Team Name: Health Balancer
App Name: Health-Balancer
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What is our project?

The Health Balancer is a mobile application for Android Users. Mainly for people who need to record detailed information of foods eaten, consumption of exercise, and consumption of mental activity like study. It can track the changes of their weight, and the balance of the energy expenditure and intake.

The main design idea is to allow users to record their daily breakfast, lunch and dinner, and also their daily exercise or some mental activity. This will be convenient for users to check how much calories or other information that they intake and burn per day. And most important thing is users could check if they overeat and do no exercise which is a negative balance, and then they can make a change based on our chart and report.

Why is it interesting

With the progress of the times, people are beginning to pay attention to their health problems. The health of the body is affecting our lives.There is the health balancer who can record users calories and how many they cost. People can always be vigilant and supervise themselves so that people will get a perfect body and a healthy body. It gives people the balance of a day you need to take, and it can also help them to find what is healthy food.

Describe and justify your project selection

This is a good software for helping people control their health. A lot of people don't know how many calories they have been taking, it will turn to the adipose tissue into their body. When people get too fat will change to patients making their life stumble. This software can remind them and help them to get to a healthy life.

Why does this project make sense in a mobile form factor?

Mobile phones are already an integral part of our lives.The mobile phone is more convenient and can be recorded at any time without affecting your overall actions,people can just pull it out their pocket and use it. all the features on the smartphone people only need to use a few clicks. It is easy to check their recording list. Using our project on mobile devices can let people get an easier to healthy life.

The functional properties

FR1 Login page

      1.1 Allowing users to sign up and log in.

      1.2 There is a reset button for users who forgot their password.

FR2 Homepage

      2.1 Allowing user initiate their own information(e.g. weight,height)

      2.2 Program should automatically calculate the daily maximum calories for a user based on the user's information and display on the top, and users can choose their demand like keeping weight or losing weight.

      2.3 Event

            2.31 User is able to create a new event.

                  2.311 A list of exist data can be add

                  2.312 modify data by user-self

            2.32 User is able to update the event.

            2.33 User is able to delete the event.

FR3 chart

      3.1 The bar graph records daily calories spent.

      3.2 The line graph records the weight changed.

FR4 Record

      4.1 Record the daily consumption (calories)

      4.2 All the events should be stored in the database.

FR5 Notification

      5.1 Notify user record their daily consumption

      5.2 Notify weekly reports for users.

      5.3 Notify user when daily consumption overflowed

FR6 Setting

      6.1 Allowing users to update and change their information. (e.g., Name, Age, Height, Weight)

      6.2 Allowing users to turn on/off the notification

User scenarios

First of all, users open the application and go to the login page to sign up and log in. Users press the reset password button if they forget their password.   (FR 1)

After log in, users will go to the main page, they can initiate their own information in a personal file. When users fill in their information, they can choose their demands like keeping weight or losing weight. And the application will give their suggestions. (FR 2.1 AND 2.2)

Users press the create button, there will be four types of activities which are breakfast, lunch , dinner, exercise. (FR 2.31)

Users press the breakfast button, there will be some basic breakfast food they can pick what they have eaten and add it to the event. If users can't find the food, they can press the add food button to add a new food to their event that they have eaten. (FR 2.311 AND 2.312)

Users will be able to update the events and delete the events by using the update button and delete button. (FR 2.32 AND 2.33)
Users will be able to view their events as the charts. (FR 3)
Users will be able to view their events as the words report. (FR 4)
Users will receive notification daily, weekly. And when they overeat, they will be warned. (FR 5)
Users can go to the personal file to change their personal information, and also be allowed to turn on/ off the notification. (FR 6)

The non-functional properties

Usability:
NFR1: Program easy for use, user interface should be plain design.
NFR2: Provide guidelines and instruction for users.
NFR3: Program should document and comment.
Efficiency:
NFR4: The lording time should be no longer than 1s.
Reliability:
NFR5: Program should never crash for any reason.
Security:
NFR6: The date should display only if user login.
Implementation:
NFR7.0: All source code is based on java.
NFR7.1: The system will render on Android.

Why are these non-functional properties important for our system?

Non-functional requirements define the quality attribute of a system, it fulfills our functional requirement.

For developers
A good project would always follow with a good team, to have a good team each developer should cooperate with each other. A common goal and standard is the basic(NFR7.0/1). And a clear comment makes everyone know what they were doing for their job(NFR3).

For Client
First of all, to catch the user's attention(NFR1), a plain creative design would always be the best choice. No one wants to spend a pouch of time to learn a complex system. Secondly, giving the clients a suitable user experience(NFR2,NFR4) is also important when they are using our system, such as making the system quickly respond to users' action and never crash during the running time. In addition, Clients' privacy would always be the first part that we have to worry about(NFR6). It directly decided the user would either use or not use the app, thus a login account is necessary for our client.

log

user

calories:****

create

update

delete

bar graph

weight graph

Setting