Amos Xcerlerator Demo - User Documentation

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16.07.2024

1 User Documentation

This is the final user documentation submitted under sprint number 12.

1.1 Overall Functionality

The Xcelerator Demo Application is a web application, which simulates the functionality of the Siemens Xcelerator platform. This platform allows the management of facilities and the IOT devices which are part of the facility. The website enables the user to inspect the data of the individual devices inside. This data includes for example the temperature of water flow, as well as the data related to the environment of the pump, such as the temperature or air pressure. In case one of the devices is faulty or broken, the user is able to create cases, these cases describe work orders. The work orders include not only the information which of the pumps is in need of repair, but also a title and detailed description of the case, as well as due date, status and priority. These cases can be deleted or updated. In addition, the user is able to grant access to the individual facilities, for the maintance crew.
The user is able to navigate to the different sites by using the icons on the homepage, or the icons on the left sidebar, as well as clicking the back button in the header and clicking on the individual breadcrumbs.

1.2 Homepage

The first picture shows the Homepage, it is the landing page after the login. From this, the user can either continue with displaying either an overview of all the facilities or an overview of all the cases.

1.3 Facilities

This part of the documentation shows what type of facilities are available to the user. Every facility consists of one pump and the corresponding pump data.

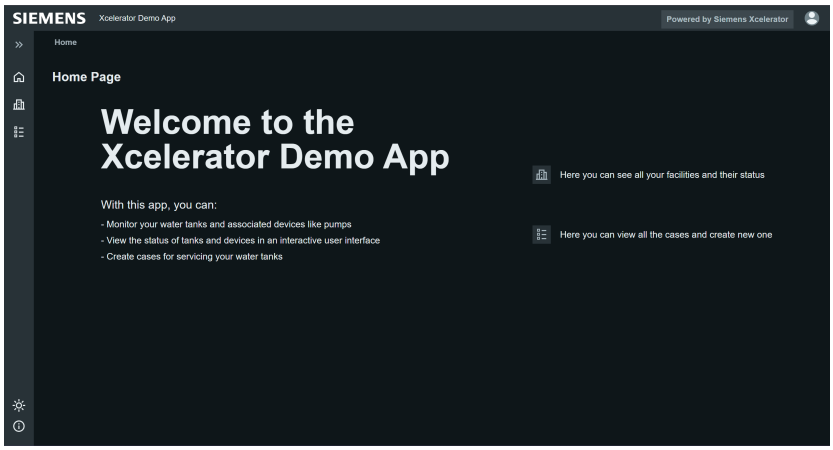

Figure 1: Homepage

1.3.1 Facilities Overview

The facilities overview shows all the facilities, which available. This page can be reached by clicking the building icon on the left side. The overview is a card list as a default but can be changed to a list view when the button is clicked. The list view is clearer for more items.

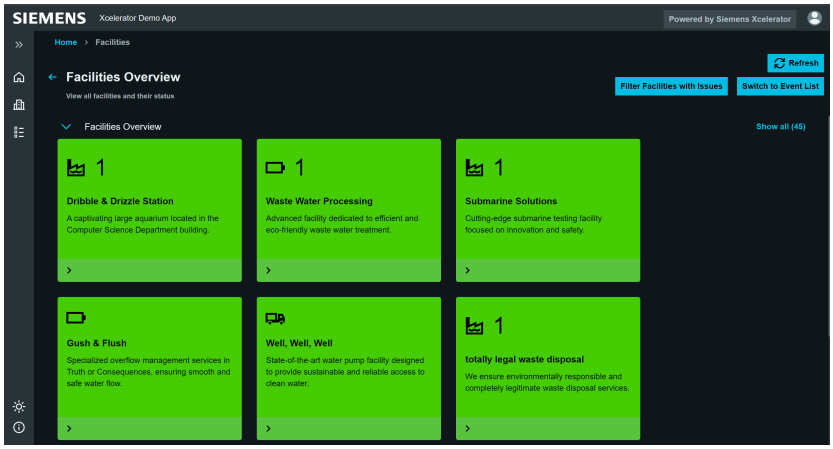

Figure 2: Facility dashboard

In the screenshot, we can see the card view and the information displayed for every facility. These include name, number of issue attributed to the pump and the location. The individual cards can be clicked to show more information. The page also allows the user to click the refresh button to reload all the facilities of change. The user is also able to filter the facilities for the

ones which have issues. This is done to provide the user with a shortcut to gain quicker access to the necessary information.

1.3.2 Facility data

The User is able to show the individual data of a given pump, this includes the temperature and flow rate. The page also displays the information about how ecological the facility is. It furthermore enables the user to unlock the facility, e.g. for a technician or facility manager. In addition, it is possible to create a new case for the selected facility in this details page. This link redirects the user to the "Create Cases" page. For more information, see the corresponding section.

