# Athlete Web Application

using Polar H10<sup>©</sup> and Polar Verity Sense<sup>©</sup>

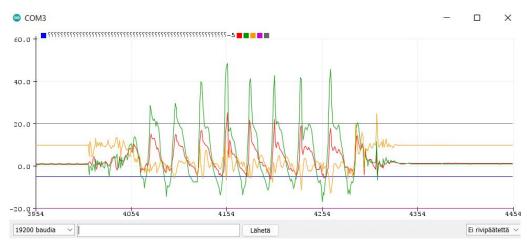
#### Main idea

- Main goal is to get the data from both of the sensors in real time and display it in Chrome browser.
  - This is done with using the Web Bluetooth API that to our knowledge Polar is not using at this time.
  - We will try to display the data in a simple matter, so every end-user can easily understand it
  - o It should be possible to calculate the speed a sensor is being moved using the accelerometer

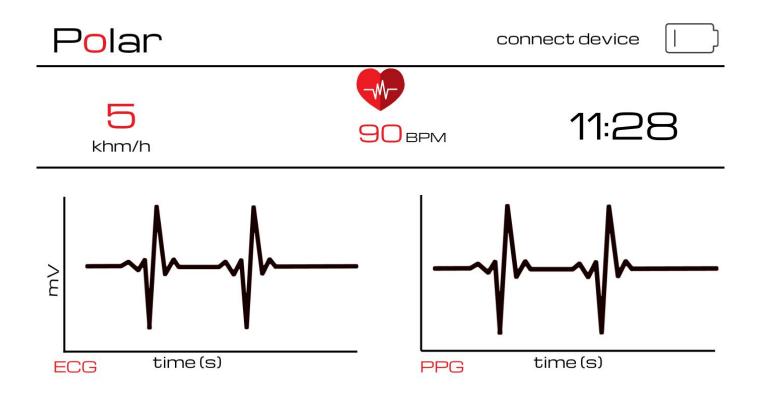
→ Because of this the web application could be relevant for the future development of Polar.

### Experiments with accelerometer

We thought that it would be a good idea to get some experience how accelerometers work because there is also one in the Polar sensor we have. We were able to get some data out of the accelerometer and show it with a graph as seen in the picture below.



## Simple design Idea for the Web-Application



Live demonstration

#### Over the top ideas

If we are able to implement all these goals, we have some additional ideas:

- We are thinking about including a database to store highest/lowest BPM etc.
- Program an algorithm that calculates the movement and speed of the user and put them in perspective
- develop a 3D model showing the users movements (only for the arm for now)