

TopFit T-Geotracker

NADEZHDA MOKHIREVA	101149416
PARISA KHATAEI	101111190
VLADYSLAV BORDIUG	100629242
MAHDI ESMAEELPOUR	101124172



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PROPOSAL

OVERVIEW

Group 11 is glad to have the opportunity to develop fitness mobile app for Android containing several fitness exercises and features. For each exercise the users will be able to watch a video and step by step image manual that explains them how to make the exercise correctly safe and efficient. The apps will be free, additionally, users will have an option to pay a fee and receive the premium versions that will provide more content and support from personal trainers. The user of the app also will be available to use GPS tracking system when performing exercises.

ABOUT TopFit

Group 11 is a mobile app development team working together to build a successful unique mobile fitness app. Group 11 has been focused on developing an Android app and have a team of young and enthusiastic professionals. We will work together with a team of experts from MontGym; they will provide their knowledge of fitness industries and standards which will help to build professional and successful fitness app. Our understanding of mobile and web-based technology empowers us to build products that will be user friendly, reliable and always have new and up-to-date most efficient exercises. TopFit App will help our users to achieve desired fitness goals than they set in the most efficient way without consuming a lot of time.

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Course of Action

Discovery



We work with MontGym to understand a fitness industry and we merge their initial experience and expertise to help us understand needs of our potential clients and with combinations of our knowledge in mobile development we are confident that we will develop successful fitness app. We'll assess the possible challenges and identify the ways to overcome them.

Features & Architecture



We establish what features go into the product and how they will work together. Here, we're showing a mockups wireframe for the app.

Design



When it comes to first impressions, it's all about design. We'll put passion for good design to work and based on approved wireframes we'll design all screens.

Development



The development process is broken down into sprints based on feature sets. Our agile-based development process will allow our team to regularly review and assess what we're building.

Launch



After passing all test and final round of QA and refinements, we'll submit the app to the App Stores.

Maintenance



We will provide bug fixing and maintenance that cover everything from small updates all the way to whole new versions.

BACK END

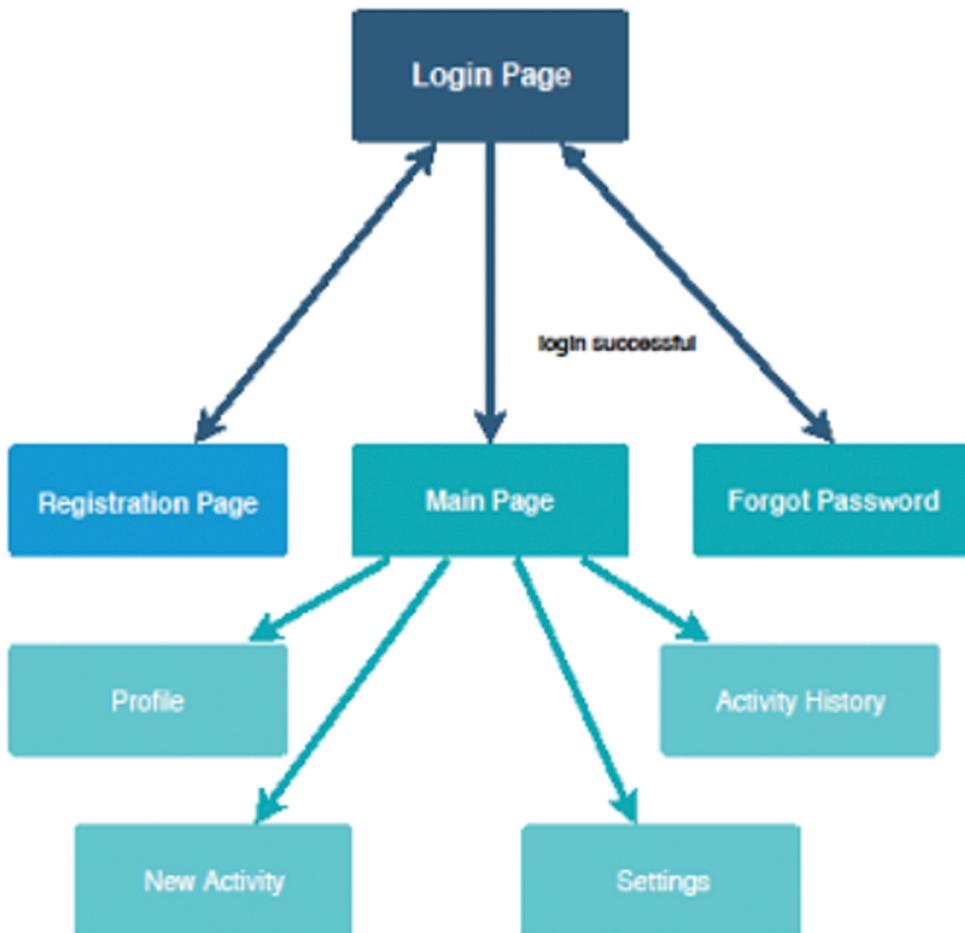
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The APIs in this project are responsible for making secure transaction between the Servers and Clients. Java will be used to for back-end coding and as it was mentioned before, APIs will help connect to the database and decouple the back end.

