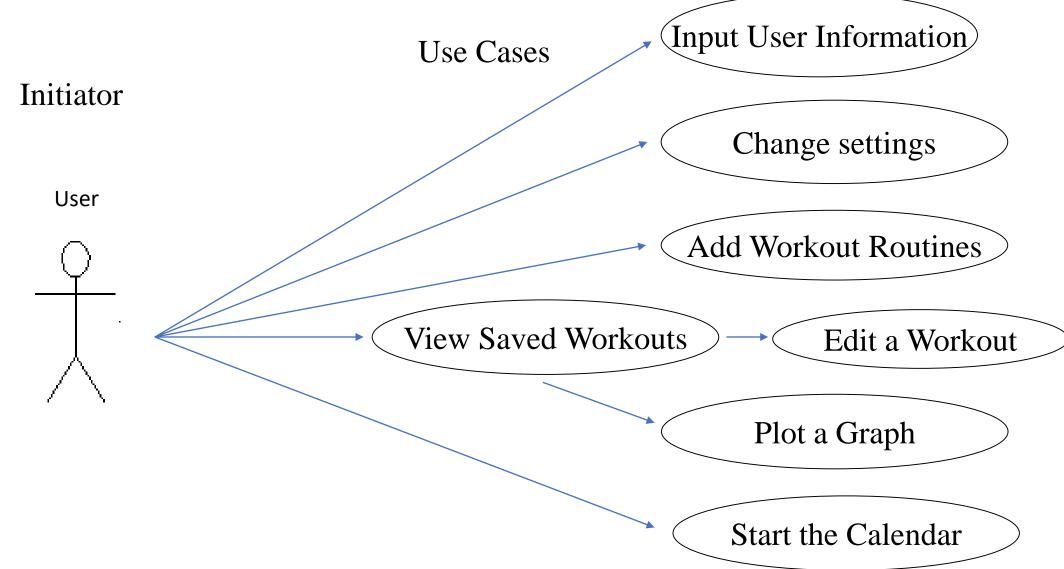
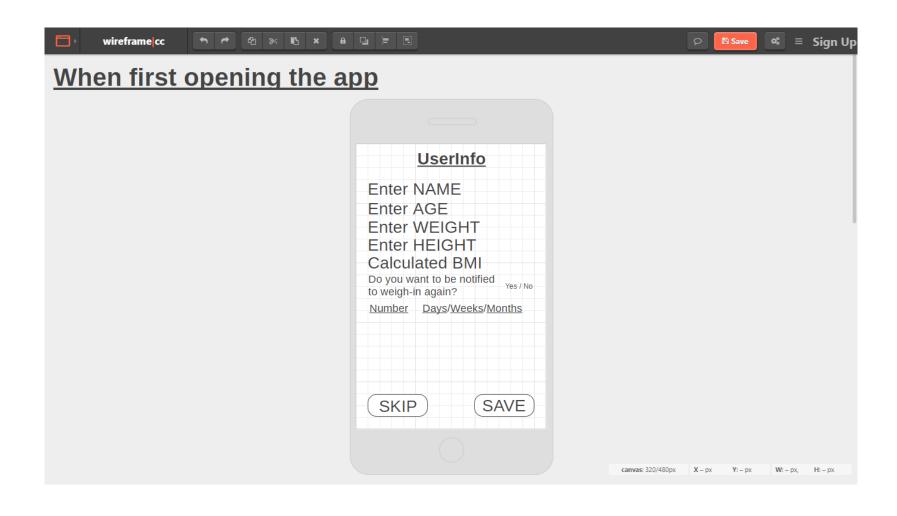
# Prototype Design

## UML Use-Case Diagram



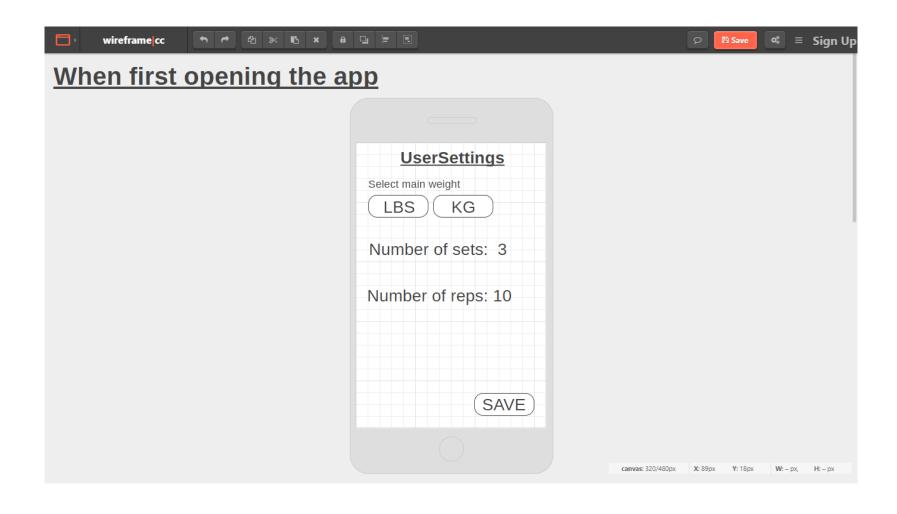
### User Information



## User Information Description

- The user can skip this section.
- User enters their details.
- When "weight" and "height" is entered, the BMI is automatically calculated.
- The user can choose to be notified to weigh themselves again every user-defined time period.
- The user can save any changes.

