System Tests

Must: non-negotiable device/system needs that are mandatory

M	As a subscriber, I want to monitor electricity consumption, so that I can see how much electricity a consumer(s) is using.	
ID	System Test	Assessment
1.	The **device** must be able to measure the electricity consumption	Achieved
2.	The **device** must be able to collect and format data so it is easy to transmit	Achieved
3.	The **device** must be able to transmit data to a cloud system at predetermined intervals (collection rate)	Achieved
4.	The **system** must be able to observe and collect data transmitted by the **device**	Achieved
5.	The **system** must be able to store, transform, aggregate and present data to the **subscriber**	Achieved

M	As a subscriber, I want to be able to access monitoring information from any place with internet access, so that I can monitor electricity consumption remotely.	
ID	System Test	Assessment
1.	The **system** must be able to be accessible over the internet	Achieved
2.	The **system** must provide means for connecting the **device** to internet (via WiFi)	Achieved

M	As a subscriber, I want to be able to see the current status of the devices, so that I can easily understand which devices are online and which are offline.	
ID	System Test	Assessment
1.	The **system** must be able to assess device's state	Achieved
2.	The **system** must be able to update with the latest device's state	Achieved
3.	The **system** must be able to provide means of visualizing the current state of a device	Achieved

M	As a subscriber, I want to be able to visualise historical data, so that I can go back and read the electricity usage at a certain point in the past.	
ID	System Test	Assessment
1.	The **system** must be able to preserve the collected data	Achieved
2.	The **system** must be able to retrieve and present stored data	Achieved
3.	The **system** must be able to offer a way of navigating historical data (preferably based on time)	Achieved

M	As a subscriber, I want to be able to make comparations of consumptions between devices so that I can see how much a device has consumed over another device.	
ID	System Test	Assessment
1.	The **system** must be able to select data for a specific device	Achieved
2.	The **system** must be able to select data for a specific device over a period	Achieved
3.	The **system** must be able to provide aggregated data for easier comparation	Achieved

M	As a subscriber, I want to be able to make comparations of consumptions between periods so that I can see the difference between two or more periods.	
ID	System Test	Assessment
1.	The **system** must be able to select data for a specific period	Achieved
2.	The **system** must be able to select data for a specific period for multiple devices	Achieved
3.	The **system** must be able to make comparations for two or more periods	Achieved
4.	The **system** must be able to provide aggregated data for easier comparation	Achieved

M	As a subscriber, I want to be able to monitor electricity consumption in real-time (near real-time), so that I can observe how much a device is consuming at the moment.	
ID	System Test	Assessment
1.	The **system** must be able to collect and make data available	Achieved
2.	The **system** must be able to auto-refresh to the last available data	Achieved
3.	The **system** must be able to provide means of adjusting the refresh rate	Achieved
4.	The **system** must be able to provide means of visualizing real-time (near real-time) data	Achieved

Should: important initiatives that are no vital, but add significant value

S	As a subscriber, I want to receive reports for certain defined intervals, so that I can have an easy-to-read overview of electricity consumption.	
ID	System Test	Assessment
1.	The **system** must be able to use stored data for creating periodical reports	Not Implemented
2.	The **system** must be able to send/present the reports to the subscriber	Partially Achieved
3.	The **system** must be able to regenerate reports confidently	Partially Achieved

S	As a subscriber, I want to have a profile that I can login to so that I can have an overview of my devices and configurations.	
ID	System Test	Assessment
1.	The **system** must be able to create user profiles.	Achieved
2.	The **system** must be able to store, retrieve and edit user profiles.	Achieved

S	As a subscriber, I want my subscriber data, configurations and monitoring information to be stored securely so that other un-authorized subscribers cannot access it.	
ID	System Test	Assessment
1.	The **system** must be able to provide a way of authorizing/authenticating subscribers	Achieved
2.	The **system** must be able to deny access to not authorized/authenticated subscribers	Achieved
3.	The **system** must be able to store subscriber data in a secure way	Achieved

Could have: nice to have initiatives that will have small impact if left out

C	As a subscriber, I want to adjust the update rate of the device so that I can have more control on how often data is updated.	
ID	System Test	Assessment
1.	The **device**/**system** must be able to provide methods for adjusting the update rate	Not Implemented
2.	The **device**/**system's** update rate must be adjustable remotely	Not Implemented

C	As a subscriber, I want to receive automatically generated reports on a pre-defined timely basis, so I don't have to manually create the reports.	
ID	System Test	Assessment
1.	The **system** must be able to create reports on a time basis	Not Implemented
2.	The **system** must be able to send reports to the user	Not Implemented

