SUSTO THAKUN

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APPROVAL

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We have done the project under the supervision of Mr. Raja Tariqul Hasan Tusher, Senior Lecturer, Department of CSE Daffodil International University. We also declare that neither this project nor any part of this project has been submitted elsewhere for award of any degree or diploma.

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ABSTRACT

A healthy body is very much needed for all of our in our real life. There are so much researches in this area and many of them are helped by the researches. But most of the application is in English language. But most of the people of our country do not know English. So, they can't use the application properly. But our application is in fully Bangla language. So, everybody in our country can easily use the application. It allows some advantage features that will help the people to lead their life with a healthier body. The main advantage of our application is it can useable for every age. If anyone want to be healthy of loss weight then he can do it by using the application. We will be able to know that how much kilocalorie we need every day and which food has how much kilocalorie. Finally, it can say that by using the app we can lead a healthy and happy life.

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CHAPTER 1

INTRODUCTION

1.1 Introduction

"SUSTO THAKUN" is an android based mobile application. It can be defined as a

body care application. By using the application one can keep his body fit. Now a days everybody wants to keep his body healthy. Today such kinds of android base application are very common. The world is developed every day with the modern technology discovering with new idea and concept. There are many researches who has developed many applications to this area and many of them are success. Still many researches are working to develop the application.

One can calculate his/her BMI BMR by using the application. How much kilocalories we take from the food everyday it can also be calculated. How much kilocalories we need every day? How much kilocalories we have to barn or how much kilocalories we need extra. We can also know how to loss the extra kilocalories. Here will be also a food list with kilocalories in Bangla. The whole application will be in Bangla language so everybody can use the application easily. If we search a food then we can see the kilocalories list of the food.

If we follow the rules of the application, we can lade healthy life. So, everybody should use the application to care his /her body.

1.2 Motivation

Health is the most important thing for a happy and successful life. In today's busy life style, everyone wants something smart and easy to learn more about health care. This app will help us to know daily health tips so that we can take control of our lifestyle.

Many people of our country are not consensus about their health. They do not know how much kilocalories they need every day if they want to healthy or lose weight. We can say that this is the only one Bangla application by those we can care our body and led a happy and healthy life. The application is also very easy to use. The male and female can use the application to calculate their BMI BMR. So, if we want to live free from disease this application will help a lot. It is not only an app but also like a family doctor

1.3 Objectives

Now a day's lot of people want to be healthy or lose weight. They do not how to be healthy or loss their weight. We are going to solve the problem by using the standard formulas to determined risk score, Body Mass Index (BMI) and Basal Metabolic Rate (BMR) daily kilocalorie. One can count his/her step.

1.4 Expected Outcome

The main outcome of the project is to provide a healthful and batter life. The user can use the application for a several purpose.

- Personal diet coach
- Health record maintenance and access
- Control weight
- Instant guidance on health problem
- Calculate food calorie
- Count step.

Report Layout means the summary of all the chapters. A summary of all chapters is given below: □ Chapter 1: Introduction, Motivation, Objectives, Expected Outcome and the Report layout. □ Chapter 2: Describes the background, the related works, Comparative Studies and Challenges. □ Chapter 3: Describes the Android Studio, System requirements, XAMPP, Sublime Text. □ Chapter 4: Block Diagram, Description of this application, Use Casa Diagram, System Architecture. □ Chapter 5: Describes the Implementation of Front-end design, Back-end design, Data type architecture, Testing methodology, Functional testing, Unit test, Compatibility test and

result.

been described.

☐ Chapter 6: Describes the conclusion where the goal, limitation and future scope have

Chapter 2: Background

2.1 Introduction

Many researchers are building many projects of this field. But most of them are abroad and they build their project for their own country and their own language. But very project is built for Bangladesh. There are some organization they are trying to researches and developed this field. Some question for this project.

- How to explore the concept of this project to the users?
- How to make it more easily and effective for Bangladesh?
- How to make it easily running in the lower internet?
- How can spread outcome each district of Bangladesh?
- How it will take people of our country?