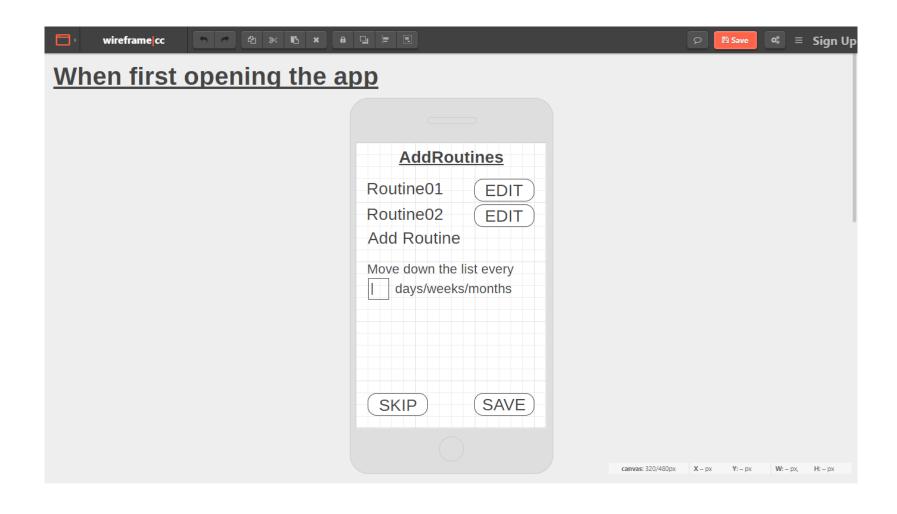
## User Settings



## User Settings Description

- The user can select their main weight unit. Later on in the app, the user can specify using the other unit, otherwise the default will be what the user selected.
- The default number of sets and reps is 3 and 10. However, the user can redefine the default numbers. Later on in the app, the user can delete the default number set in the cell and set a new number.
- The user can save any changes.

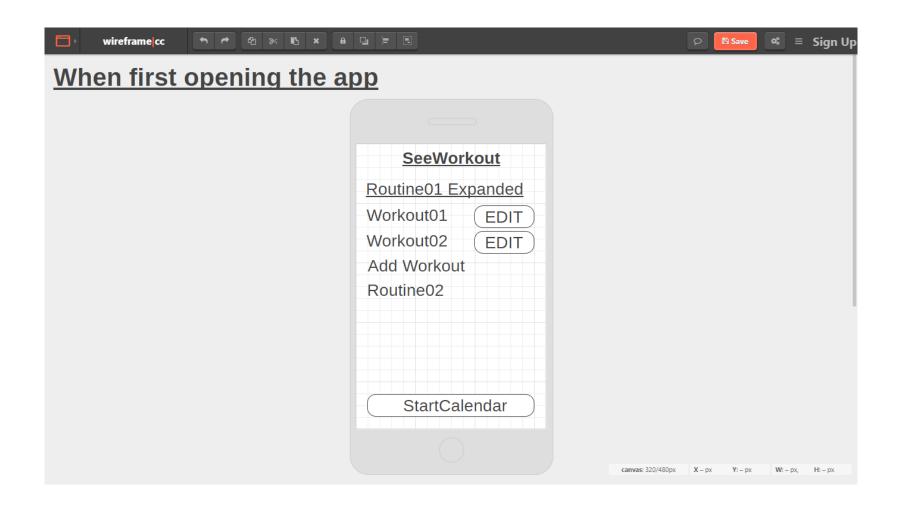
## Adding Routines



## Adding Routines Description

- The user can skip this section.
- If they do want to add a Routine, they press the "Add Routine" button. The minimum number of Routines is 2.
- After changing the name of a Routine, the user can "Edit" to move to the "View Saved Workout".
- The user can then define how long the time period is after moving down the list of Routines.
- The user can save any changes.

