Velomobile Control & Telemetry System

Use Case Specification

Read Sensors

Version 1.0

Revision History

|  |  |  |  |
| --- | --- | --- | --- |
| **Date** | **Ver.** | **Description** | **Author** |
| March 13, 2010 | 1.0 | Initial Composition | John Schmidt |

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# Start Up

## Brief Description

The ECU receives a clock signal, then

## Requirements Trace

1.1.1, 1.1.2, 1.1.3, 1.1.4, 1.1.5

## Involved Actors

Rider – The rider will be the one activating the system.

Drive Wheel Sensor – This sensor reads RPM on the drive wheel.

Battery Sensor – This sensor reads the remaining charge in the battery.

Voltage Sensor – This sensor reads the voltage being fed to the motor.

Throttle Sensor – This sensor reads the throttle position.

Torque Sensor – This sensor reads the degree of torque applied by the rider.

# Flow of Events

## Basic Flow

This use case begins when the ECU receives a clock signal.

1. The ECU receives a clock signal.
2. The ECU queries all sensors for their current levels.
3. The ECU stores these values for later calculation.

# Preconditions

The system has values for each sensor.

# Post Conditions

The system has new values stored for each sensor.