2.2 Related Works

Total Health Care:

Total Health Care, this app helps us to overcome health related problems. This is a very good solution for the problem we have face every day. At first it takes the input from the user who want to lose weight or to be healthy, skin problems, body care and hair related problems. This app also gives us some of the tips to take good care our self and it also provides us with the basic information to stay fit and healthy. By using this app, one would also be able to make their own routine. Total Health Care provides us information clearly and easy to understand way.

What we will find from the app

Weight Loss-

- Diet
- Exercise
- Routine Maker

Skin Care-

- Pimples
- Scars
- Sunburn
- Face Care

Hair Care-

- Hair Loss
- Dandruff
- Hair Growth
- Grey Hair

Body Care-

- Cold & Cough
- Stomach Ache
- Headache
- Back Pain
- Joint Pain

General Tips -

- Weight Loss
- Skin tips
- Hair tips
- Body tips

My health care

My health care is a very good app. By the apps we can learn, health tips to ensure a healthy lifestyle. This app will help us to fetch daily health tips so that you can take control of your lifestyle. It's can be called a health dictionary which is ready for answering all our health problems.

We can also know health blogs, health articles, news and health tips from the application. It is not only the store of physical health but also a mental health store. It is like a family doctor which advices you and take care of your health. It is hard to explain all the benefits of this app

What we will find in this app:

- Most Searched
- Diet and Fitness
- Health News
- Home Remedies
- Relationship
- Unani Herbs
- Yoga

Diet & Fitness:

Its diet and fitness part provide us how to maintain healthy weight and balanced diet. We will get free daily health tips, never-heard-before weight gain tips that truly works and so much information on weight loss exercises.

Health News:

It provides us latest health news, medicines, vaccines, prevention tips etc. Find the latest updates and alerts related to health care.

Home Remedies

Its home remedies part takes us back to old times when our family doctor was our grandmother. Find home remedies for all your problems from acne, diabetes, pimples, glowing skin, cold & cough, fever and more. This app is more than what you think it is.

Vitamin and Minerals:

By the part we can know the source of vitamin and minerals. If we want to make us immunity strong and keep a doctor away. You need to get all vitamins and minerals from natural source.

Unani herbs:

My Health Care app provides the list of Unani medicine with the details. The user can see the details of the medicine.

Yoga:

It provides the instruction and tips for practicing Yoga. It helps us to improve us brain and nervous system healthier. It helps us to increase our blood flow, drains your lymph's and boosts immunity, PS your heart rate, helps you focus, relaxes your system, improves your balance, maintains your nervous system, helps you sleep deeper.

BMI Calculator and Weight Loss Tracker

BMI means Body Mass Index. This BMI Calculator helps to find and reach your ideal weight. We can also Calculate our Body Mass Index (BMI) based on the given information on body weight, height, age and sex.

Included features:

- BMI calculation classified by sex and different age ranges
- Compare statistics about our weight, average weight or difference our starting and target weight.
- A weight reminder that supports us to achieve our ideal weight. Input weights in the metric or imperial unit system. Sync our weight data with your Google Fit account

Check our body stats to find your ideal weight, because overweight and obesity are risk factors for diseases such as hypertension, heart disease and diabetes. It can also be used to find your healthy weight if you want to lose weight or are on diet. It also provides us more information about the BMI is available on the website of the World Health Organization (WHO)

2.3 Comparative Studies

SUSTO THAKUN is similar with some others websites and android applications (Total Health Care, My health care, BMI Calculator and Weight Loss Tracker, HealthCare). Our application is also, almost similar with log in and log off, sign in and sign off, calculating BMR, BMI. Our has some extra and unique features like search food in bangle, food list with kilocalories, takes all input in bangle, small in size, easy to use. Above all it is like a family doctor. Not only we I think everybody believe that our application will be like so much. It would be very helpful to our whole country.

2.4 Scope of the Problem

Thought it would be very helpful but it would be some problem. As we consider that our application will be fastest and easiest android base mobile application. The users who use iOS and Microsoft operated mobile phones. So, they are not able to using this application. It is a internet based application. If anyone want to use the application, he/she must need internet connection. There are on email and password saving option. So, if anyone want to login again the application, he must provide password again.