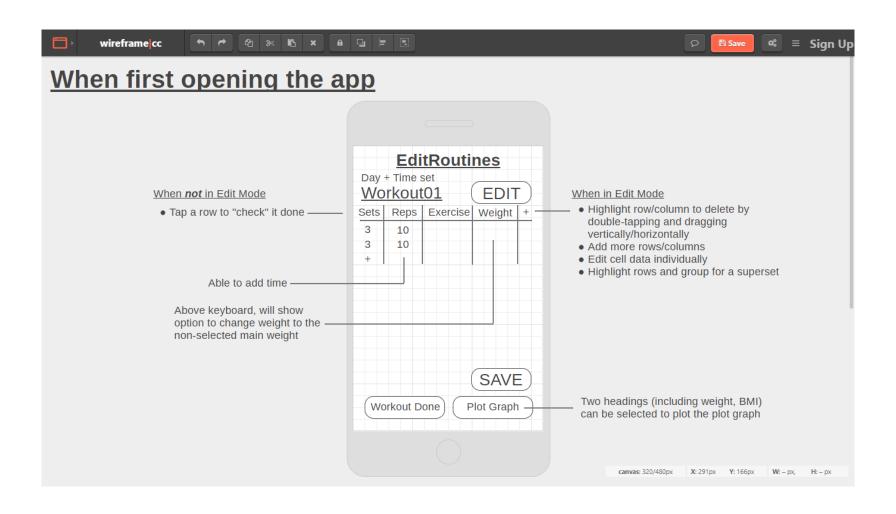
### View Saved Workout



## View Saved Workout Description

- If the user has made any Routines, the Routine names will be displayed in a collapsible menu.
- The user can open the menu and add Workouts to the Routine.
- If the user doesn't have any Routines, Workouts will just be displayed as a list.
- The can edit the name of a Workout, and press "Edit" to move onto "Edit Workout".
- When the user has all their Workouts made with days set for each one, the user can press the StartCalendar button.

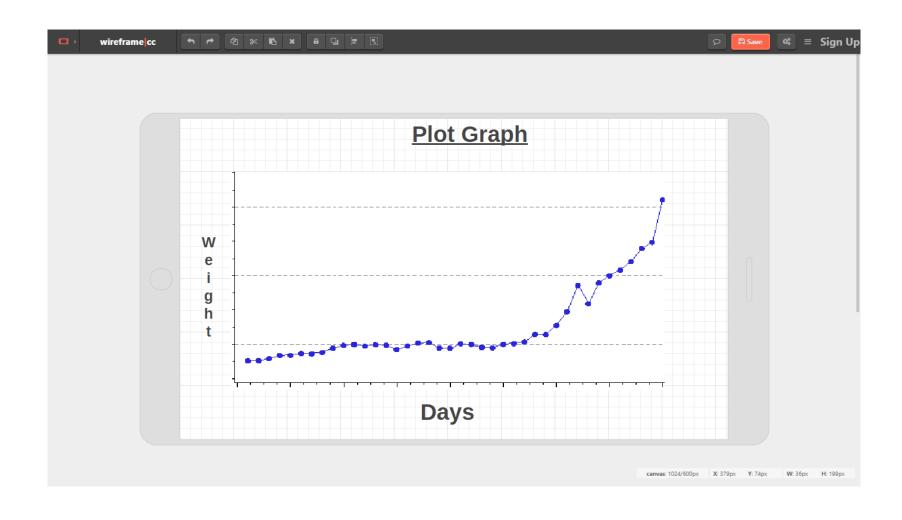
### Edit Workout



## Edit Workout Description

- The user will see the name of the Workout.
- The user can set a day and time for this Workout to be notified.
- A pre-defined table will be set, and after entering "Edit Mode" with the Edit Button, any cell data value can be changed to suit the user's requirements.
- In any cell, time (minutes, seconds) can be added. After all changes have been saved, the user can start the timer for a countdown to begin.
- When the user is not in "Edit Mode", the user can select a row to "check" that it is done. The user can also press the "Workout Done" button to "check" all of the Workouts.
- When the user is not in "Edit Mode", the user can select the "Plot Graph" button. The user can then select any two table headings for the x and y axis and move to the "PlotGraph" page.

