

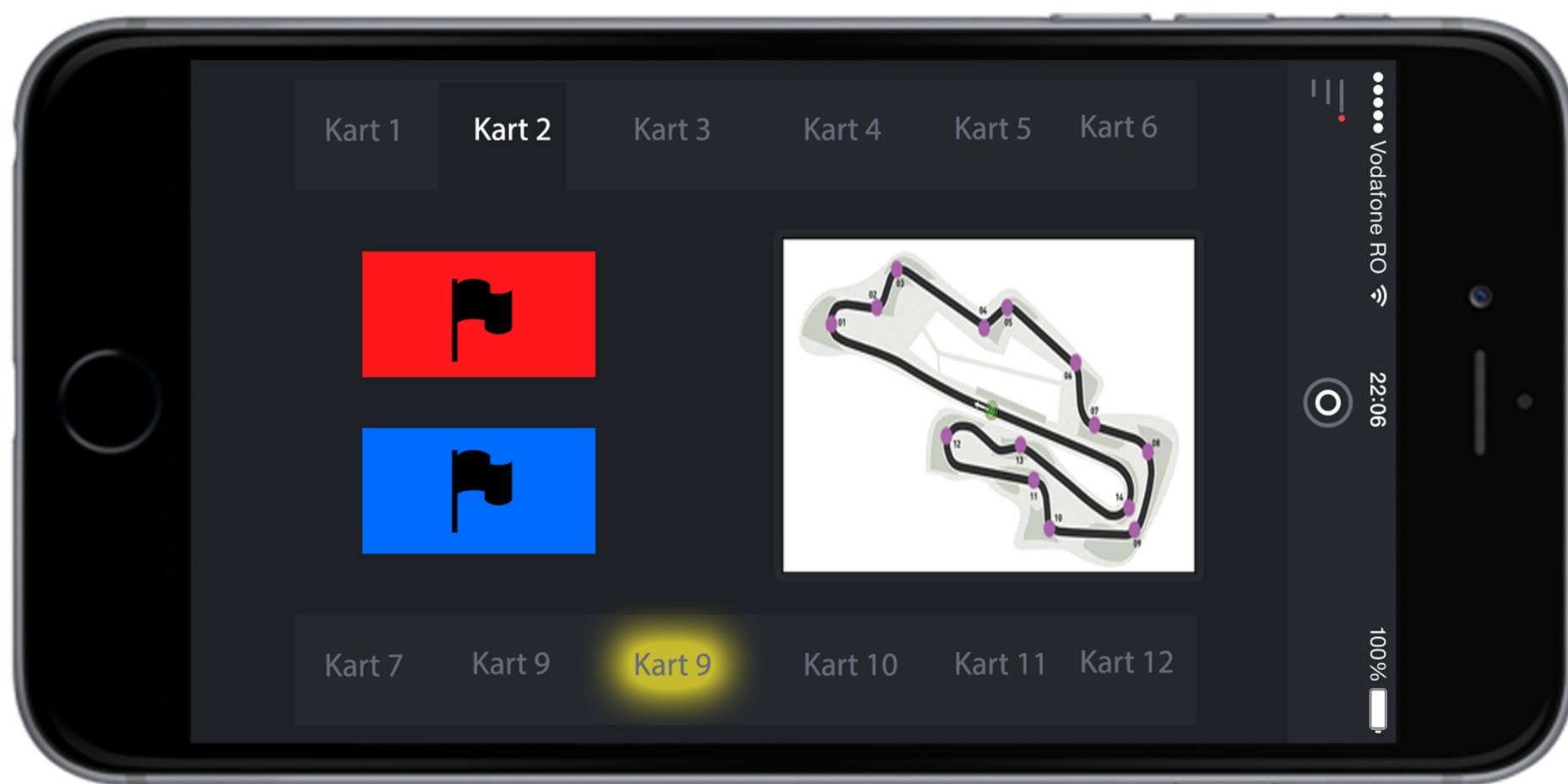
KARTING

CONCEPT

We developed an application that can be used by karting monitors to easily communicate with the racers. Instead of waving with flags and flashing track lights the monitors can now use the app to bring those signals straight to the racers individually. The helmets of the racers are equipped with 3 different subtle LED lights. Every LED represents another flag colour:



- The person behind you wants to pass, drive slow and take the outside of the turn.
- You need to drive to the pit because you're driving careless or the race has ended.
- Blinking: the faster the yellow light blinks the closer you get to a crashed racer, drive slow and don't take over.
Turned on: watch out, you're close to the crashed racer.