2.5 Challenges

It was never easy to create the project. It was so much challengeable to us. It was a new platform to us. It was so much tap to us to manage the users demand. It was not easy to maintain. The first challenge was after submitting the idea, how we implement the project. We have learned from the project:

- How we should think.
- How to research about the project.
- How to have an idea.
- Always be strong, don't be afraid.

This process helps us to create our project too easily. Time was a biggest problem to create our project.

CHAPTER 3

REQUIREMENT SPECIFICATION

3.1 Android Studio

Android Studio is the official integrated development environment (IDE) for Google's Android working framework, built on JetBrains IntelliJ IDEA software and designed specifically, for Android development. It can be download or it can use on macOS, Windows and Linux based working frameworks. At first it was declared on May 16, 2013 at the Google I/O conference. It was in early access sees organize beginning from variant 0.1 in May 2013, at that point entered beta stage beginning from adaptation 0.8 which was discharged in June 2014. In December 2014 the principal stable form was discharged, beginning from rendition 1.0. In October 2017 the present stable rendition is 3.0 discharged. In December 2014, beginning from rendition 1.0 the principal stable form was discharged. In October 2017 the present stable rendition is 3.0 discharged. Android software development is a such kind of process by which new applications are made for the Android working framework.

The Google Data API enable software engineers to make applications that read and compose information from Google administrations. Right now, these incorporate APIs for Google Analytics, Google Book, Blogger, Google Base, Search, Google Calendar, Google Code, Search, Google Earth, Google Spreadsheets, Google Google Apps, Notebook, and Picasa Web Albums.

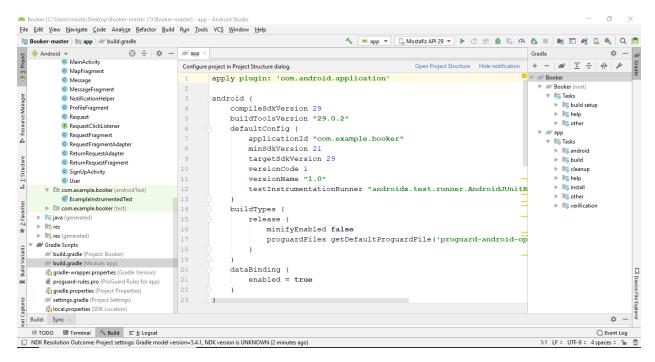


Figure 3.1: Interface of Android Studio

SDK (Software Development Kit or "Devkit") is normally an arrangement of programming improvement apparatuses that takes into account the production of uses for a specific programming bundle, programming structure, equipment stage, PC framework, computer game comfort, working framework, or comparable advancement stage. It might be something as straight forward as an application programming interface (API) as a few records to interface to a specific programming dialect or incorporate modern equipment to speak with a specific inserted framework. Basic instruments incorporate investigating helps and different utilities frequently displayed in a coordinated advancement condition (IDE).

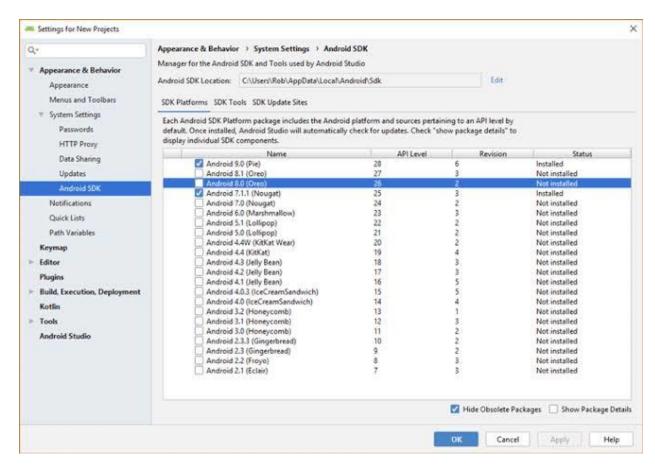


Figure 3.2: Android Studio SDK Manager

3.2 XAMPP

XAMPP is an open-source web server bundle that can be deals with different stages. It is really an acronym with X signifying "cross" stage, A for Apache HTTP server, M for MySQL, P for PHP, and P for Perl. XAMPP was intended to help webpage developers, programmers, software engineers, and planners check and audit their work utilizing their PCs even without association with the web. Along these lines, fundamentally XAMPP might be utilized to remain as pages for the web even without association with it. It can likewise be utilized to make and design with databases written in MySQL and additionally SQLite.