Storing user data securely is the top-level priority in the development. Not only it provides positive user experience but also enables developers to manipulate the data and later release an improved version of the application with additional functionality.

TopFit is going use three separate database tables for Authentication, Users Information and User Statistics. Database operations will be performed with MySql for two reasons. The first is that it is open source, the second is that all group members are familiar with it.

STORYBOARD



MOCKUPS

USER INTERFACE

Upon launching the application, the user is presented with the login screen (figure 2). If the user does not have an account yet, they have an option to press the Register button. They will be redirected to the registration screen (Figure 1).

TopFit

TopFit

Enter your name

Enter your email

Password must be at least 6 characters long

Register



Figure 1. Registration screen

TopFit

TopFit

maddy.hall@email.com

See figure 4

LOGIN

Register

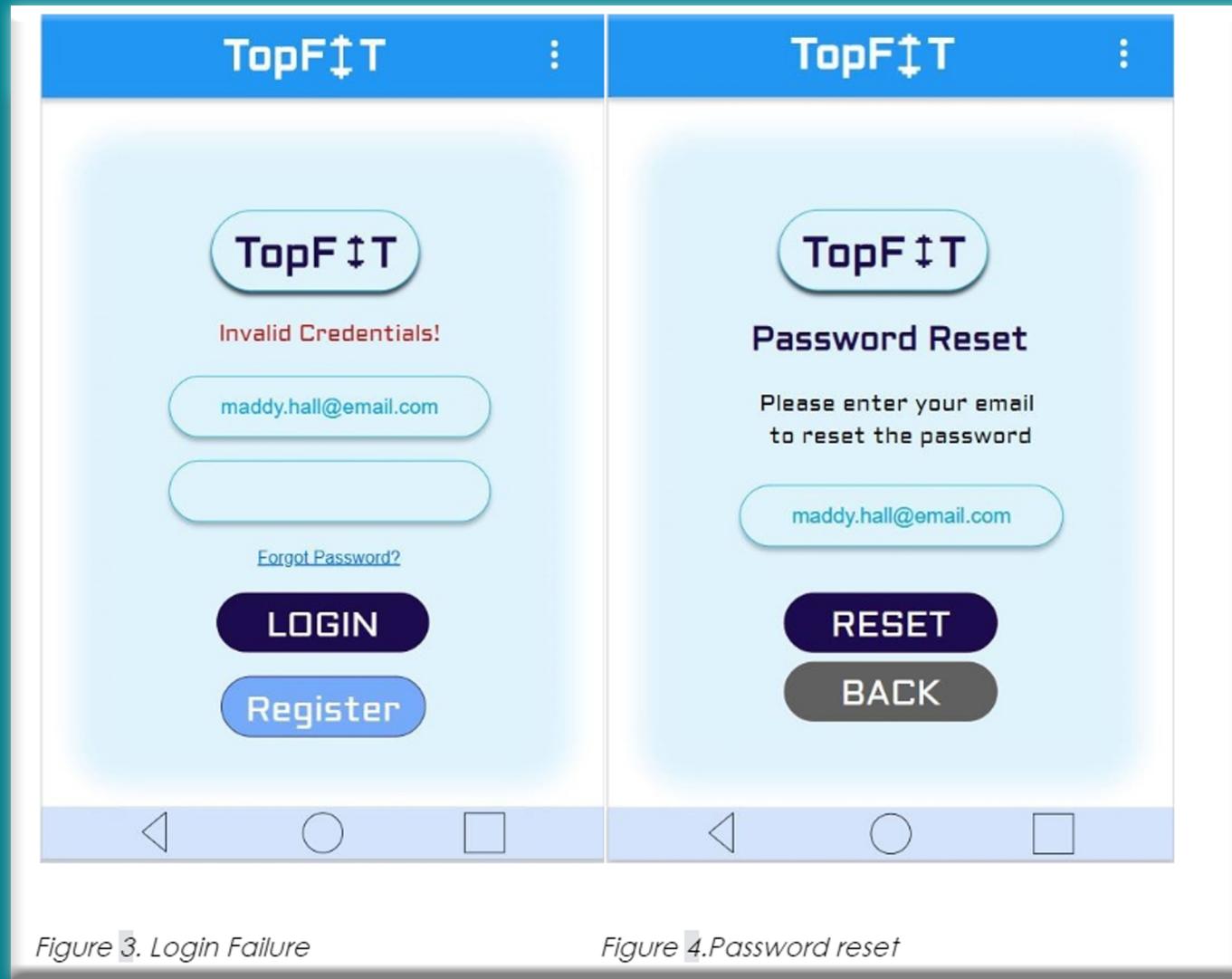


Figure 2. Login screen

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MOCKUPS

If the user enters incorrect email and / or password, they stay on the login screen and a message appears, indicating that the authorization failed (Figure 3).

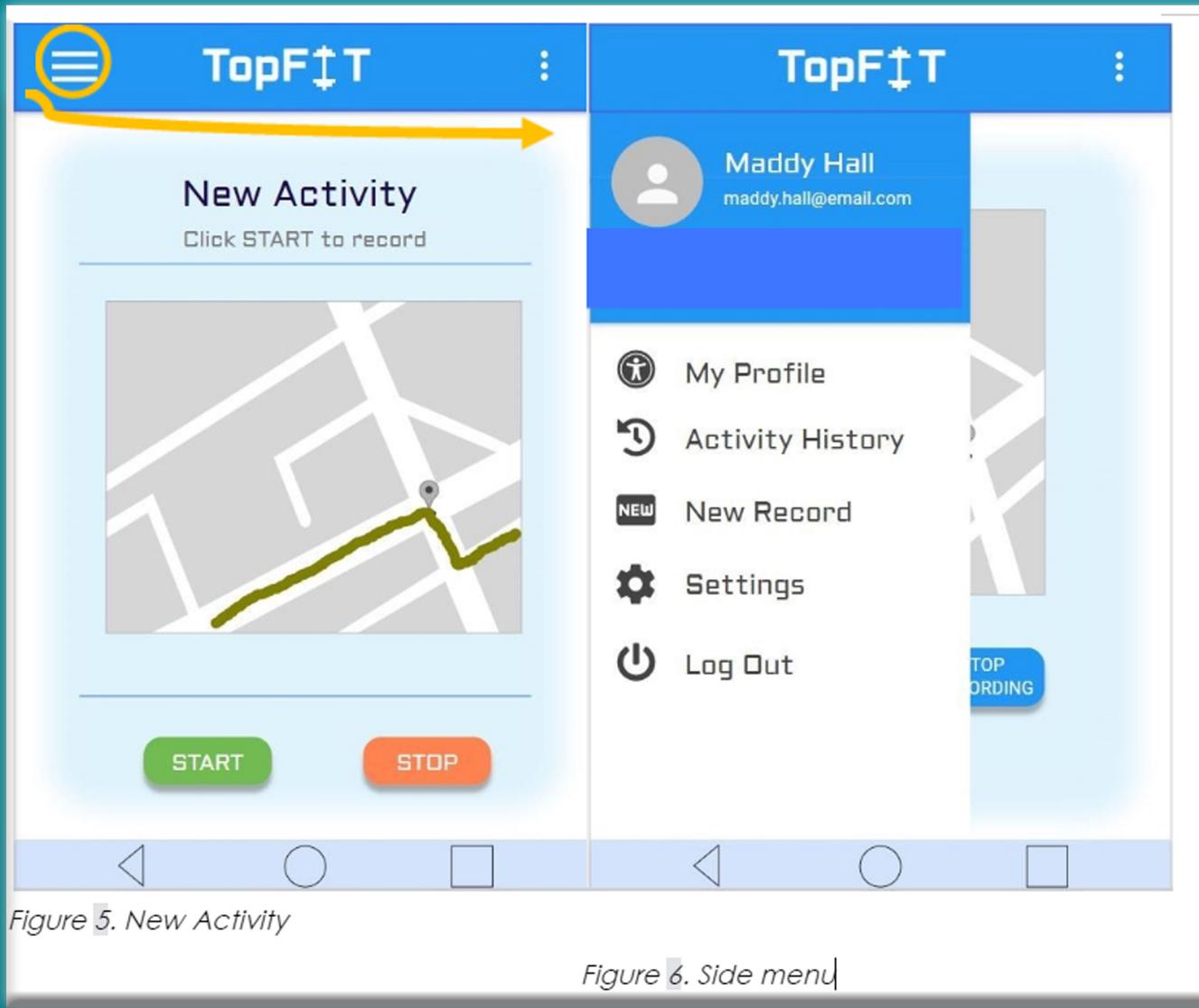


It sometimes happens that the user is registered but cannot remember the password. In such a case, they can restore it (Figure 4).

MOCKUPS

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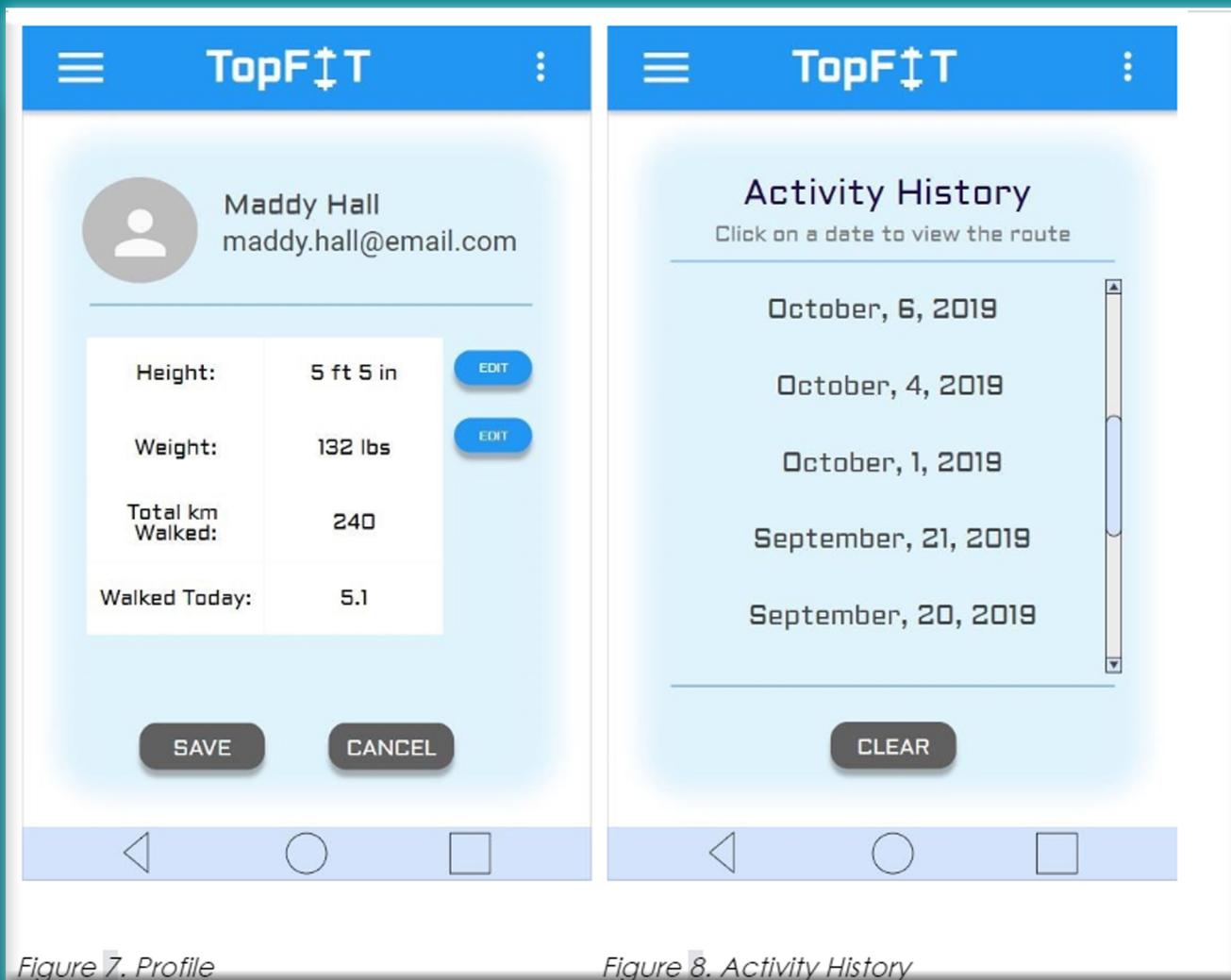
Upon successful login, the user will be directed to the main page of the application, a.k.a. New Activity page (Figure 5). To access the side menu (Figure 6), the logged in user can press the Menu icon in the top left corner from any screen. Pressing the Logout button will take the user to the Login page



At the New Activity page, the user can press START button to activate the geo tracking. The activity will be recorded until the STOP button is pressed.

MOCKUPS

Picking the My Profile option from the side menu will redirect the user to the following screen (Figure 7):



The user can edit their height and weight measurements and see their total distance walked. Saving / Cancelling the changes will take them back to the main page.

The Activity History screen allows the user to view the recorded routes. Clicking on the date will display the route that was recorded on that day. The user also has an option to clear activity history by pressing the CLEAR button. This can be also done from Settings page (Figures 9 and 10).

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MOCKUPS

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From this page, the user can modify their information: name, photo and password. To persist the changes, they have to press Save button.

The user also has the options to delete their account or clear the activity history. In this case, a confirmation dialog will appear, warning the user. To complete the action, they have to press OK.

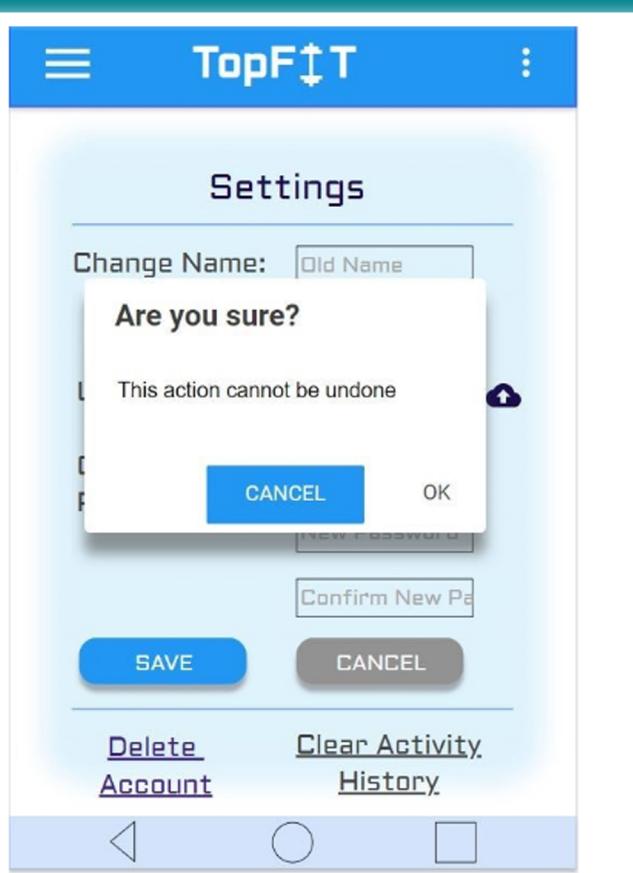
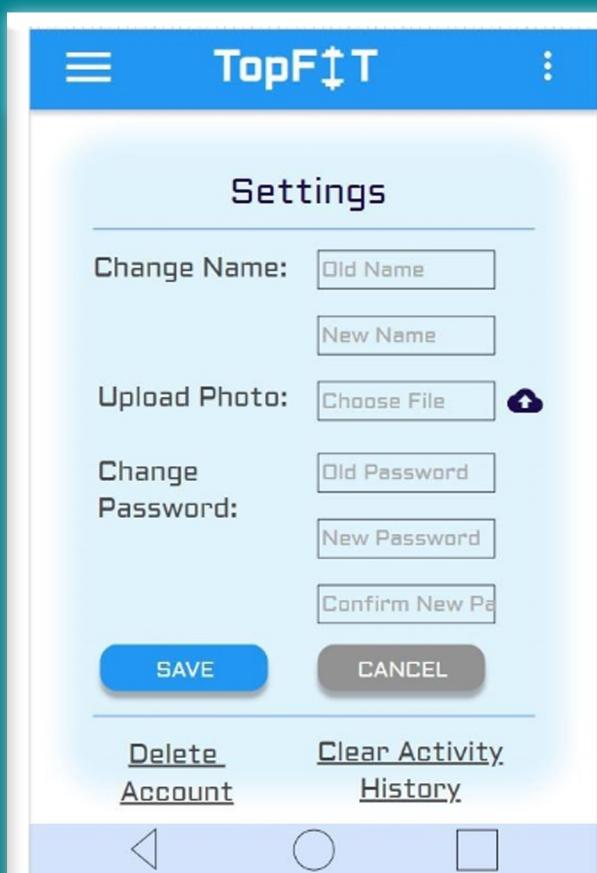


Figure 9. Settings

Figure 10. Confirmation Dialog

FUNCTIONALITY

Login: All users will be able to login with their username(email) and password, on “Submit” button click in the form, authVerify() function will be called. It will check if the username and password combination matches the one in the database.

Register: If a user does not have an account, they will be asked to register for one. The registerUser() function will verify that all mandatory fields are filled out with the proper values, and none are left empty.

Forgot password: To recover a forgotten password, a user will be asked to input their email associated with their account. The forgotPassword() function will check if the provided email exists in the database, then the user will be emailed instructions on how to create a new password.

