CORNER

ANDROID DEVELOPER TASK

Overview

Corner builds wearable technology to provide objective performance feedback to athletes and coaches in combat sport training. Our mission is to have a product and service range that extends across all skills levels, to assist athletes from grass-roots sport to high-performance elite competition.

One of the primary tasks for the incoming developer at Corner will be to building out the UI for an android app in accordance with designs from our in house team. The mobile app displays real-time statistics from our wearable sensors. These statistics include punch count, type of punch, combinations, speed and peak acceleration.

Task

For this assignment, you will be building the UI for the 'Round Feedback' screen from the android app. The design for this screen is shown on the next page, and also included in the folder as a PDF. The 'Round Feedback' screen is shown during the athlete's rest between rounds of boxing, typically a 1 minute duration.

The CSV file in the folder contains real data taken from a fight between France and Italy in the World Series of Boxing. You may use this data to populate the widgets. This screen is supposed to give the athlete a snapshot of their performance for the completed round. Each of the individual graphics are widgets that would be re-used in other areas of the app, so it is worth taking this into consideration when you structure your code.

What does the screen show?

The intensity graph shows the frequency of punches over the 3 minutes of a round of boxing. The punches are summed in 15 second bins, and compared to the athlete's punch goal. For example if an athlete is expected to throw 100 punches in a 3 minute round, then they are expected to throw 8.33 punches in each 15 second interval. This graph is meant to be very simple to interpret, and accordingly only the minimum and maximum values are labelled.

The headline statistics in the centre of the screen show the total punch count, the average speed (mph) and the average power (g). Each stat also includes an indicator showing whether the statistic increased or decreased compared to the previous round.

The final graph breaks down the athlete's punches into the count of each type of punch. In the CSV file, punch types are referenced by an integer ID as follows:

Left hand punches:	0 - Jab	1 - Hook	2 - Uppercut
Right hand punches:	3 -Cross	4 - Hook	5 - Uppercut

It is worth nothing that both the graphs for left and right hand use the same scale to help the athlete see which hand they are using most.

The tab bar at the bottom provides information as to the interval timing., The number on the left counts down the seconds left in the rest, whilst the progress bar shows how far through the rest period it is. The play button on the right allows users to override the interval timing and begin the next round.

Completion

It is up to you how far you take the task and it is not necessary for the full screen to be developed, We would prefer to see organised and re-usable code for one widget as opposed to rushed code for the complete screen. It is best if the project is built in a git repository. Upon completion of the task, please send a link to the repository to charles@thecornerapp.com.

If you have any questions about the task, don't hesitate to get in contact with Charles using the above email.