TrackRecordRace
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What is it?
TrackRecordRace is a mobile app for Android smartphones for people who like to run. The app allows the user to:
- **Track** their runs, and view metrics as they run including location, speed, distance, and calories
- **Record** these metrics for later viewing
- **Race** other runners through the application in an asynchronous head-to-head competition
- Users can send others they have added as friends requests to race
- These races can be completed at any time by the user who received the challenge

Technology
- TrackRecordRace is for Android devices
- Developed using Android Studio IDE
- Relies on location for calculation of important running metrics
- Utilizes Google Play Services and Fused Location API
- Fused Location API uses WiFi, network and GPS for accurate location
- Less battery intensive than any single provider method
- All data stored in Parse.com cloud backend
- Immediately updated and viewable to the user

Design
1. **Individual Run**
   - Select the runner icon to begin a run. The play and pause buttons toggle and metrics are not recorded while the run is paused.
   - When the user stops the run using the buttons on the action bar, they will be prompted to ensure that they are finished.
2. **Challenge Run**
   - When a user begins a challenge, they run their route like any normal run.
   - Select a friend to send the challenge. They will receive a push notification on their device.
   - The user who receives the challenge will see it in their queue. They can accept the challenge, which will open a new run page, or decline it.
3. **Other Features**
   - The profile page allows user to see some important metrics regarding their individual runs, as well as for challenges.
   - Users can add friends by typing in the username of a friend. They are added this way to ensure that users know each other.
   - Users can change how many runs they can also change their weight for more accurate calorie counts.

Architecture
1.) **Data Storage**
All runs, challenges, and user information is stored securely in the Parse.com cloud and accessed via the Parse.com API for Android.
2.) **Winner Determination**
When the user sends a challenge, they submit their time for that distance. The person they challenged will submit their time after running and the times are compared.
3.) **Metrics Calculation**
Metrics are calculated using location services and have the appropriate calories are calculated using the VO2 formula, an estimate oxygen use while running based on weight

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2. Ben Jakuben of TeamTreeHouse for his guidance and tutorials on Parse and Android Development.
3. runnersconnect.net

Try it Out!
Scan the barcode to the right to begin using TrackRecordRace!