



Project 76

A Fitness Coaching App for Runners



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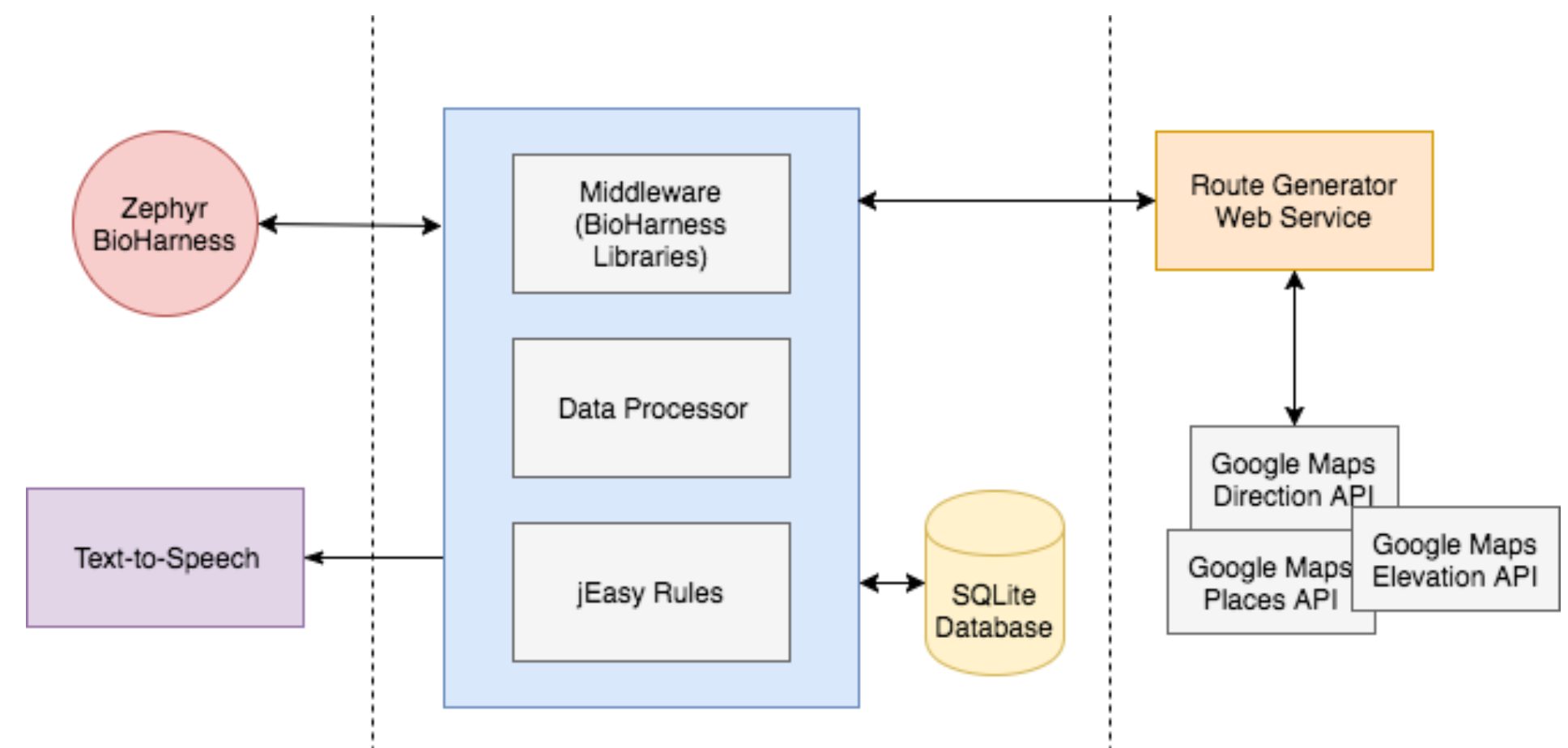
Motivation

With running becoming one of the most popular forms of exercise and technology finding its way into every industry, it is now possible to have a coach in your pocket. Running is often considered a solitary sport, and traditional coaching is expensive and difficult for runners as they are constantly moving. This project aims to provide a running coach mobile app that substitutes for a real trainer, using real time feedback and navigation to guide users as they run.

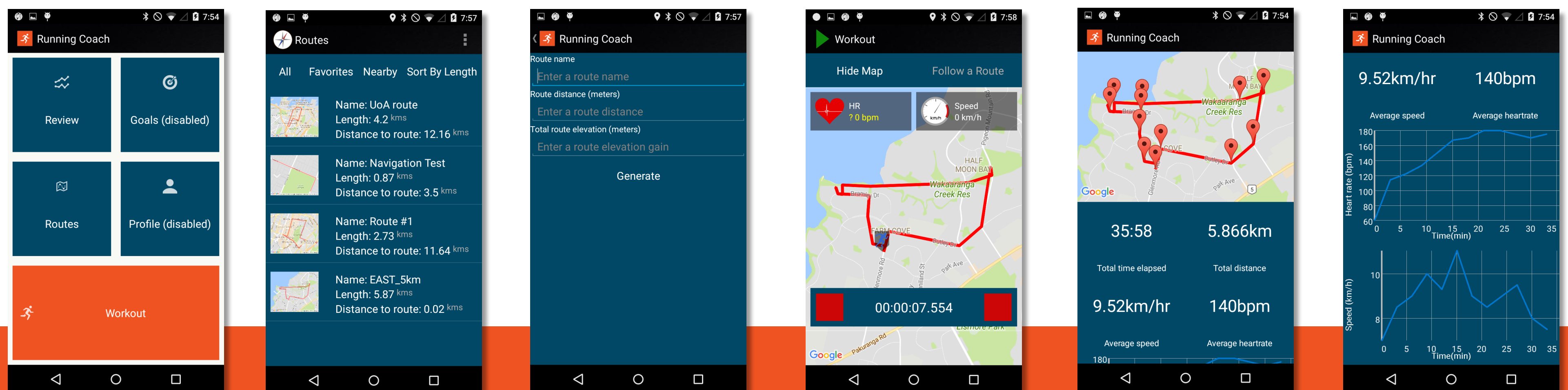
Features

- View and generate new running routes based on input parameters (length and elevation gain)
- Receive coaching advice through text-to-speech while running
- Receive navigation feedback through text-to-speech
- View history of workouts with interesting data

System Architecture



Screenshots



Evaluation

To confirm the validity of the app, 3 participants were invited to test the app in a workout session. The generated routes and text-to-speech navigation received positive feedback, with some improvements suggested for the real time feedback. Prominent feature requests include:

- Adapting the real time feedback to different stages of the run, for example lowering the speed and heart rate range towards the end of a run.
- Add support for other fitness gadgets such as sport watches to improve convenience.

General usability of the user interface was also tested with a group of users. Overall the feedback on navigating the user interface was positive with several exceptions. Through the usability study we were able to remedy many bugs and UI design issues. Some of the larger improvements suggested were:

- Revamp how elevation is specified by the user by using different levels of elevation instead of a number.
- Adding a calendar to manage past workout sessions

Conclusion

Ultimately, this is an early prototype but we believe that this product will definitely be widely used. Through our evaluation, we have found that there are many more improvements that could be made with the existing features as shown. Additionally, there are a number of other features we have considered which will make this project more exciting:

- Providing training programs which will utilize the route generator and live coaching
- Implement a social section to share workouts with friends

Feature	Rating / 5
Route Generator	4
Live Feedback	3.7
Workout Data Tracking	4.4