CHAPTER 4

PROPOSED MODEL AND DESIGN

Block Diagram:

Block diagram provides basic interaction of applications. The block diagram figure is given bellow-

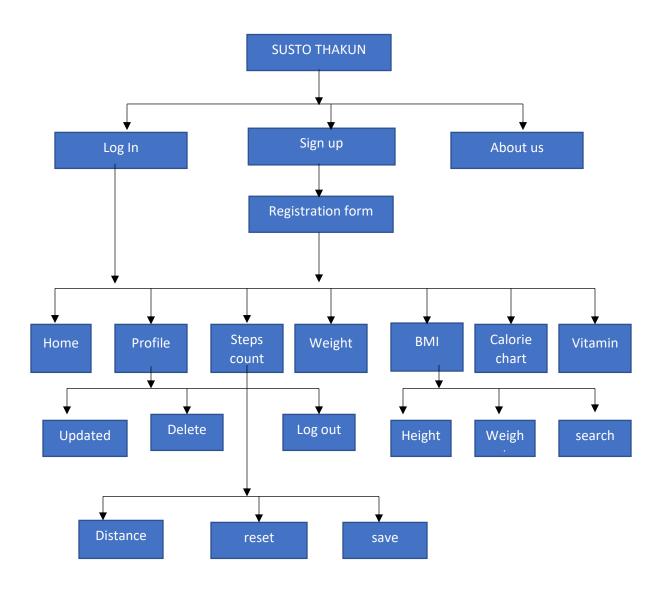


Figure 4.1: Block Diagram

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Description of this application:

Log in: Logging is that process where individual user accesses this application by providing users information to know who use this application.

Sign up: When use application user need account and the account creating give some basic information. Like first name, lest name, email address, phone number etc.

Profile: Hear heaving some sort information about user and show working details. And user added, delete or updater their information.

Steps count: In steps count measured user walking information and show how many distance user traveling. Also showing How many calories need to losing to be healthy.

Weight: Hear knowing how many weight loss or gain user need to be healthy and told how to do it.

BMI calculation: BMI calculation part calculate daily using food calorie and notifying the user.

Calorie chart: Show food calorie chart using stander system. When user eat something calorie chart show the calorie volume.

Vitamin: Hear know what kind of vitamin are in the food and suggest user to take useful vitamin.

Use Casa Diagram:

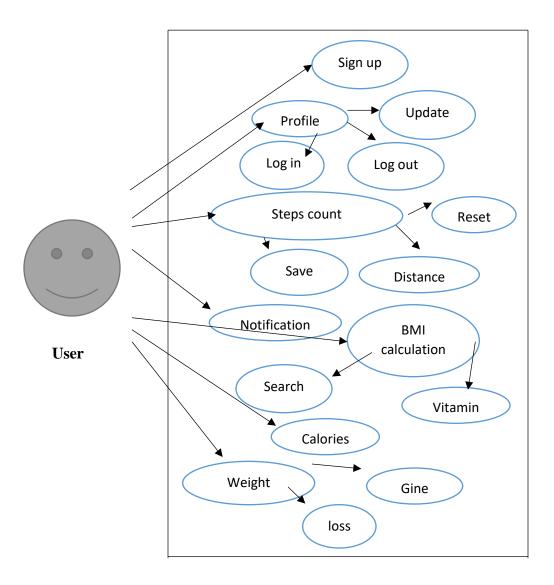


Figure 4.2: Use Case Diagram

System Architecture:

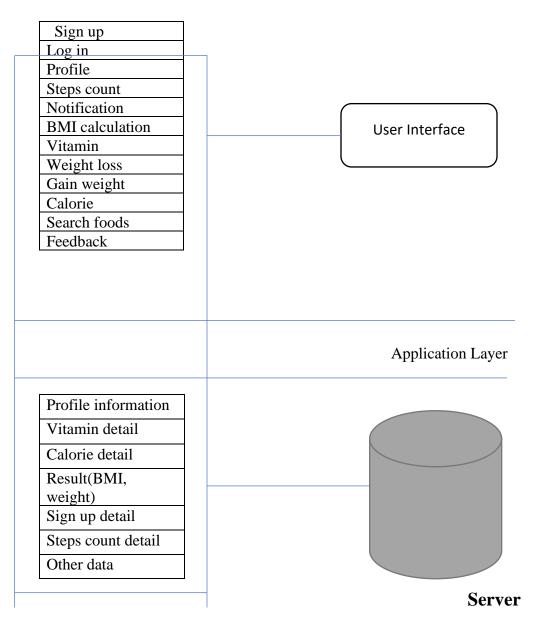


Figure 4.3: system Architecture

CHAPTER 5

IMPLEMENTATION AND TESTING

It needs to be said that this is our application project was designed and developed collecting information from environment and also some existing system. Many developers develop android based health relative system but our system are different and we developed a new system.

Implementation of Front-End Design

We use some screenshots of main project. And how to work the application in mobile screen.

Home Activity: The SUSTO THAKUN application home activity have two option



Figure 5.1: Sustho Thakun Home Activity

Sing Up: User need to fill up the form to create an account to use the SUSTO THAKUN application for health tips.

Sing Up validation: User need to fill up the form to valid information. Fill the name, fill valid email address, valid password and a valid mobile number for create account.

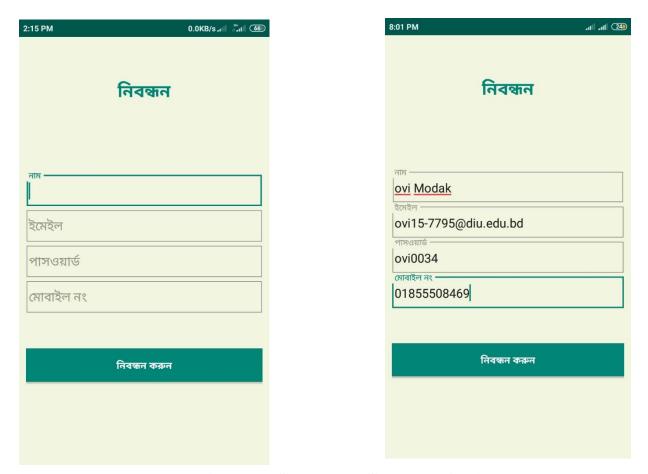


Figure 5.2: Sing Up and Sing UP Validation

Log In validation: After complete Sing Up than the use email and password to log in the SUSTO THAKUN application.

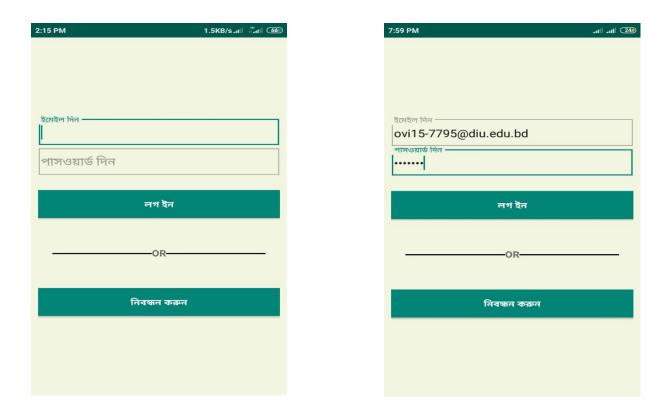


Figure 5.3: Log in and Log in validation

After Log in: After successfully login user access all the feature of the SUSTO THAKUN.

Features: Specific some features for user to be healthy. How a user lose weight, how to gain weight, which foods to be taken, step count, BMI count, which kind of vitamin user use and also log out.



Figure 5.4: Features of Sustho Thakun

BMI Calculation: In BMI calculation user need to fill up the information high and the weight than the BMI show how many calories user need.



Figure 5.5: BMI Calculation

Steps count: In steps count how many steps user moving and how many times user moved. A day how many steps user needed to inform to user by notification. Every time save the moving time and steps.



Figure 5.6: Steps count

Vitamin: In vitamin we need to know how many vitamins we needed and whish type of vitamin we needed.



