

Find Your Path

Team 25 - Product Backlog

Revanth Nagurla, Aldio Ngudjiharto, Simron Patel, Willy Tanggono, Jackie Wu

Problem Statement:

Many people like to run, walk or even bike with a set route - and they utilized apps such as MapMyRun or even Google Maps. However, such apps do not allow users to freely create their own, personalized routes based on their preferences. On the contrary, our offering of a mobile web app would provide extra features, such as allowing users to generate a customizable route based on their preference of incline, distance travelled, or even any specific spots or scenery that they want to go through.

Background Information:

With no viable applications that allows users to create custom routes to their preferences, we plan on creating one for our users. Our application will allow users to create routes on the go and workout in familiar places or venture out in a new environment.

Audience

In the current era, some people use technologies as a part of their exercises. For our app, the users are people who want to run, walk or bike. We can help them to find different routes that they can choose from based on their preferences. Through this we can help our users on their workout plan.

Similar Platforms & Limitations

There are several other applications that provide similar features and platform as our application. MapMyRun is an application created by Under Armour which provides similar features to ours, however, it is not free. Google Maps are a similar platform except it does not have the specific features we are offering to our users. Our application will resolve these problems by offering it to our users for free and allowing them to create customizable routes.

Requirements:

Functional Requirements

1. As a user, I would like to be able to register for an account.
2. As a user, I would like to be able to manage my account.
3. As a user, I would like to stay logged in in my account.
4. As a user, I would like to be able to view my account statistics.
5. As a user, I would like to see the directions of my route.
6. As a user, I would like to see a map that outlines my path.
7. As a user, I would like audio that tells me as I need to travel a new direction.

8. As a user, I would like my password to be reset if I forget it.
9. As a user, I would like to be able to easily access my data across all of my devices.
10. As a user, I would like to be able to generate a route according to my preferences.
11. As a user, I would like to be able to see the time elapsed during my run.
12. As a user, I would like to be able to see the distance traveled during my run.
13. As a user, I would like to be able to see how many calories I burned during my run.
14. As a user, I would like to be able to view my past routes taken.
15. As a user, I would like to be able to view popular routes.
16. As a user, I would like to receive notifications about exercising if I have been skipping workouts.
17. As a user, I would like to be able to set workout goals.
18. As a user, I would like to modify my workout during the route.
19. As a user, I would to have the option of stopping my workout during a route.
20. As a user, I would like to see the weather that is related to my route.
21. As a user, I would like to save my favorite routes.
22. As a user, I would like to pause my workout.
23. As a user, I would like to see the average of all my statistics taken which can include average miles per session and average pace.
24. As a user, I would like to be able to easily navigate through the user interface
25. As a user, I would like to see how many times I have ran a specific route.
26. As a user, I would like to add notes to my saved routes.
27. As a user, I would like to be able to view my personal workout records.
28. As a user, I would like to receive daily notification reminders to work out at specified times.
29. As a user, I would like to choose my preferred units of measurement for weather and statistics.
30. As a user, I would like to sort my statistics based on running, biking, and walking.
31. As a user, I would like to see routes based on the scenery my area has to offer.
32. Time Permitted: As a user, I would like to see routes based on elevation change.
33. Time Permitted: As a user, I would like to connect and travel with other users on a route.
34. Time Permitted: As a user, I would like to see areas that are not safe for me to travel in and inform me about this news.
35. Time Permitted: As a user, I would like to be able to send messages with other users of the app.

Non-functional Requirements

Architecture and Performance

The backend will be similar to RESTful API written in Node.js which will mainly be used to generate routes, note down user data, and authenticate users. The frontend will be written in React Native because it will be a mobile application. For our purposes, React Native allows us

to do mobile app development through React, javascript, and HTML as opposed to using Java or Swift. Lastly, the data stored will be written to a MySQL database.

Security

We will be using Passport.js to deal with the security aspect of our application. The personal data will be encrypted using AES 256 bit encryption. Having security is essential to this app because each user has personal data about their workouts; thus authenticating each user and creating an impenetrable system is necessary.

Usability

The user interface should be intuitive and simple so that the layperson will be able to understand. Since there are many features and statistical data that will need to be implemented and displayed, the user experience needs to be well designed. A well designed user experience will allow the user to focus on their exercises instead of being frustrated with the app.

Hosting/Deployment

Since we divided our frontend and backend, we will be hosting the frontend on GitHub Pages and deploy the backend on Amazon Web Services.