

SENG330 Assignment 3 Design Document

Our team repo is: <https://github.com/SENG330/assn3-partner-wanted>

Use **gradlew run** to run application. Default admin username: "admin", regular user: "reguser"; password is "password" for both.

In our assignment 3 design document, we will go through our MVC pattern and application structure.

All the Java classes from Assignment 2 (Hub, Devices, Clients, etc.), and some additional ones (User) act as the **Models** for our application.

FXML files generated with Scene Builder act as our **View**. Each controller corresponds (approximately) to each view.

Controller classes draw the GUI, and detect and handle user requests.

Data is shared between the controllers by passing instances of the Client and Hub between them (facilitated by the HubInstance and ClientInstance classes). For offline storage, our application serializes Device objects and the Client object to JSON and stores them in json files.

Scenario A:

we create the Login UI and link with LoginController.java which is the **Controller**, and User.java as the **Model** for the scenario A. The controller will check id and password are correct or not, and allow user and admin go to their own interface.

Scenario B:

we create the user and admin UI linked with UserController.java and AdminController.java as **controller**

Scenario C:

we create camera UI as our **view**, Camera.java and CameraFullException.java as **model**, and ControllerMethods.java as the **controller** for the scenario c.

Scenario D:

we create thermostat UI as our **view**, thermostat.java and Temperature.java as **model**, and ControllerMethods.java as the **controller** for the scenario c.

Scenario E:

we create lightbulb UI as our **view**, Lightbulb.java as **model**, and ControllerMethods.java as the **controller** for the scenario c.

Scenario F:

we create smartplug UI as our **view**, SmartPlug.java as **model**, and ControllerMethods.java as the **controller** for the scenario c.