C	As a subscriber, I want to receive updates for the software automatically without me having to interfere with it, so that I do not have to manually update it.	
ID	System Test	Assessment
1.	The **device**/**system** must be able to receive updates over the air	Not Implemented
2.	The **device**/**system** must be able to install the update and run the newer version of the software without subscriber's interference or help	Not Implemented

C	As a subscriber, I want the device to be able to stop electricity consumption monitoring without having to physically unplug the device, so that I can remotely control when the device is monitoring - sleep mode.	
ID	System Test	Assessment
1.	The **device**/**system** must be able to start/stop monitoring the electricity consumption	Not Implemented
2.	The **device**/**system** must be able to receive commands over the air	Not Implemented

C	As a subscriber, I want to be able to manually save/favourite sections of time and create a custom tag for them, so that I can easily find it back	
ID	System Test	Assessment
1.	The **system** should be able to let the subscriber save time periods for easy finding	Not Implemented
2.	The **system** should allow the subscriber to create custom tags for the favourited sections	Not Implemented

C	As a subscriber, I want to create custom commands (IFTTT) so that I can automate some of the tasks when controlling consumers.	
ID	System Test	Assessment
1.	The **system** must be able to register IFTTT commands	Not Implemented

2.	The **system** must be able to store IFTTT commands	Not Implemented
3.	The **system** must be able to execute IFTTT commands	Not Implemented

C	As a subscriber, I want to be able to use the device as a remote switch so that I can turn off any consumer without having to physically unplug it.	
ID	System Test	Assessment
1.	The **device**/**system** must be able to start/stop electricity flow between the electricity source and consumer	Not Implemented
2.	The **device**/**system** must be able to receive commands over the air	Not Implemented

C	As a subscriber, I want to be able to schedule when a consumer is consuming electricity and when not so that I can create schedules for different consumers.	
ID	System Test	Assessment
1.	The **system** must be able to store subscriber generate schedules	Not Implemented
2.	The **system** must be able to follow the schedules provided by the subscriber	Not Implemented

Must – contribution 50 %	**100 %**
1. As a subscriber, I want to monitor electricity consumption, so that I can see how much electricity a consumer(s) is using.	100 %
2. As a subscriber, I want to be able to access monitoring information from any place with internet access, so that I can monitor electricity consumption remotely.	100 %
3. As a subscriber, I want to be able to see the current status of the devices, so that I can easily understand which devices are online and which are offline.	100 %
4. As a subscriber, I want to be able to visualize historical data, so that I can go back and read the electricity usage at a certain point in the past.	100 %
5. As a subscriber, I want to be able to make comparisons of consumptions between devices so that I can see how much a device has consumed over another device.	100 %
6. As a subscriber, I want to be able to make comparisons of consumptions between periods so that I can see the difference between two or more periods.	100 %
7. As a subscriber, I want to be able to monitor electricity consumption in real-time (near real-time), so that I can observe how much a device is consuming at the moment.	100 %

Should – contribution 37.5 %		**76.56 %**
8.	As a subscriber, I want to receive reports for certain defined intervals, so that I can have an easy-to-read overview of electricity consumption.	32 %
9.	As a subscriber, I want to have a profile that I can login to so that I can have an overview of my devices and configurations.	100 %
10.	As a subscriber, I want my subscriber data, configurations and monitoring information to be stored securely so that other un-authorized subscribers cannot access it.	100 %
Could – contribution 12.5 %		**0%**
11.	As a subscriber, I want to receive automatically generated reports on a pre-defined timely basis, so I don't have to manually create the reports.	0%
12.	As a subscriber, I want to adjust the update rate of the device so that I can have more control on how often data is updated.	0 %
13.	As a subscriber, I want to receive updates for the software automatically without me having to interfere with it, so that I do not have to manually update it.	0 %
14.	As a subscriber, I want the device to be able to stop electricity consumption monitoring without having to physically unplug the device, so that I can remotely control when the device is monitoring - sleep mode.	0 %
15.	As a subscriber, I want to be able to manually save/favorite sections of time and create a custom tag for them, so that I can easily find it back.	0 %
16.	As a subscriber, I want to create custom commands (IFTTT) so that I can automate some of the tasks when controlling consumers.	0 %
17.	As a subscriber, I want to be able to use the device as a remote switch so that I can turn off any consumer without having to physically unplug it.	0 %
18.	As a subscriber, I want to be able to schedule when a consumer is consuming electricity and when not so that I can create schedules for different consumers.	0 %
Won't – contribution 0 %		**0 %**
19.	As a subscriber, I want to access the system on a mobile device (with internet access) through a dedicated mobile/pc application so that I don't have to use the browser for that.	0 %
20.	As a subscriber, I want to receive assistance/support from the developers of the system, so that they can fix the system in case of malfunction.	0 %
Weighted Average Achieved (excluded Won't)		**78.71 %**