# Mobile Computing Project CS855

DAILY DIET PLAN – An android mobile application prototype

1. Description of project:

This project, ‘Daily Diet Plan’ is an android mobile application prototype to integrate the Food Data Central API \cite{API} developed as part of CS 855 Mobile Computing course project requirement.

The 'Daily Diet Plan' application allows the user to plan their daily meals based on the personal calorie requirements.

Being a beginner in Android development and Kotlin programming language, this project is proposed to learn and explore the process of API integration, implementation and use of different user interface elements in an android app through facilitating the daily diet plan application requirements.\\

\*2) Features list

The application begins with user information gathering.

Provide the daily diet plan application with your information including age in years, sex, height in centimeter, weight in kilogram, and your activity rate in a scale from 1 to 5 as described below.

The activity rate selection is from five categories:

Not active - If user does little to no exercise and mostly sedentary

Lightly active - If user does light exercise like 1 to 3 days per week

Active - If user does moderate exercise like 3 to 5 days per week

Very Active - If user performs heavy exercise daily or 6 to 7 days per week

Heavily active -If user performs very heavy exercise like twice per day or extra heavy workouts.

With this user information the application evaluates the Body Mass Index(BMI) and classifies user to a specific category among underweight, normal, overweight, and obese.

The recommended daily calorie intake is estimated using the BMI and users activity rate.

The applications 'Home' tab displays this data as in figure 1.

The main screens of Daily diet plan is designed as a bottom navigation application with two tabs:

a) Home tab: Displays the values of calorie estimation, Body mass index (BMI), weight in kilograms and BMI category as status.

b) ‘Today’s Diet’ tab: Shows the list of food items planned to take for Breakfast, snacks, lunch and dinner. This view alerts on the remaining calorie to spend based on selected diet.

Planning the meals: Initially the ‘Todays Diet’ tab is an empty list where user can add his choice of food. The ‘ADD’ button in each meals takes user to a search screen.

Search screen: Type in any food item you wish to have. The application returns a list of options with ingredients, brand (if available), amount of food and calorie in Kilo Jules. The food options are from USDA Food Data Central Database.

Updates on ‘Today’s Diet’ tab: For each food selection the remaining calorie is updated and selected food item is listed.

3)To do list

Add a settings tab in the bottom navigation with user profile information.

Ability to edit user information.

Ability to add more food items in one meal.

Handle or provide option to enter user height and weight in different units like meters, pounds etc.

Add option to choose the amount of servings while planning the diet.

Integrate activity tracker

\*4)Building - list of all libraries used

Recycler View

Retrofit

Shared Prefernces

5)Set up Instructions (to build (not need for android proj)

checkout from github

compile commands eg : make config

How to load in developer mode ?

6)Users Manual- screen shots of what its doing

-a use case

7)Contact us:

Pull request are welcome . Please email at ruckiya.sinorina@gmail.com