

ITCS 5180 Mobile Application Development

Final Project Report

Submitted by

Group 3A

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App Features:

The primary purpose:

The app allows users to keep track of their weight changes, food and exercise habits.

The app fetches current food - calorie information through API calls to USDA REST API.

The app fetches calories burned through exercise, taking into account the latest weight record of the person.

Based on the information recorded by the user, an activeness chart is generated to display the times of the day the user is most active.

Based on the information the user records in the app, daily badges are offered to the user for motivation to keep working on the user's fitness.

The App features screens (fragments) where user can add information regarding their current weight, food consumed during the day and exercises planned and completed.

The below features have been implemented successfully.

Weight Goals

The user can use a weighing scale and record his current weight onto the app on a daily basis. The weight changes can be tracked by doing this over a period of time.

Plan your day

- *Select Exercise Activities:*

The user can enter a list of activities to plan the workout for the day and time of the day. Upon completing the activity, the user can mark the activity as complete and it will get recorded for other statistics.

- *Select Food intake:*

The user can enter food based into list of meals. The recorded food intake can be passed on to the USDA API to calculate the calories for the food and can be used to suggest the workout routines to decrease weight.

Activeness Range Chart

Based on choice of activities, the activeness range chart will be displayed on a measure of time.

Display badges

Based on achievements in number of strides and activity chart, the user will be given badges for motivation.

Design choices

Better UI design has been incorporated than what was proposed in the project proposal with the use of Sliding Panel Layout, the use of custom Alert Dialogs, sliding gesture for list item click etc.

Bar code reader was not incorporated because it complicates a simple task of adding the food item name. Instead, a list item of common items has been incorporated for users to quickly add their regularly consumed food data.

The Strides fragment was also omitted because of lack of accurate data that can be used to capture the statistic.

Besides the login and Signup Activities, all the screens have been implemented as fragments. The utilization of fragments greatly reduces memory use and reduces time of loading screens.

The use of sliding layout enhances user experience and also saves time navigating back to home screen for viewing menu options. It offers a better visual appeal than Action Bar menu items.

The use of accepting data through Alert Dialogs and the use of Alert Dialog item lists declutters the user interface of unnecessary buttons and texts.

You tube Link for our Project Demo:

<https://www.youtube.com/watch?v=Gwpr0MyviOs&feature=youtu.be>