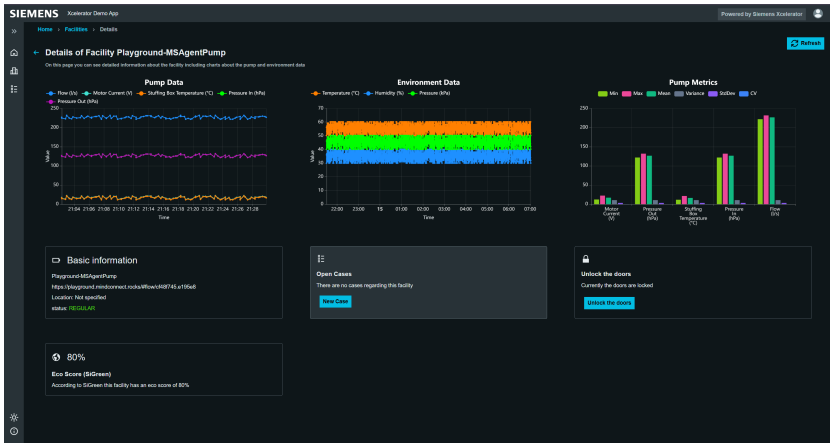

Figure 3: Pump data graphs

The pump data shows the following information, as the graph on the left shows the following information: water flow, motor current, stuffing box temperature, pressure in and out. This information is critical for deciding the state of a pump. The graph on the right shows data regarding temperature, humidity and (air) pressure. This data augments the information in giving intel on the environmental data, this describes e.g. the air pressure around the pump compared to the water pressure flowing in and out. In addition to this, the page contains a chart regarding pump metrics. This shows the statistical change of the variables. The user is also presented with information showing the eco index of the facilities. Furthermore, the lock icon enables the access granting capabilities of the application.
This second pictures, shows what the theme switching from dark to light mode, this can be done by the user if the sun icon on lower left is clicked. This theme switching is possible for every page.

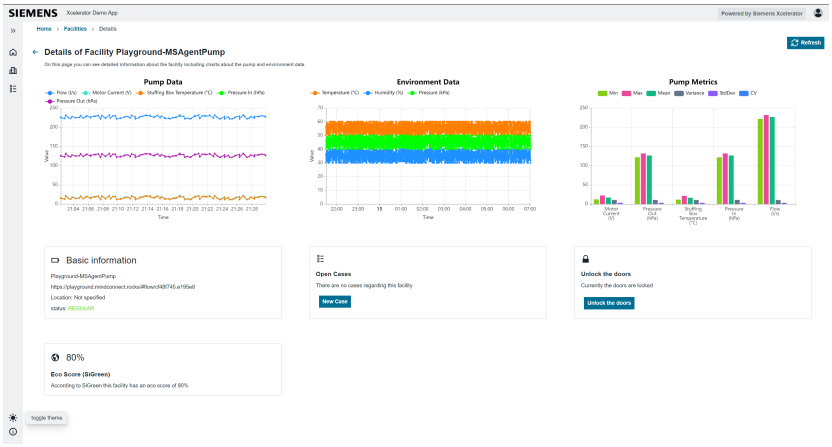

Figure 4: Pump data light mode

1.4 Cases

Cases enable the user to schedule a case for e.g. technicians to inspect a given facility and pump. This case contains information such as the name and ID of the facility, the email and telephone number etc.
By clicking on the cases icon, the user is directed to the page which displays all the cases. As they were described in the last paragraph. This page shows the information, which was submitted in the Create Cases section. It further shows a unique identifier and a title for the case, as well as a due date. This site also contains a shortcut to open a new case.

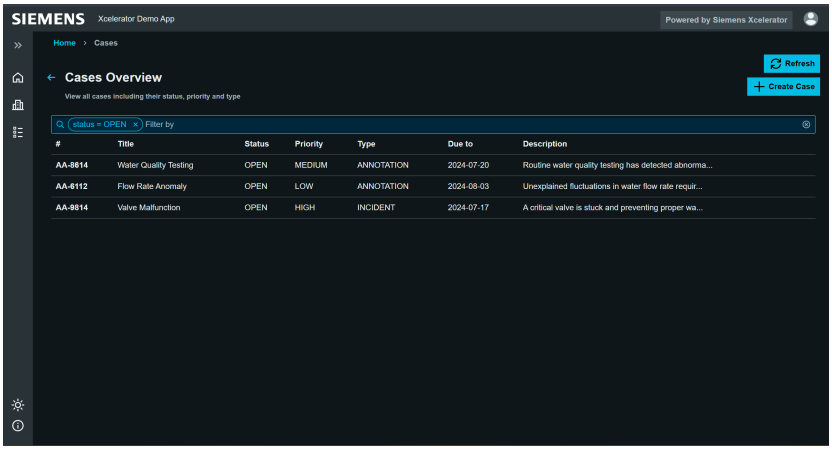

Figure 5: Cases overview

1.4.1 Create Cases

This page allows the user to create new cases which are saved. The creation allows the user to fill in the date, these are: Selecting a facility - which is the subject for the case adding a Title - as a header for the case Description - in further detail what needs doing Due Date - to schedule a time and date when the task needs to be done Status, Priority - to further detail the basic conditions of the case.

