

IoT Platform

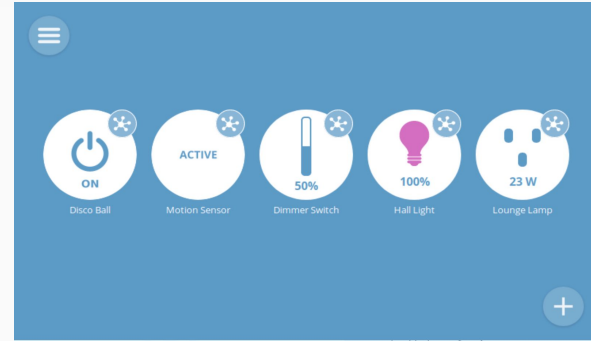
The project consists of realising an **IoT Web Platform** for managing **IoT devices**.

This platform must allow the import/export, processing and saving of information related to IoT devices.

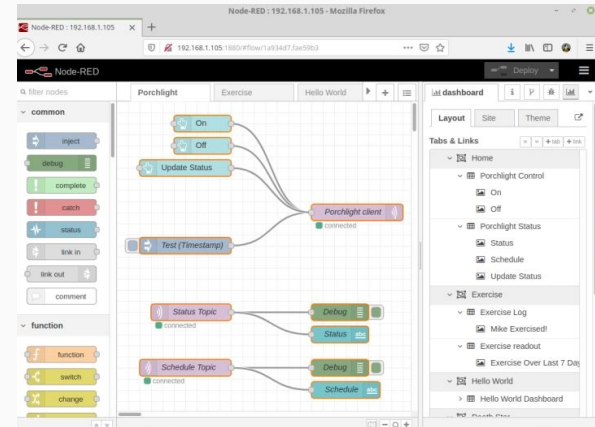
The devices information must be stored in a **database** which schema is coherent with the **IoT-lite ontology** (<https://www.w3.org/Submission/iot-lite/>).

The platform must integrate the open-source tool **Node-RED** (<https://nodered.org/>) which allows to develop IoT applications.

The platform should allow users to select a set of the imported devices that will be used for developing the IoT application. Their information will be sent to Node-RED and the user will be able to develop the application using such information.



Devices information must be sent to Node-RED tool



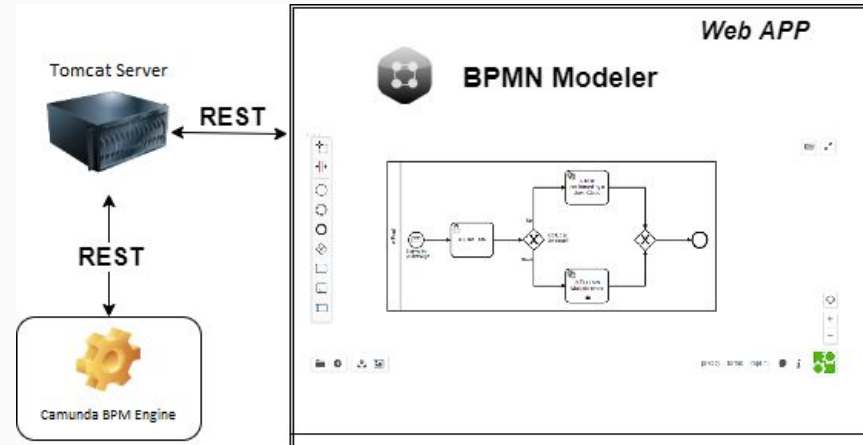
IoT-Aware BPMN platform

The project consists of implementing a **web application** that allows to design **IoT-Aware BPMN models**.

The **bpmn-js** library, can be used to design models and should be extended to include IoT related information.

The models, after designed, can be sent to a BPMN engine that will allow the models to be executed. The BPMN engine considered is **Camunda Engine**.

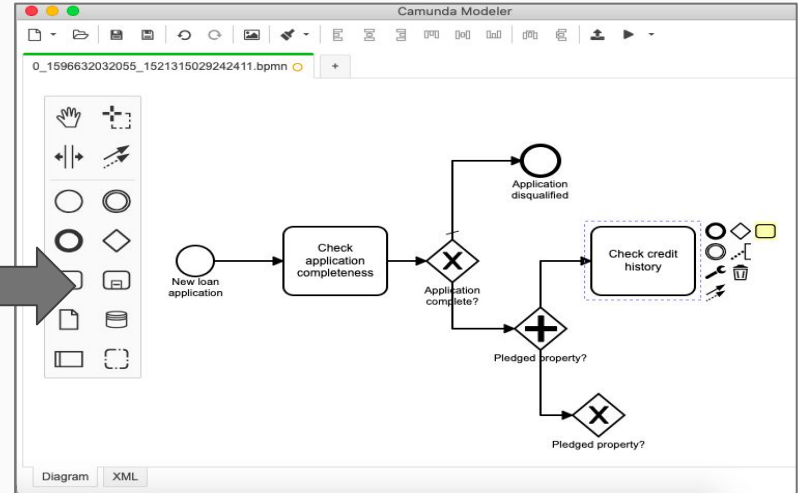
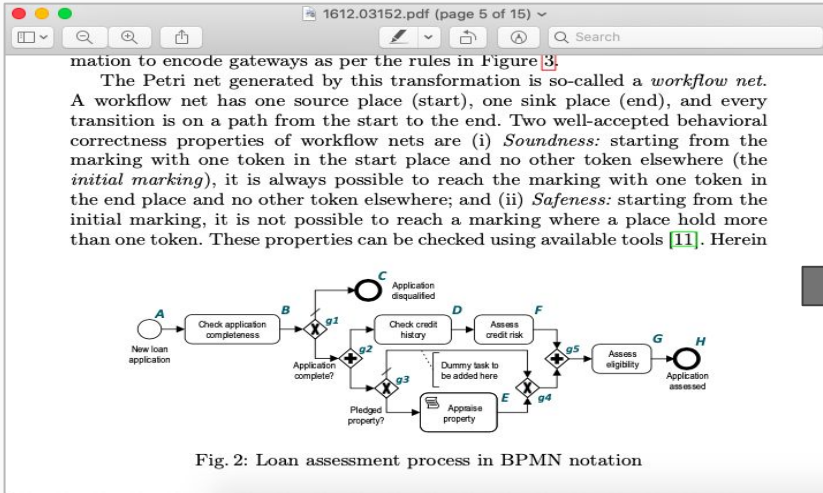
The project is supported by **real IoT devices** that have to be configured.



BPMN Redrawer

The project consists of implementing a web application that allows to upload images (.png) of BPMN models and turns those images in actual BPMN models stored in .bpmn format

Link Utili: opencv.org, docs.camunda.org



Digital Library

The project consists in developing a web/mobile application for accessing digital books. The system allows users to create a digital library and to read stored books, add notes bookmarks and share them with other users. **MAX 2 groups**

The system should be able to integrate with a pre-existent one.

Link Utili: <https://bibliotecadigitale.unicam.it>

