

REPORT FOR HOME AUTOMATION SYSTEMS

Github repository link:

<https://github.com/cerenkdy/Web-Programming---Home-Automation-WebApp>

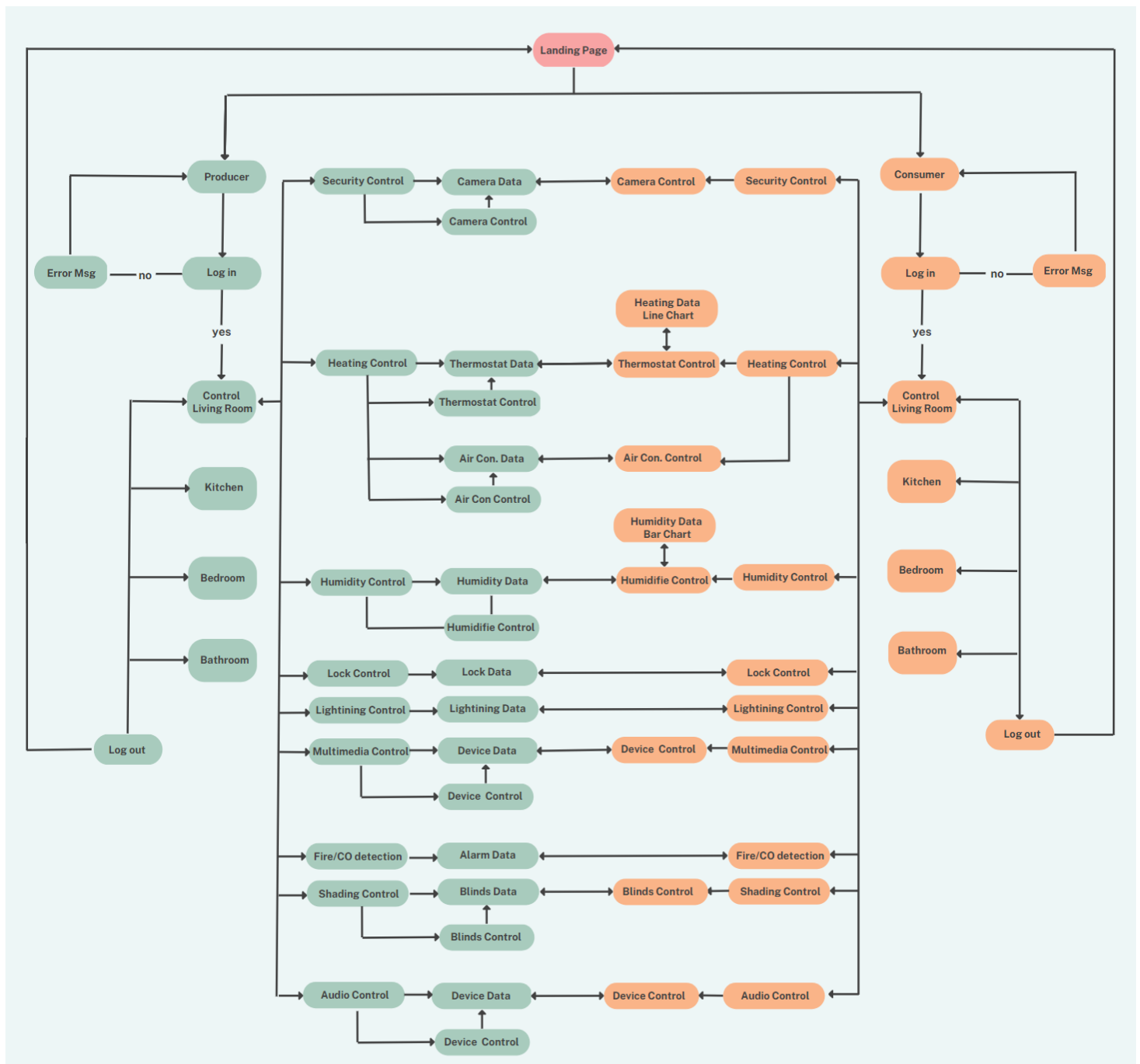
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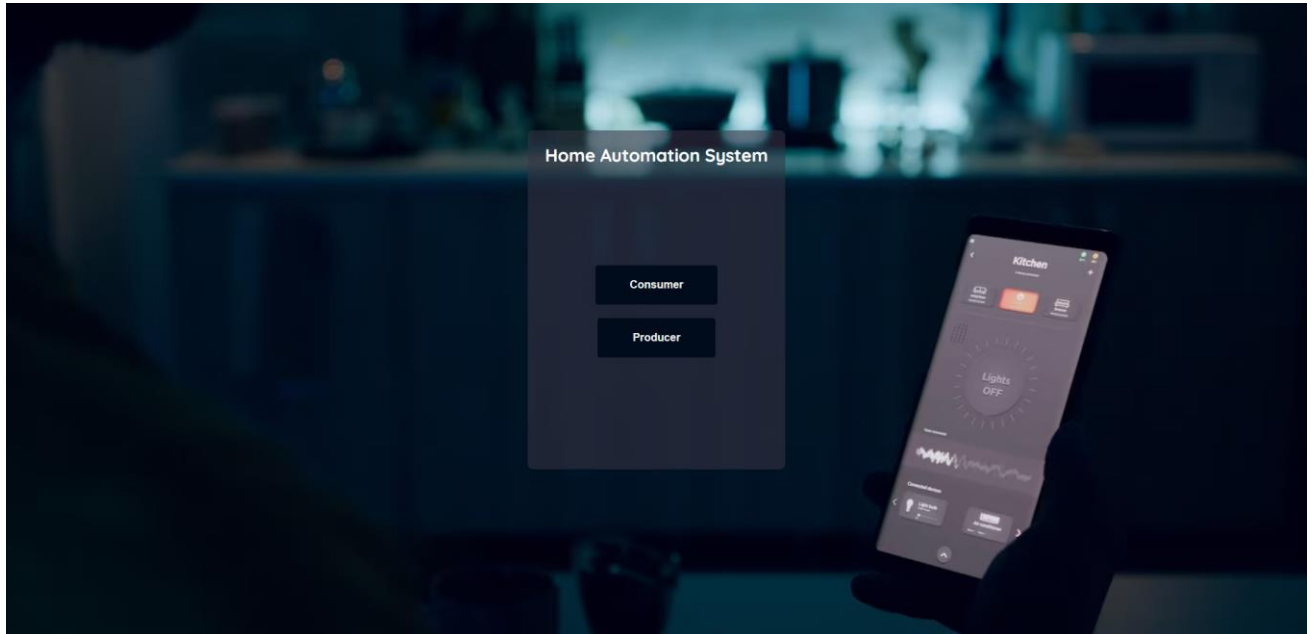
App Workflow

