

# TuneRunner



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## Background

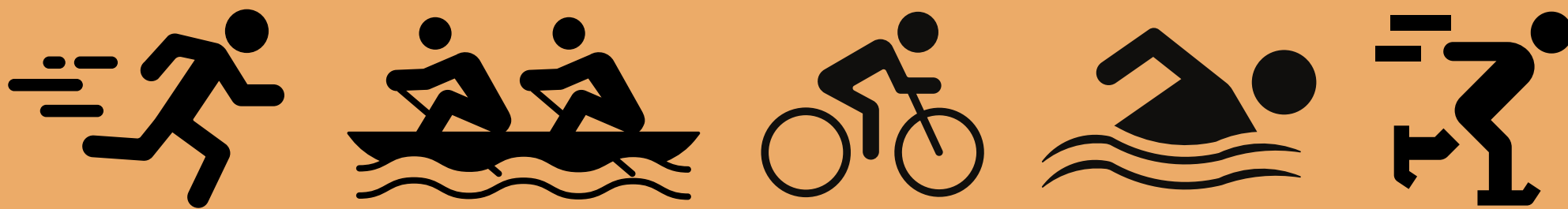
Running while listening to music is a popular practice because it can increase a runner's performance and endurance. However, the tempo and energy of a song are significant factors for a runner to run comfortably and perform their best. Running with music that does not match the runner's pace can hinder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

## Features

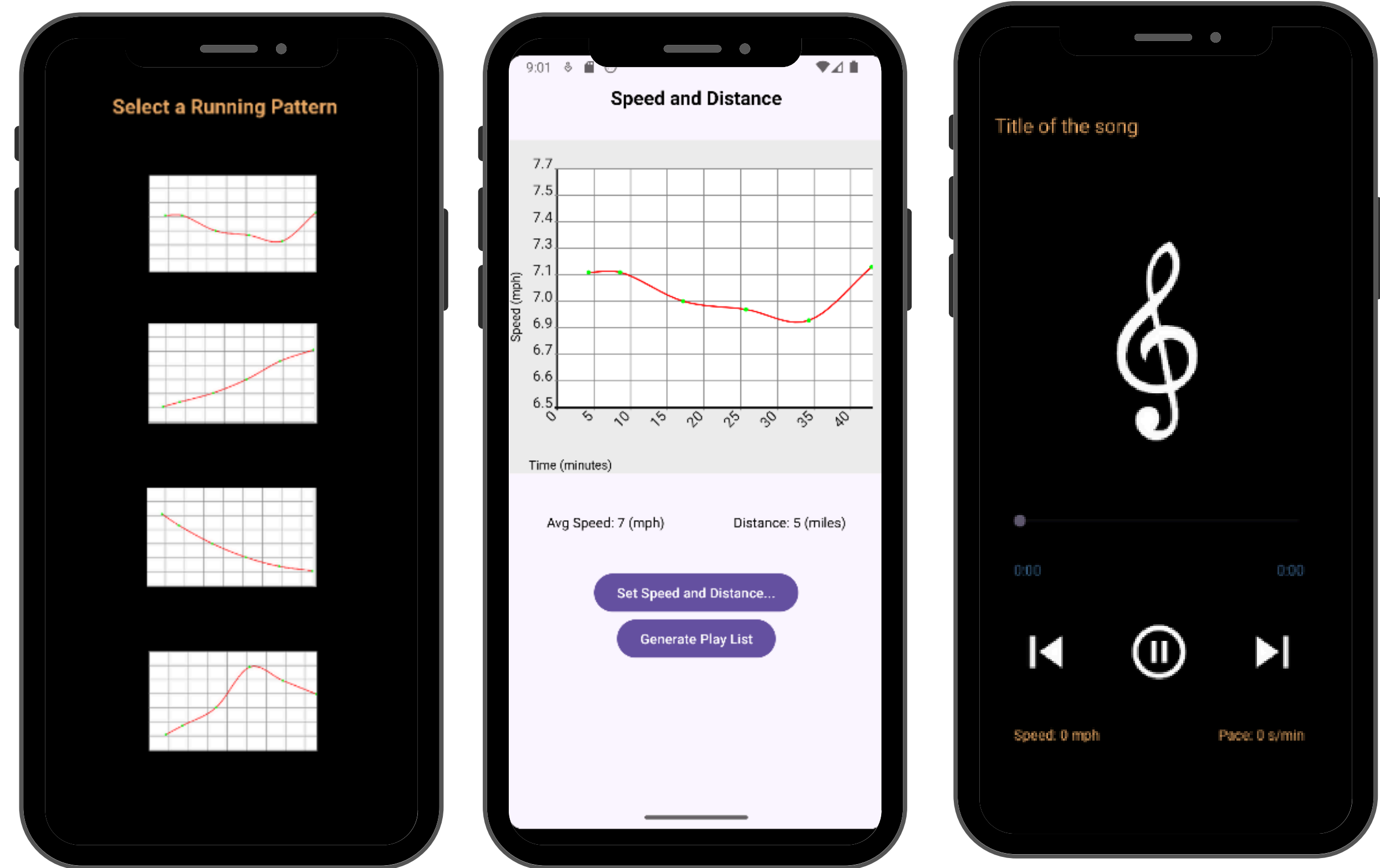
This app allows users to choose predefined speed trends over the course of a run in the form of a graph. They then input their desired distance and average pace alongside this. Leveraging these details as well as a library of downloaded songs and their corresponding beats per minute, the application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