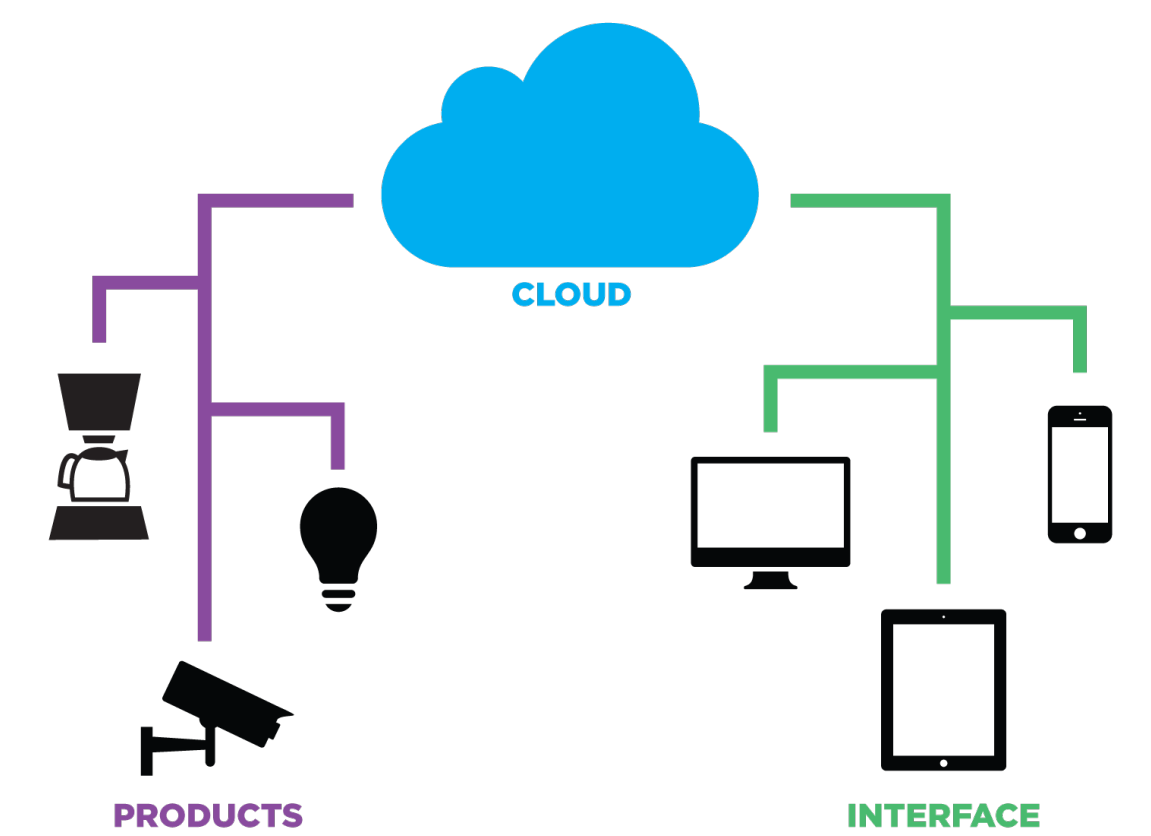
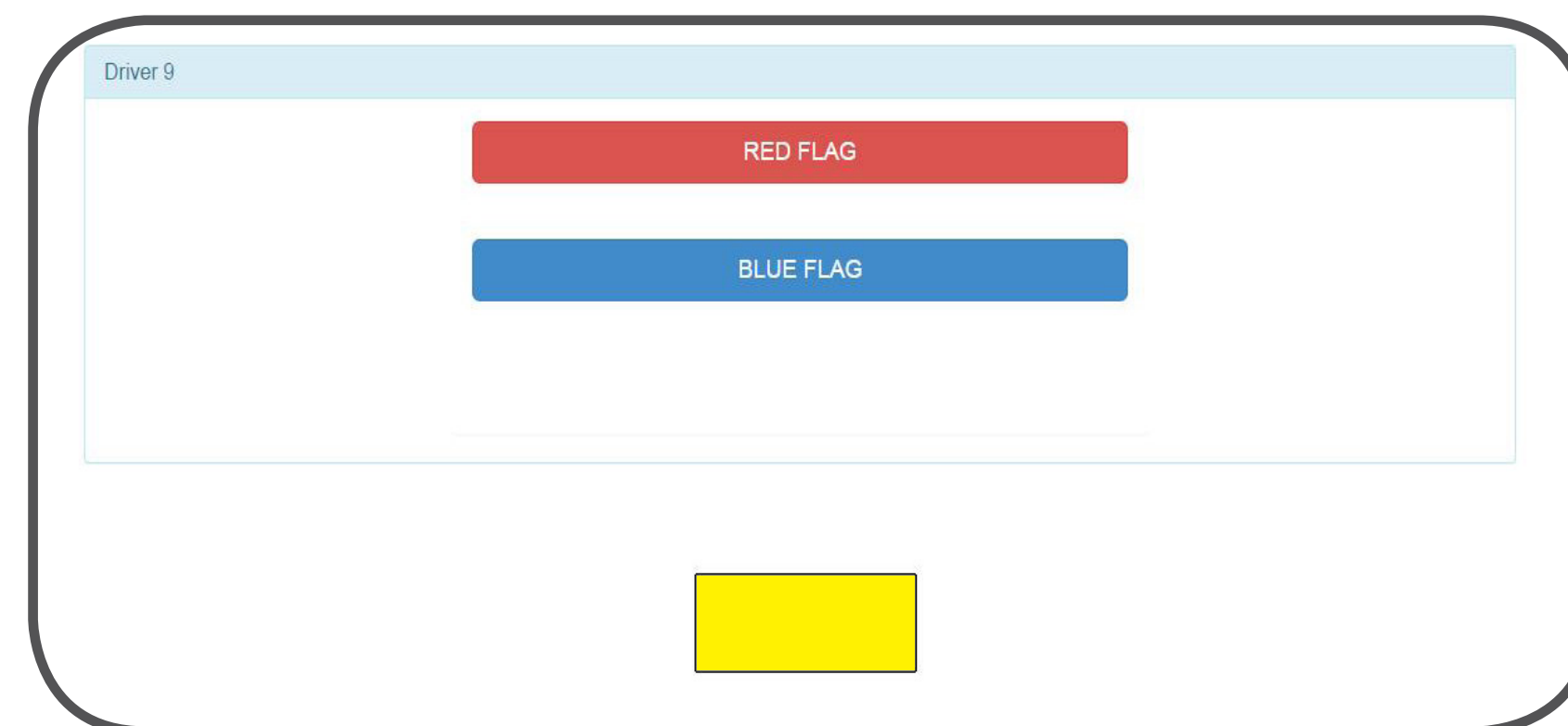