This Workflow only considers Living Room control panels, other rooms' control panels work the same but some of them do not include all the controls.

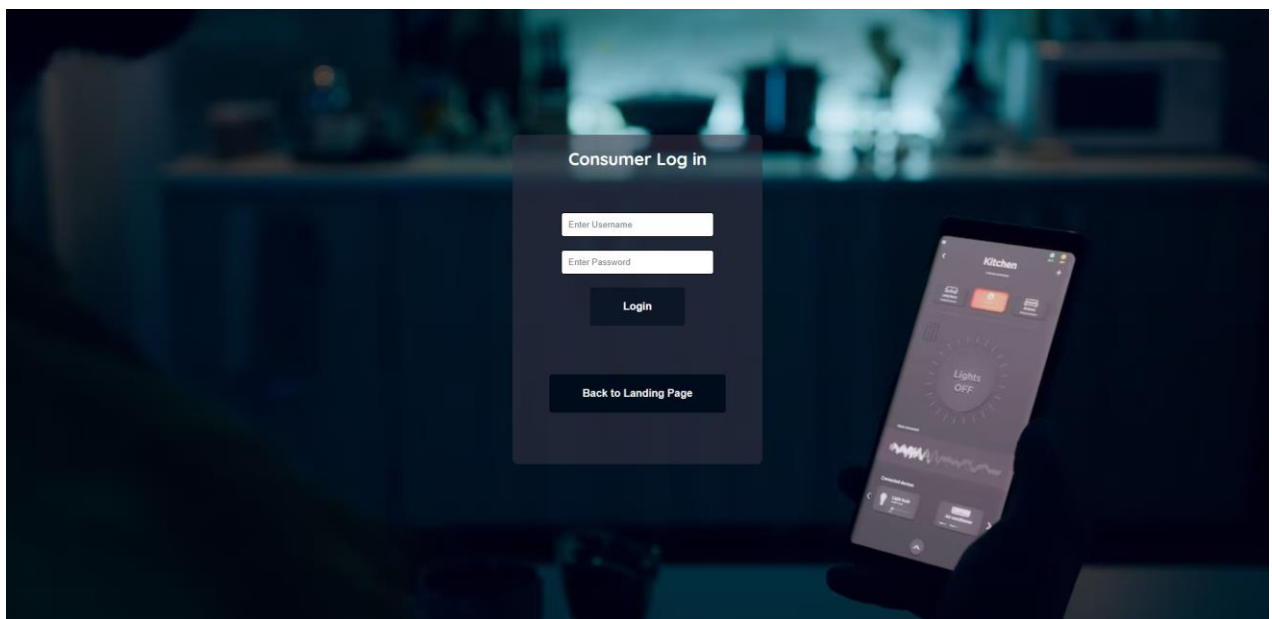


Landing Page:

- On the landing page, we choose who to log in as a consumer or a producer.



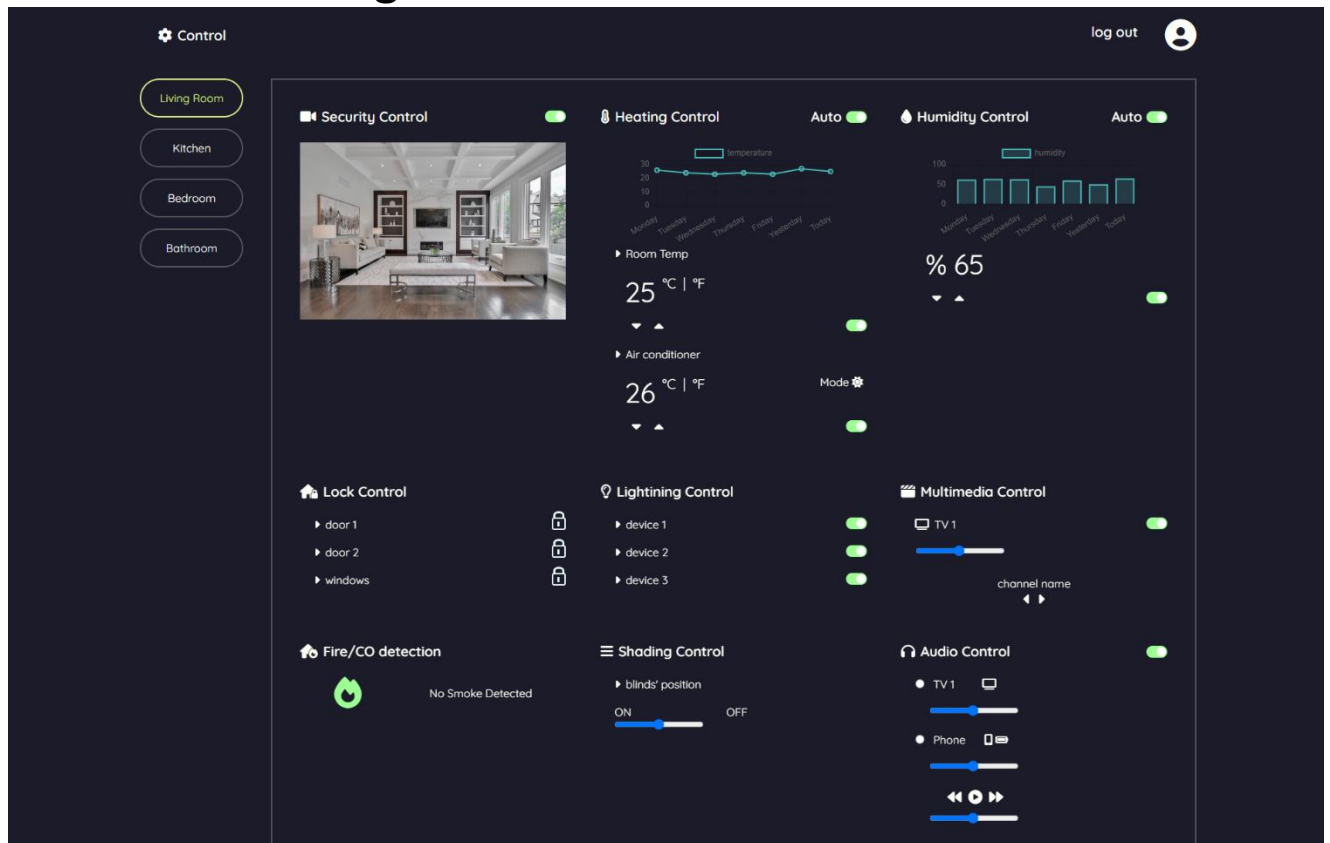
Consumer Log in:



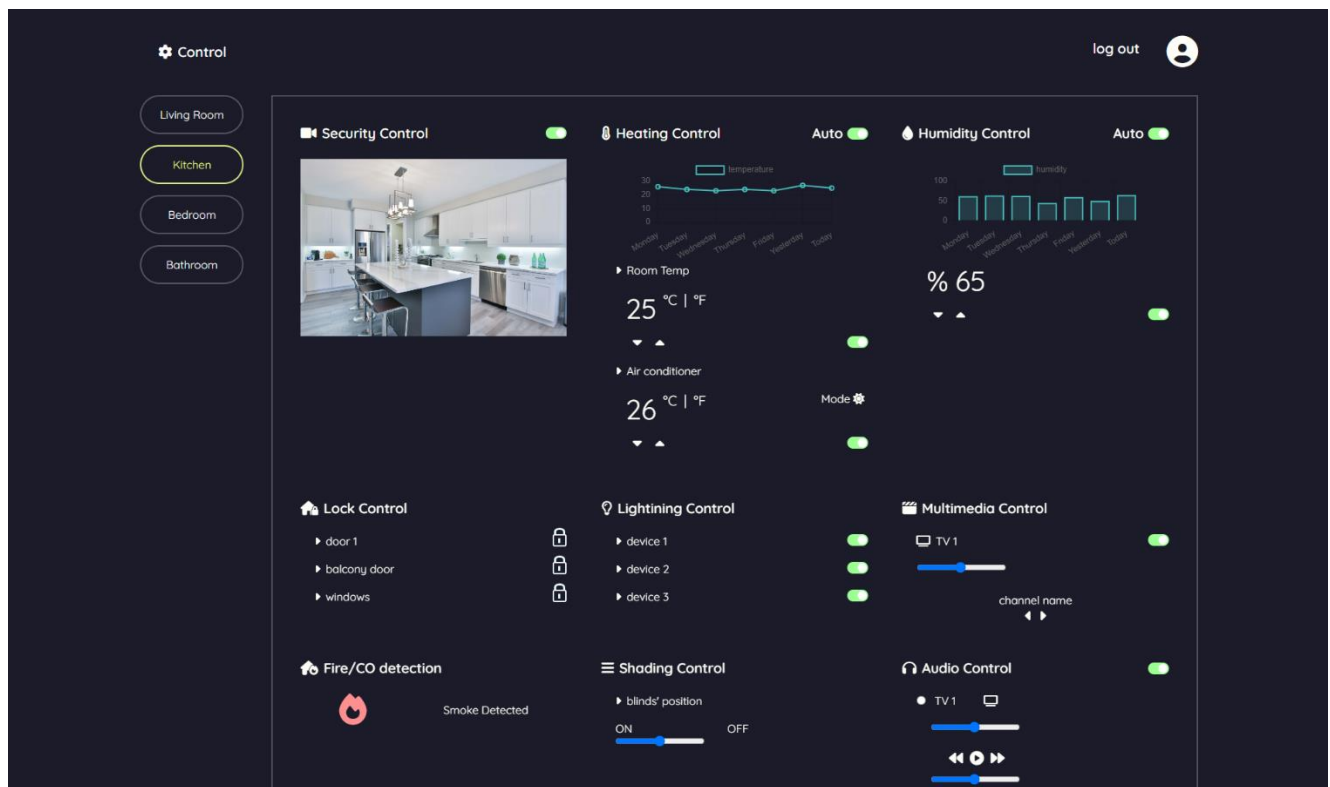
- After we log in, a Control menu is welcome us. The menu includes some controls such as “Security, Heating, Humidity, Lock, Lightning Multimedia, Fire/CO Detection, Shading, Audio” that can control devices and give information about devices’ and room statuses.
- **Security Control**
 - This panel provides us to control Camera.
 - Switch button allows us to open and close the camera.
- **Heating Control**
 - This panel displays the thermostat data and provides us to control the thermostat.
 - There is a switch button allows us to control Auto mode.
 - Down and Up buttons allow us to increase and decrease the room temperature. The switch button next to these buttons allows us to turn the thermostat on and off.
 - Air conditioner control is also provided in the same way.
 - The line chart displays current and historic data for the room temperature
- **Humidity Control**
 - This panel displays the humidity level and provides us to control it.
 - There is a switch button allows us to control Auto mode.
 - Down and Up buttons allow us to increase and decrease the humidty level. The switch button next to these buttons allows us to turn the device on and off.

