King Fahd University of Petroleum & Minerals

College of Computer Sciences and Engineering

Information and Computer Science Department

ICS 201: Introduction to Computing II (Term 182)

Term Project

Instructions

1. This is a group project consist of two members
   a. The members are NOT necessarily form the same section
   b. Fill the following form by your id and your partner id
      https://goo.gl/forms/z4Csmjz3n04sYcPy2
   c. Last day of creating teams is Monday 18/March/2019 at Midnight after it I will assign you randomly.

2. Calculate the time you spend in this assignment using the table below
   a. any activity should be considered including
   1- Reading the requirement of the project
   2- The design of your implementation,
   3- Coding
   4- Testing
   5- Other activities where you spent some time on (e.g., reading a book or a website).

Task	Members	Date	Start	End	Duration	Notes and comments
1					0:00:00	
2					0:00:00	
3						
…						
n					0:00:00	
				Total	0:00:00	

(tip: You can use "ctrl+;" to insert the date and "ctrl+shift+;" to insert the current time in excel)

3. Submission:
   a. DEADLINE is Sunday 14/April/2019 at Midnight
   b. through BlackBoard
   c. **Softcopy** (ZIP or RAR file) including:
      i. Your source code: Java files
      ii. Your compiled classes (.class files)
      iii. configuration files and other related resources (if any)

You and your friend Rashid are working in a software solutions company. A nutrition center approached your company to help them build a software that serve their patients. Rashid is the business Analyst of the company thus he went and met a Nutritionist works at the hospital. He generated the following software use cases:

- They need a software that helps the patient following their own daily food and beverages intake.

- For each day the user has three Main meals, each meal consists of any dynamic number of edibles (food and beverages).

- The Food and beverages are described with the following: calories, protein, carbohydrates and fats and the portion size (grams for food and ml for beverages).

- The sum of the protein, carbohydrates and fats SHOULD be less than or equal to the portion size.

- When the user search for a food then add it to a meal, the list of food will be shown sorted Alphabetically. (if he searches with empty String return everything, otherwise return the edibles that contains similar string).

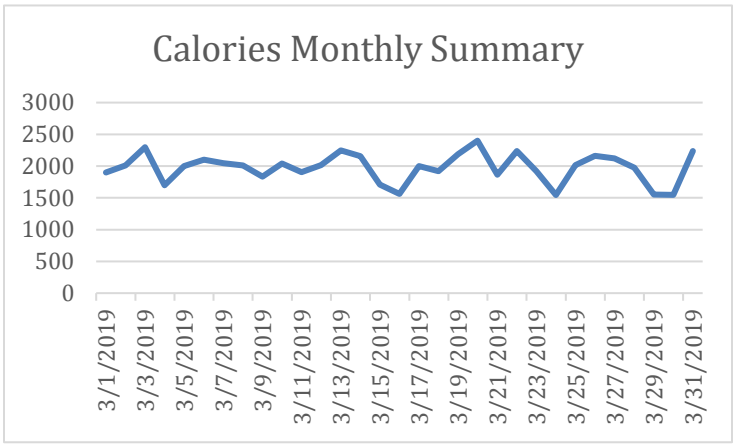
- The user has the choice to filter the search results from edibles (Food and Beverages), to Food only or to Beverages only.

- The user can change the sorting of the search results based on name, highest calories, highest protein and the inverse of each of the previous sorting criteria.

- The software should also save the logging of a whole month assuming the month is 31 days.

- The user will have daily goals for each nutrition value (calories → 2000 Calorie, protein → 100 gram, carbohydrates → 300 gram, fats → 50 gram, and beverages > 3000 ml) and the software should show a progress bar for each goal as daily summary.

- There should be a month summary for each daily goal represented as line graph, similar to this graph.



- The software should save the logged food for the next runs.

- The hospital will provide us with an updated CSV file contains the nutrition values of several foods and beverages.

The hospital promised to send sketches about the design of the application by next week.