In this case the monitor can activate a red or blue LED in the helmet of the driver of kart 2. Also notice that the driver of kart 9 has crashed.

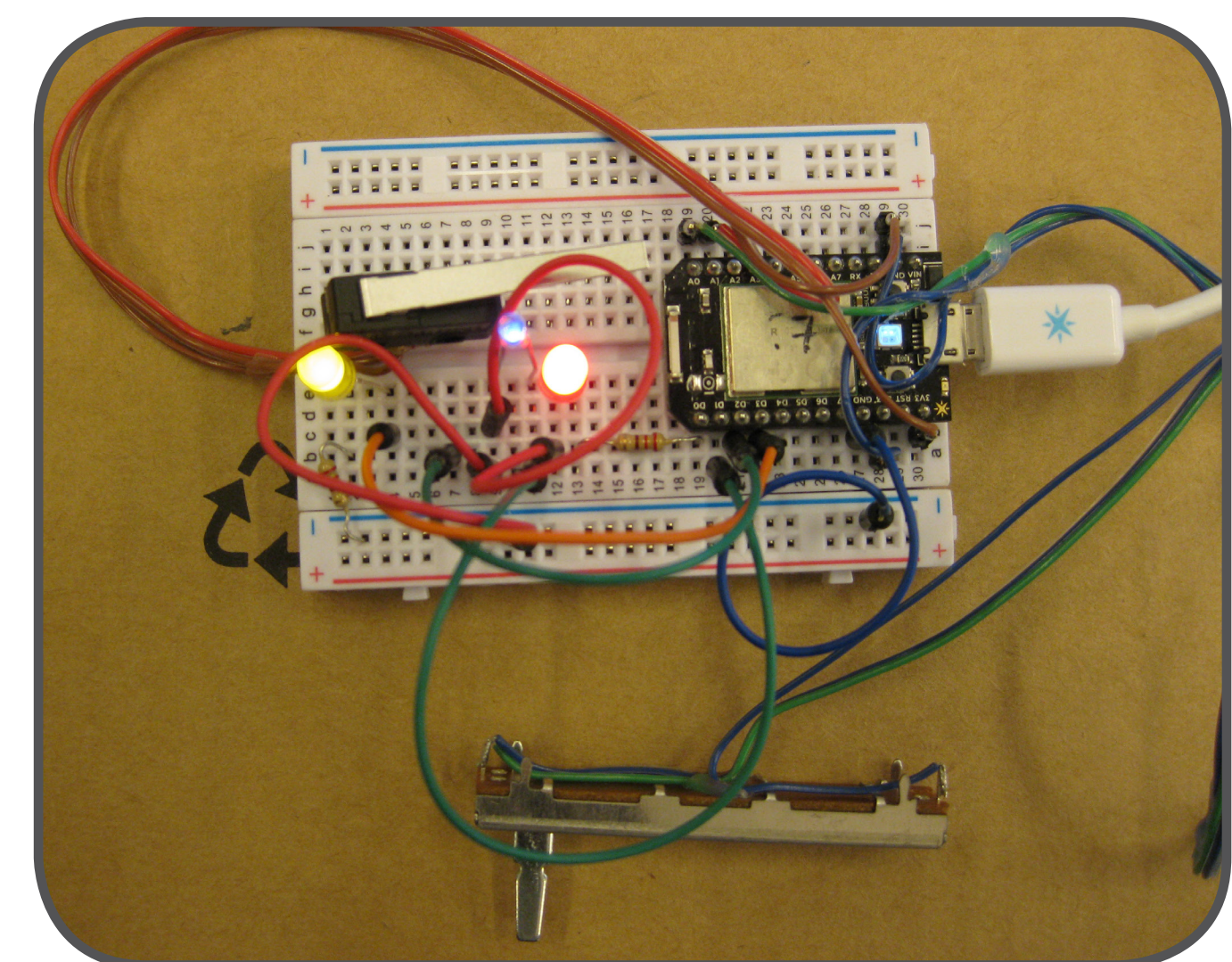
The monitors can watch the racetrack on the app and the positions of each racer gets tracked by GPS. If a racer crashes he can press the crash button which does two things: first of all it communicates to the app so the monitor can go and help, secondly it activates a signal that warns the other racers (blinking yellow light).