Figure 5.7: vitamin

Implementation of Back-End Design: The SUSTO THAKUN application database is selected to system application. Its database design to used detail data set information of database. This database used some logical and some physical data set model to fulfill the required information the logical database content all the logic information to create database. And the physical database content physical storage parameter to create data definition language. The database contains data model detail attributes of each entity. Database design use all the needed information to create fulfill the system and also applicable form and queries to a part of database management system.

Data Type Architecture: A data architecture need some data sets for all data Model interaction between data system and also data integration between the Database.

Declaration parameter of data types

- INT
- CHAR
- VERCHAR
- FLOAT
- REAL
- TIME
- DATE
- BLOP [BINARY LARGE OBJECT]
- NUMERIC
- DECIMAL

Testing Implementation

This SUSTO THAKUN application jagged by the following criteria:

Satisfying requirement specifications: This app would be successful if all requirement such functional and non-functional requirement ensure of requirement specification base on environment.

Correctness: Correctness is the key to develop a perfect system. All the requirement we use should be perfect or correct is the basic of system. When each part of requirement is perfect than application work properly.

Compatibility and Integrity: The Susto Thakun application was create compatibly of any Domain. The evaluation of the system depend on how the system was implement.

Real time management: In Susto Thahun application is the necessary of real time management because this application work real time scenario and user needs the notification on time.

Reliability and security management: Reliability and security management is one the important factor of any software system. In SUSTO THAKUN app we used all the security features when the system under develop.

User friendliness: when a system jagged then how the system user friendliness is important Criteria. In SUSTO THAKUN application we work on this user-friendly criterion. And ensures quality Of efficacy, portability, flexible of this system.

Testing Methodology:

Testing is the method that used to find some system error of software. Software test can test coding, design and also test the whole system. Software testing is important to improve quality of system and also find error and fixed that error. Testing codes is basic of software engineering to improve the system. The standard of software testing in the ANSI/IEEE standard 829/1983 standard and some testing in Computer Aided Software Testing.

Functional testing:

In functional testing there are two type of functional testing. Possible functional testing, testing the function with valid input and verifying the correct output. Negative functional testing, testing the function with some invalid inputs and use some outside scenarios to testing functionality.

Unit testing:

Unit testing used detail designing and implementation steps to find out the defects of this system and should solve this system.

Compatibility testing:

Compatibility testing is a part of non-functional software testing. In compatibility testing know that how the software work outside of computer environment. And also known the user experience of this software. We used some android mobile phone to test compatibility of the SUSTO THAKUN android mobile application. Our project tested on different android mobile to ensure compatibility of this project. The result of compatibility testing is following-

Results of Compatibility Testing:

Android Device Name	Screen Size	Test	Result
Xiaomi 4x	5.0 inch	Yes	Okay
Xiaomi Redmi Note 3	5.0 inch	Yes	Okay
Samsung Galaxy S II	4.3 inch	Yes	Okay
Walton prime	5.0 inch	Yes	Okay

CHAPTER 6

CONCLUSION AND FUTURE SCOPE

Conclusion:

SUSTO THAKUN is an android base mobile application that allows user to know how to be healthy. User can be benefited to learning in this application. The Susto Thakun environment is to be very user friendly to use and find the resources they needed. In this application mostly use Bangla language so user easily use to access all the feature. Lot of people went to be healthy or losing weight and this application solve the problem by using body mass index, basal metabolic rate, steps count, input local food calorie calculation formula. Many peoples of our country is not conscious about their health. They do not know how much calorie they need every day if they went to be healthy or losing weight. By using this application this problem would be solve. Hope this will be a batter solution in this application field.

Goal:

The main goal is to create an android application that would help people who went to be healthy or losing weight. It works like a personal Diet coach of user. And also maintenance and access health record, control weight of user and give instant guidance on health problem.

Limitation:

There some limitation of the SUSTO THAKUN application. The limitation is following-

- The system implemented using current technology although some modification had to be done at various locations.
- For file sharing used google API

Future scope:

- More feature and functionality added in future.
- The interface design will be updated.
- Increase reliability

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Plagiarism Check:

