

TuneRunner



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Background

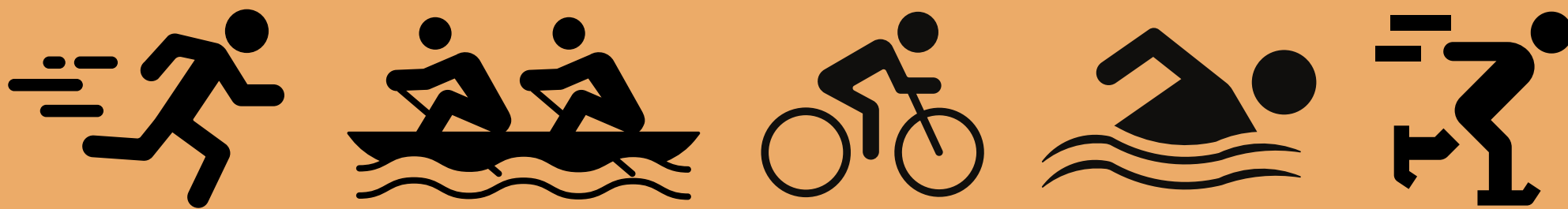
Running while listening to music is a popular practice because it can increase a runner's performance and endurance. However, the tempo and energy of a song are significant factors for a runner to run comfortably and perform their best. Running with music that does not match the runner's pace can hinder their rhythm, therefore making the runner perform worse.

Features

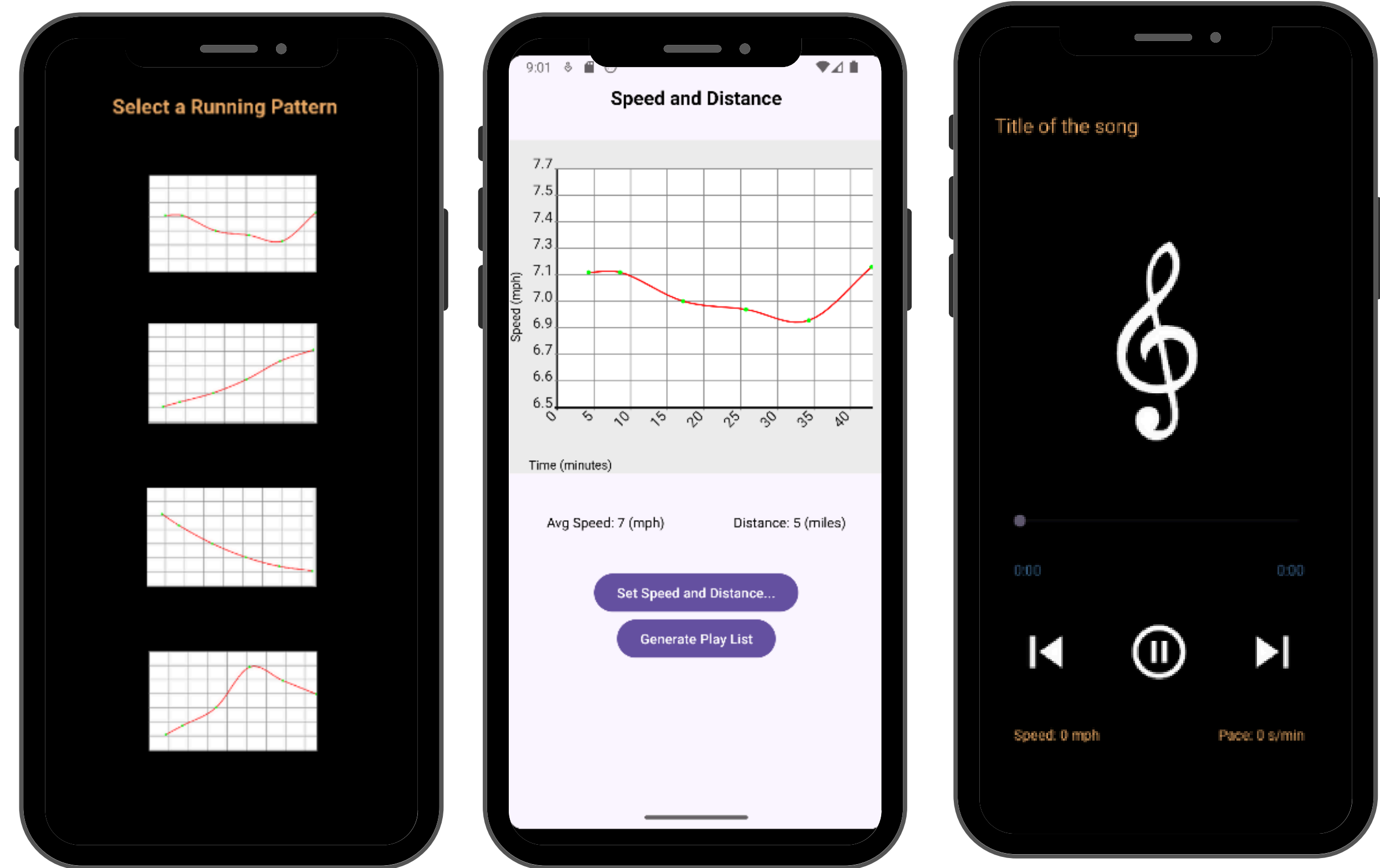
This app allows users to choose predefined speed trends over the course of a run in the form of a graph. They then input their desired distance and average pace alongside this. Leveraging these details as well as a library of downloaded songs and their corresponding beats per minute, the application generates a playlist that aligns with the graph configured.