SIMULATION

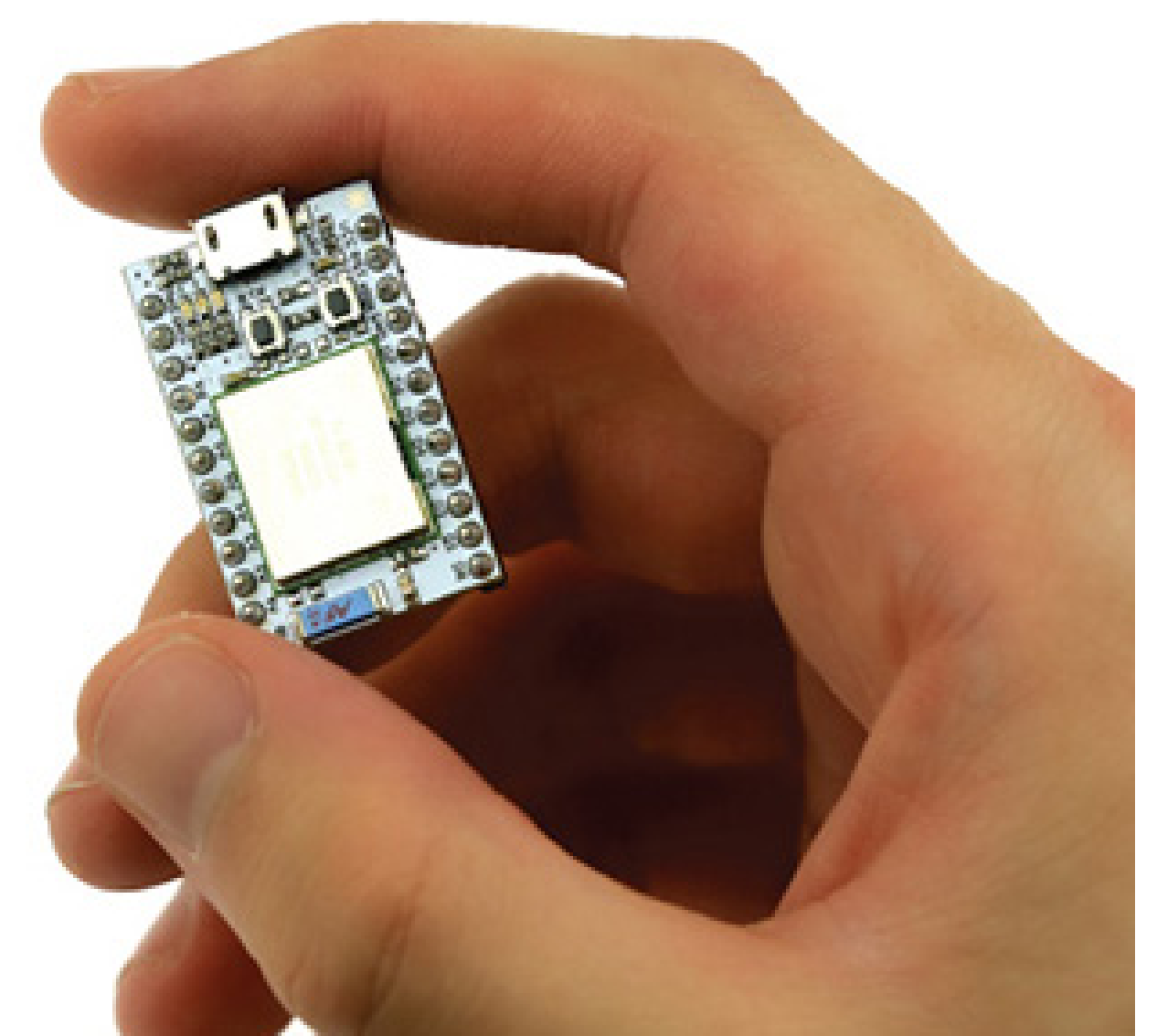
We build a simple simulation of our concept. Through a website we can activate two buttons which control the red light and the blue light. This will communicate to the Spark through Wi-Fi and will activate the LED's accordingly.



The breadboard also has a crash button. The box on the website will turn yellow when this button is pressed.



A manual slider simulates a kart nearing a crashed racer. A yellow LED will start blinking faster when you slide until it's constantly on.



PRODUCTONTWIKKELING



WEARABLES
WORKSHOPWEEK 2015

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