9/16/21	9/18/21	2	100%
1.4.3	Project Design	Nidhi S, Nidhi H	9/16/21	9/18/21	2	100%



Bibliography

[1] Jeongeun Kim, PhD, RN, INS College of Nursing, Analysis of Health Consumers' Behaviour Using Self-tracker for activity, sleep and diet. https://doi.org/10.1089/tmj.2013.0282 ,3 Jun 2014

[2] Deepti Ameta DA-IICT · Research Lab, Medication Reminder and Healthcare – An Android Application.https://www.researchgate.net/publication/281379567_Medication_Reminder_and_Healthcare_-_An_Android_Application

[3] Parag Achaliya SNJB's Late Sau Kantabai Bhavarlalji Jain College of Engineering · Information Technology, Master of Engineering, Android based medication reminder system based on OCR using ANN,https://www.researchgate.net/publication/319242767_An_Android_Based_Medication_Reminder_System_Based_on_OCR_Using_ANN

[4] Shrutika Deokar Sourabh Khandake Shubham Ture, Med-Tracker: Android app for medicine tracking https://ijisrt.com/assets/upload/submitted_files/1582616978.pdf

[5] Harleigh Schumer, BS, Chioma Amadi, MPH, and Ashish Joshi, PhD, MBBS, MPH, Evaluating the Dietary and Nutritional Apps in the Google Play Store https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5820085/ , Published on:Jan 24 , 2018

Acknowledgement

We have great pleasure in presenting the mini project report on **MedXpert.** We take this opportunity to express our sincere thanks towards our guide **Prof. Shafaque Sayed.** Department of Computer Engineering, APSIT thane for providing the technical guidelines and suggestions regarding line of work. We would like to express our gratitude towards his constant encouragement, support and guidance through the development of the project.

We thank **Prof.Sachin Malave** Head of Department, Computer Engineering, APSIT for his encouragement during the progress meeting and providing guidelines to write this report.

We also thank the entire staff of APSIT for their invaluable help rendered during the course of this work. We wish to express our deep gratitude towards all our colleagues of APSIT for their encouragement.

Ishanee Revankar:
(19102040)

Chirag Hegde:
(19102035)

Nidhi Heniya:
(19102041)

Nidhi Singh:
(19102042)