Target Audience

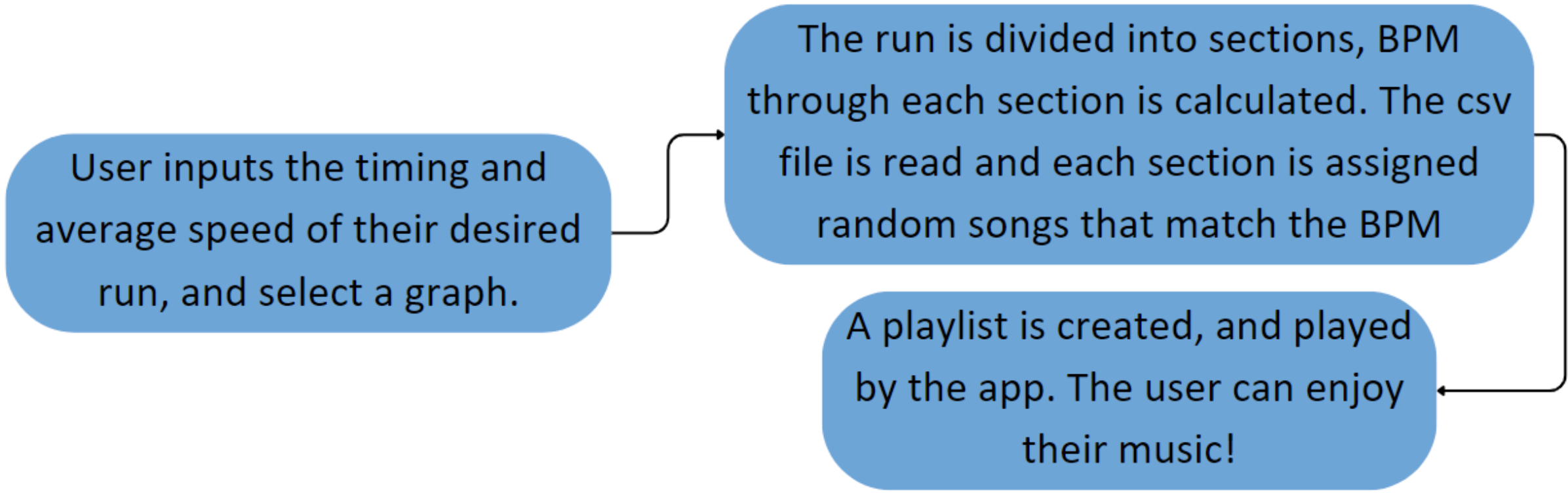
This app targets an athletes who have difficulty finding a set playlist that adapts to one's pace as it changes.



App Overview



Flow Chart



Tools and Technologies

To achieve this, some of the tools and technologies used are:

- **Android Studio** for programming the entire app
- **SongBPM** to find the BPMs of different songs
- **Google Sheets** to create csv files for reading the BPMs and link them to a specific song
- **GitHub** was utilized for external storage and cloud collaboration

Competitors

Our app has 3 major competitors:

- **Run BPM** - Creates a pre-determined playlist based on a playlist and BPM that the user inputs.
- **FITRADIO Workout Music** - Creates a pre-determined playlist, in which all of the songs have the same BPM and mood based on user input.
- **PaceDJ** - Creates a playlist that adapts as a user's pace changes, with the user choosing a playlist at first.

Future Extensions

Future Extensions and improvements for this app include:

- Linking the app to **Spotify** or some other music application to access a wider variety of songs and genres
- Assessing a phone's **pedometer** to more accurately define a users BPM over the course of their run.