System Testing

Sugar Analysis

CSE 115A Sugar Analysis Team:
Nooran Salim, Nikita Thumma, Pranav Nampoothiri, Justin Morales, Nicole Ng

Sprint One:

A. User Story One: As a product user, I need to be notified when I should test my blood sugar levels in order to maintain my health.

a. Did not finish in this sprint.

B. User Story Two: As a product user, I need the notification to transfer me to the homepage of the app so I can view my blood sugar check schedule.

- **Scenario: (test done by Nooran Salim)**

1. Start Sugar Analysis; opens to personal information page
    a. Select Name
        i. Textbox to <Enter Name> (Example: John)
    b. Select Height
        i. Textbox to <Enter Height> (Example: 68)
    c. Select Weight
        i. Textbox to <Enter Weight> (Example: 150)
    d. Select Age
        i. Textbox to <Enter Age> (Example: 21)
2. Home page has list view with time to input blood sugar
    a. Before Breakfast
    b. After Breakfast
    c. Before Lunch
    d. After Lunch
    e. Before Dinner
    f. After Dinner
    g. Before Workout
    h. After Workout

Sprint Two:

C. User Story One: As a product user, I need to check my logs stored in a database so I can monitor my progress.

a. Did not finish in this sprint

D. User Story Two: As a product user, I need the notification to transfer me to the homepage of the app so I can view my blood sugar check schedule.

a. Did not finish in this sprint

E. **User Story 3:** As a product user, I need to be able to locate the information I inputted to review my fitness and eating habits
    a. Did not finish in this sprint
F. **User Stories finished ahead of time:**
    a. As a product user, I want to accurately calculate my BMI so I can track any changes in my body mass.
    b. As a product user, I want to review my BMI to verify that my body mass corresponds to my glucose levels.

- **Scenario: (test done by Nooran Salim)**
    1. Run Sugar Analysis app from Android Studio
    2. Emulator opens on home page
    3. Click on BMI tab
        a. Enter height (Example is 70)
            i. Units were not implemented at this point
        b. Enter weight (Example is 200)
            i. Units were not implemented at this point
        c. Click calculate to get results (Example gives us 28; overweight)

Sprint Three:

G. **User Story One:** As a product user, I need the notification to transfer me to the homepage of the app so I can view my blood sugar check schedule.
    a. Did not finish in this sprint
H. **User Story Two:** As a product user, I need to be able to locate the information I inputted to review my fitness and eating habits.

- **Scenario: (test done by Nicole Ng)**
    a. Run Sugar Analysis app from Android Studio
    b. Open Emulator to home
    c. Main page: Enter blood sugar amount for each period
    d. Check the inputted amounts in:
        - Progress Tab: calculated average blood sugar intake per day and displays in weekly bar chart
        - Log Tab: blood sugar amount per ‘period’ (i.e. Before Breakfast, After Lunch, etc.) listed daily in list format along with inputted weight and height
- **Scenario: (test done by Nikita Thumma)**
    a. Run Sugar Analysis app from Android Studio
        i. After 10 seconds it opens the Emulator to the Home Page also known as the personal information page

b. In the Home Page, Enter your blood sugar levels (Before Dinner, After Dinner, Before Workout, After Workout, Before Breakfast, After Breakfast, Before Lunch, After Lunch) in each box
c. Check progress in the Weekly Progress Tab (compares your blood sugar levels on a nice organized graph)
d. The Logging Tab will list the date, time, height, and weight that corresponds to the specific period chosen in an organized list view
    i. Ex: Before Lunch: Fri
    Time: 02:41:47 PM
    Weight: 200
    Height: 6

Sprint Four:

I. User Story One: Users can set notifications to check blood sugar so they can constantly track their glucose.

J. Scenario: (test done by Nikita Thumma)

1. Run Sugar Analysis app from Android Studio
    a. After 10 seconds it opens the Emulator to the Home Page (personal information page)
2. Click on the Notification Alerts Tab at the bottom
    a. Click the white box to pull up the keyboard
    b. Enter in Military Time you want notification to be sent
        i. (13:43 PM)
        ii. Exit out of the keyboard by clicking on the bottom arrow
    c. Click corresponding label for notification (Before Dinner, After Dinner, Before Workout, After Workout, Before Breakfast, After Breakfast, Before Lunch, After Lunch)
    d. Notification pops up at selected time (13:43PM) and says “Blood Sugar Tracker: Please Check Blood Sugar”
        i. Redirects to the Home page once notification is clicked where you can enter your blood sugar in the corresponding label

- **Scenario:**
    1. Run the Sugar Analysis App from Android Studio
    2. Emulator will open to Home Page
    3. Click on the Alerts Icon Tab
        a. Click on the Text Box to pull up keyboard
        b. Enter in a time that user desires to be notified

i. This is military time.

c. Set the time-of-day label for the entered time by clicking on the button with the label name.

d. Wait for the notification to pop up at the entered time, with the according label.

K. User Story Two: Users can view their medical contacts and call their doctor in case they need medical attention asap. (Add-on feature)

- **Scenario: (test done by Nooran Salim)**

1. Run Sugar Analysis app from Android Studio
2. Emulator opens on home page
    a. Enter blood sugar into textbox (Example is 180 for Before Breakfast)
    b. Click on corresponding circle to send info to the database
3. Click on progress tab to switch view
    a. View bar chart with progress logged for the day (Example is 180 on Sunday)
4. Click on BMI tab to switch view
    a. Enter which units you're using, SI or US (Example is US)
    b. Enter height (Example is 68 inches)
    c. Enter weight (Example is 150 pounds)
    d. Click calculate to get results (Example gives us 22; normal)
5. Click on the log tab to view record of log
    a. Display shows the following:
        i. Before Breakfast Blood Sugar: 180
        ii. Date: Sun
        iii. Time: 03:52:22 PM
        iv. Height: 68
        v. Weight: 150
6. Click on Notification tab
    a. Set Military time of when you want notification (Example is 15:56)
    b. Click on the time of day you want to set notification for (After Dinner example)
    c. Notification pops up
        i. Click on home to get redirected to home page
7. Click on extras tab
    a. Read information on blood sugar level meanings
    b. Phone number provided for Diabetes Association

8. Click on Settings
    a. Can view/edit input from test in Sprint 1
9. Test complete; app is functioning