## Target Audience

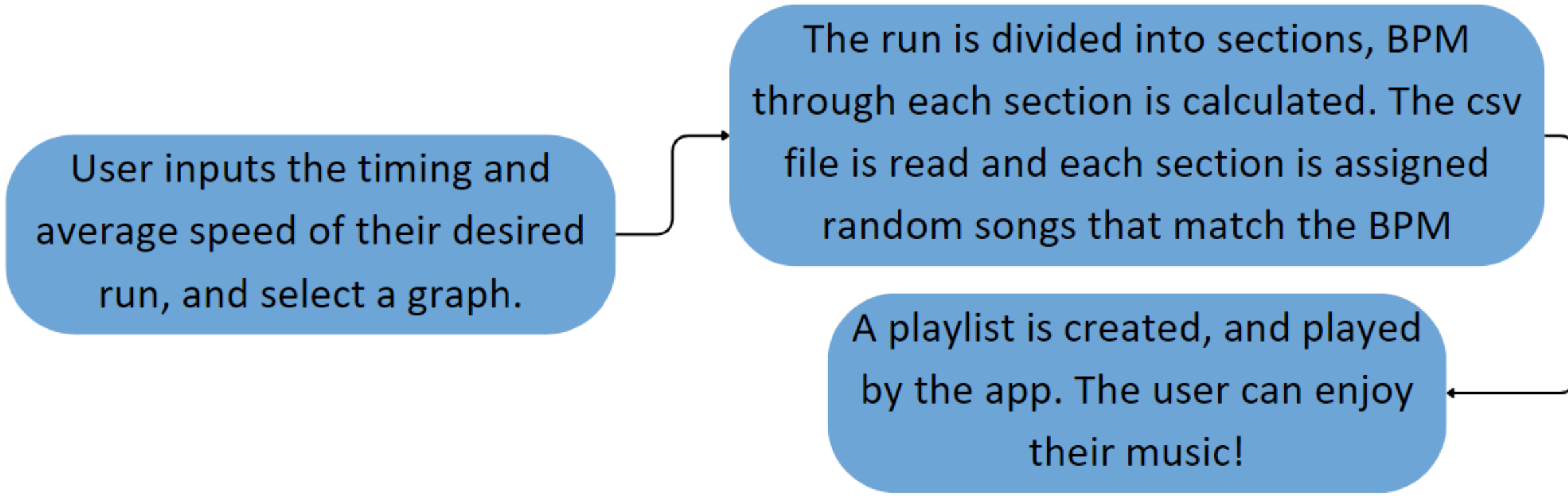
This app targets an athletes who have difficulty finding a set playlist that adapts to one's pace as it changes.



## 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.