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jkrrv



JC



DrexelECE / InternetOfThings

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InternetOfThings / Assignment1 / Step5 / demoDescription.md



jkrrv 3 hours ago cleanup of demo description... again.

1 contributor

file 11 lines (9 sloc) 1.262 kb

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We need a name for this.

Many bicyclists use a bike computer, and a phone-based fitness app to track different aspects of their rides. But why are these items distinct and disconnected? The standard bike computer uses a sensor on the front wheel to get an extremely precise, high-resolution speed measurement. Many (if not all) fitness apps currently depend on location-based input for determining common measurements such as speed and distance. Cellular polling can be very energy-intensive, and many app designers have thus sacrificed precision for battery life. This system would provide more precise information, with significantly less energy. We seek to make a hardware device that communicates with smartphones using Bluetooth, in a manner useful to many new or existing apps.

Features to potentially explore:

- Obtain power from bike motion -- eliminates inconvenience (and weight) of batteries.
- Allow device to communicate directly to internet, without a phone (using GPRS or something like that). -- Could allow for monitoring a stolen bicycle
- Integrate other sensors, such as temperature, that can impact the quality and health benefits of the ride.
- Detect significant crashes and automatically call for help