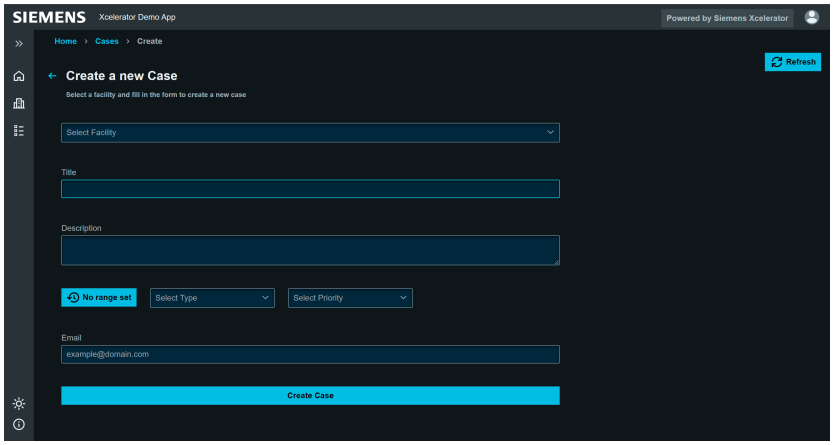

Figure 6: Create cases

1.4.2 Case Detail

Once the user clicks on an individual case, the information is displayed as they were described in the previous sections. Displays more information as the cases page. However, not inform of a list, but in a card view. This page is mainly for readability. On this page, the user is able to delete a given case. Furthermore, the user is able to update cases.

1.5 Login

The login page allows the user to log in to the page. After the buttons are clicked, or the information is typed into the username and password field, the user is redirected to the homepage. It is not possible to use the website without logging in.

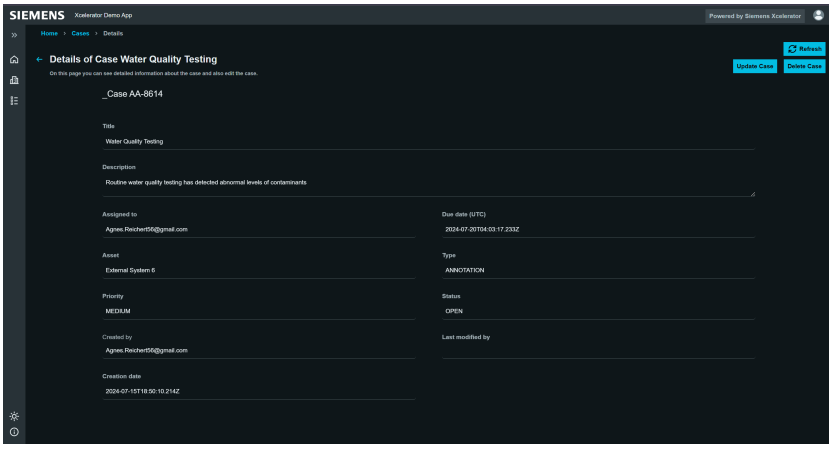

Figure 7: Case detail

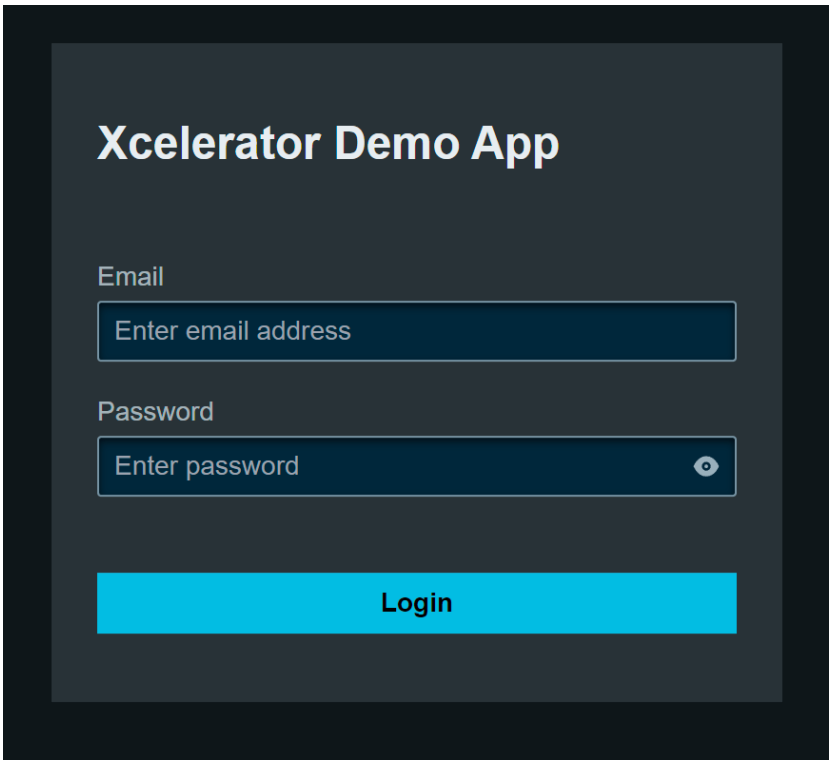

Figure 8: Login