

REQUIREMENT SPECIFICATION

homecontrol.andreasbom.se

Project Vision

BACKGROUND

Tellstick NET (brand: Telldus) is a radio frequency transmitter that plugs into a house holds router. It transmits and receives radio signals from remote electricity socket receivers, and let users control home electronics from any were in the world. It also transmits sensor information, e.g. signals from thermometers and humidity meters. The Tellstick NET has an open API, based on REST architecture.

FEATURES

The application should be able to receive a list of one user's electronic devices. The user should be able to turn on and turn off electronic sockets and also receive information about their present state (on/off). Furthermore, the application should receive a list of sensors, and visualize temperature and/or humidity.

SECURITY

The user needs to log in via Telldus authentication system. This system uses OAUTH for authentication. User information (user name, password) is handled exclusively by Telldus, and this information shall not be saved any were by this application.

In production, a secure connection (https/SSL) should be used whenever application connects to Telldus. This feature is not arranged at present.

UC1 AUTHENTICATE USER VIA 3RD PARTY LOGIN SYSTEM.

Main scenario

1. Starts after user presses login button
2. The user is redirected to Telldus login (api.telldus.com).
3. User provides username and password.
4. Telldus asks permission to access device and log device activity
5. Redirection back to application
6. An welcomes message is shown, and the menu is visible

Alternative scenario

1. User does not accept telldus to access device on main scenario 4
2. Authorization fails.

An error message and login button is shown.

UC2 SHOW LIST OF DEVICES

Precondition

UC 1 main scenario

Main scenario

1. User presses button 'Device'.
2. A list with devices is presented.
3. Each device shows: ID, Status, Dim Value, On button, Off button

UC3 CHANGE STATE ON DEVICE

Precondition

UC1 main scenario and UC2 main scenario

Main scenario

1. User selects one device that has status ON
2. User presses button *OFF*
3. The state is changed to OFF
4. The physical electrical device changes state from ON to OFF

Alternative scenario

1. User selects one device that has status OFF
2. User presses button ON
3. The state is changed to ON
4. The physical electrical device changes state from OFF to ON

UC4 SHOW LIST OF SENSORS

Precondition

UC1 main scenario

Main Scenario

1. User presses button '*Sensor*'
2. A list of sensors is presented
3. Each sensor shows: Name, ID, Last updated, Temperature, Humidity

UC5 LOGOUT USER

Precondition

UC1 main scenario

Main Scenario

1. User presses '*Logout*' button
2. The system logs out the user
3. A logout message is presented
4. Login button is presented
5. Menu is no longer visible