Change password: In case a user wants to change their password, they will be able to do it. The user must provide the current password in order to create a new password. The changePassword() function will then check if the entered current password matches the one stored in the database and if the new password meets the requirements.

Deactivate account: If a user no longer wants to use the app, they might have their account deactivated. The deactivateAccount() function will ask the user to provide the reason for deactivating their account (for feedback purposes) and their password to verify that it's the user themselves not somebody else.

Start recording: When a user presses the button while they are walking or running, the system starts to record the way that the user is going through, time that user spend for running and other function will record.

Save record: The saveRecord() function writes a record to the database table. The record is essentially a set of coordinates that describe the user's route.

Stop recording: The “Stop” button allows the user to finish recording an activity. When the user wants to stop the recording their activity, the stopRecording() method will be invoked to stop recording the coordinates.

Delete activity: It might so happen that a user has some activities recorded that they don't want to be associated with their account. To handle that, there is the deleteActivity() method that allows users to delete unused or old activities to make some space for new ones. This method actually deletes a database record, so there's no way to restore the information.

Clear activity history: Many records associated with one user stored in the database. Each entry consists of the time that the activity took (for example, the user was walking for 43 min 21 sec), the distance and the average speed. These entries make up the activity history. With the clearHistory() method, the user is able to delete all the records for their account.

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