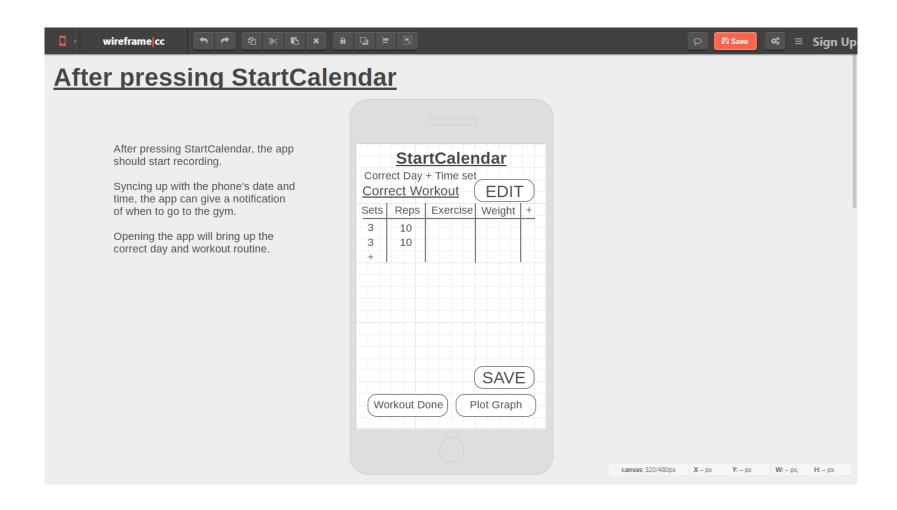
## Plot the Graph



## Plot Graph Description

- After the user has selected two table headings, a plot graph will be generated.
- This is to give a visual representation of the user's progression.

### Start the Calendar



## Start Calendar Description

- After the user has all their Workouts made with days set for each one, the user can press the StartCalendar button.
- This will make the application read the phone's day and time and jump to the correct Workout.
- Every time the application is reopened, the correct Workout for that day will be displayed. This is so the user does not have to manually select the Workout.
- If the user has made any Routines, the application will read the date so the Routines and Workouts will update correctly.

## Use-Case Diagrams

#### LaunchApplication

**ID:** 01

Actors: User

Preconditions: Application installed.

#### Flow of Events:

- 1. User taps on Application icon.
- 2. Application loads.
- 3. <<include>> UserInfo.
- Use-Case Ends.

Post Conditions: UserInfo is displayed

#### UserInfo

**ID**: 02

Actors: User

Preconditions: Application launched.

#### Flow of Events:

- Phone displays UserInfo.
- Can skip.
- Can enter in age, weight and height. BMI is automatically calculated.
  - Choose to be notified when to be re-weighed.
  - b. Choose number + Days, weeks, months.
- 4. Save.
- Use-Case Ends.

#### **Post Conditions:** Proceed to UserSettings

#### UserSettings

**ID:** 03

Actors: User

Preconditions: UserInfo skipped or saved.

#### Flow of Events:

- Select main weight unit: lbs or kg.
- 2. Change default number of sets from 3.
- 3. Change default number of reps from 10.
- 4. Save.
- Use-Case Ends.

**Post Conditions:** Proceed to AddRoutines

#### AddRoutines

**ID**: 04

Actors: User

**Preconditions:** UserSettings saved.

#### Flow of Events:

- Can skip
- Can edit name of Routine01 and add Workouts.
- Can edit name of Routine02 and add Workouts.
- Add new Routines and change its name.
- Change the number of days/weeks/months for the rate to progress through the routines.
- Save.
- Use-Case Ends.

#### Post Conditions: Proceed to SeeWorkout

#### SeeWorkout

**ID**: 05

Actors: User

**Preconditions:** AddRoutines skipped or saved.

#### Flow of Events:

- If Routines
  - See Routine names
  - Click to expand Routine to see Workouts.
- See Workouts with day and time.
- Select Workouts.
  - a. <<include>> EditWorkout.
- Can add Workouts.
- Can press the StartCalendarButton when user finished editing everything.
- Use-Case Ends.

Post Conditions: Proceed to EditWorkout or StartCalendar

#### **EditWorkout**

**ID:** 06

Actors: User

Preconditions: Workout selected or new Workout to add.

#### Flow of Events:

- 1. See what Routine this Workout is in.
- See Workout table.
- 3. Can Edit
  - Select days(s) and time of Workout, option for alarm notification.
  - b. Edit name of Workout.
  - c. See pre-generated table of sets, reps, exercise and weight.
  - d. Can enter new cell data.
    - i. Keyboard will pop-up for data entry.
    - ii. Property cells above keyboard select to add time or change weight unit.
  - e. Can group rows to create superset.
  - f. Can remove columns/rows.
  - g. Can add more columns/rows.
  - h. Save.
- 4. Can tap row to "check" the Workout is finished.
- 5. Can click to start any timers.
- 6. Can click for graph.
  - a. Select value headings to be plotted against each other.
  - b. Confirm and generate plot graph.
- 7. Check to complete Workout day.
- 8. Use-Case Ends.

#### **Post Conditions:**

#### StartCalendar

**ID:** 07

Actors: User

#### **Preconditions:**

Application installed and launched.

UserInfo skipped or saved.

UserSettings saved.

AddRoutines skipped or saved.

StartCalendarButton pressed.

#### Flow of Events:

- 1. If Application launching after exiting.
  - Read system time and application's calendar.
  - b. Jump to correct (Routine and) Workout day.
- 2. <<include>> EditWorkout.
- Use-Case Ends.

#### **Post Conditions:**