Velomobile Control & Telemetry System

Use Case Specification

Display Device Telemetry Data

Version 1.1

Revision History

|  |  |  |  |
| --- | --- | --- | --- |
| **Date** | **Ver.** | **Description** | **Author** |
| February 16, 2010 | 1.0 | Initial Composition | John Schmidt |
| March 3, 2010 | 1.1 | Updated based on system design changes | Daniel Johnson |

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# Access Web System

## Brief Description

User will access device telemetry data via the webserver.

## Requirements Trace

2.2.1, 2.2.2, 2.2.3, 2.3.1

## Involved Actors

Web User – The user will need physical access to the system.

# Flow of Events

## Basic Flow

This use case begins when the web user selects navigates to the device page and selects a device.

1. The user navigates to device page.
2. The system populates the device selector with devices registered in database.
3. The user selects a device.
4. The system retrieves all available sensors definitions for selected device. ( Use case Retrieve Telemetry Data )
5. The system returns generates a visual representation (chart, graph, map, etc.) of the sensor data.
6. The system’s displays independently update at set intervals define in the sensor definition.

# Preconditions

User has access to the website and device exists in database.

# Post Conditions

The user is viewing gauges or charts with relevant data.

# Scenarios

## Happy Day

**Assumptions**: The user selects the VeloMobile which has light sensor that has valid telemetry data in the database and is defined to update every 2.5 seconds.

**Steps:**

1. The user navigates to the device page.
2. The system populates the device selector with VeloMobile and other registered devices.
3. The user selects the VeloMobile device.
4. The system retrieves all available sensor definitions for VeloMobile from the database.
5. The system generates a light sensor display and populates it with light sensor telemetry data.
6. User views display
7. The system’s light sensor display begins updating every 2.5 seconds.

## Rainy Day

**Assumptions**: The user selects the VeloMobile which has no sensors defined.

**Steps:**

1. The user navigates to the device page.
2. The system populates the device selector with VeloMobile and other registered devices.
3. The user selects the VeloMobile device.
4. The system retrieves all available sensor definitions for VeloMobile from the database.
5. The system finds no available sensor definitions and displays a message relating the error to the user.
6. User views error.