- The bar chart displays current and historic data for the humidity level.
- **Lock Control**
 - This panel provides us to lock and unlock the doors and the windows.
- **Lightning Control**
 - This panel provides us to control the lambs.
 - Switch button allows us to open and close the lambs.
- **Multimedia Control**
 - This panel provides us to control the TV.
 - Switch button allows us to open and close the TV.
 - Slider controls the volume level.
 - Right and Left buttons change the channel on the TV.
- **Fire/CO Detection**
 - This panel display Fire/CO status.
 - If Fire/CO is detected the icon turns to red, if not it turns to green.
- **Shading Control**
 - This panel provides us to control blinds.
 - Slider controls the blinds level.
- **Audio Control**
 - This panel provides us to control the Audio, Song.
 - Slider controls the volume level.
 - Switch button allows us to play and stop the Song.

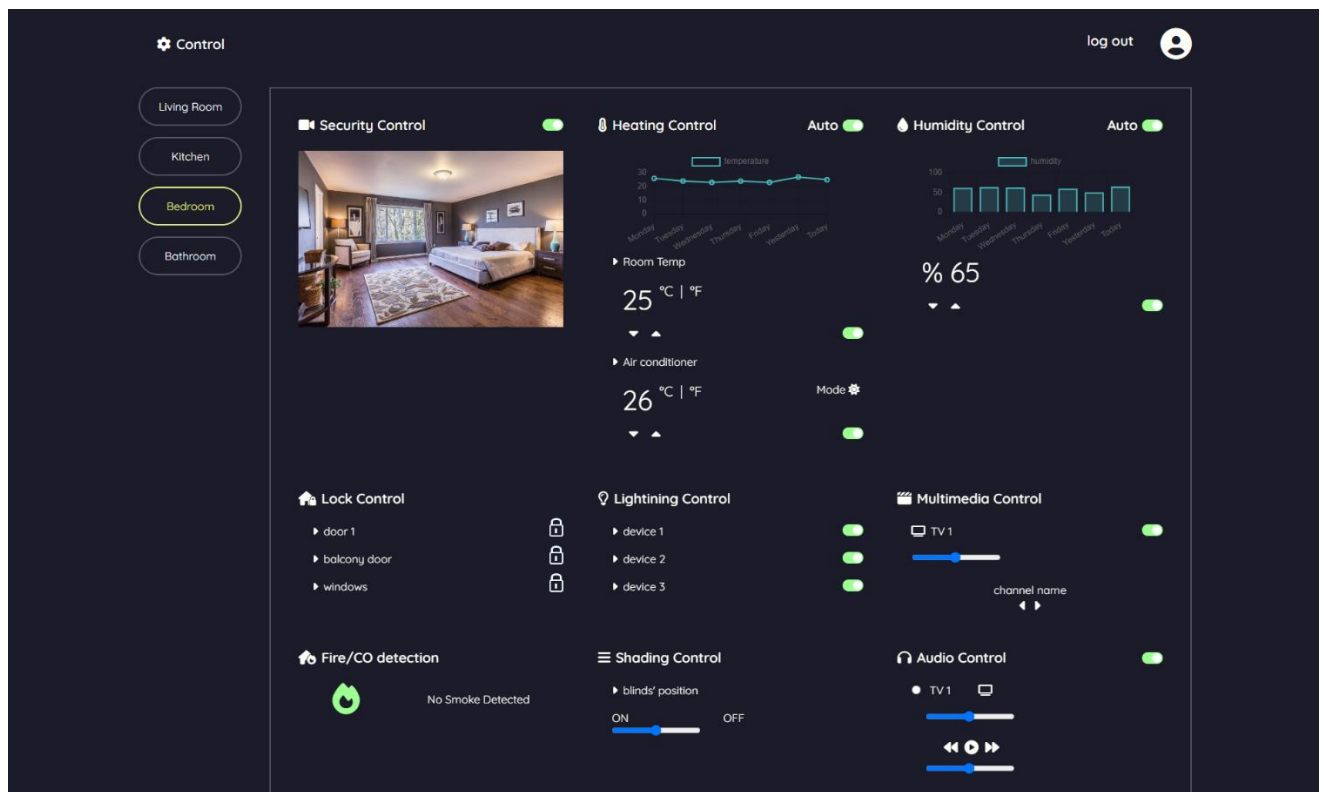
Consumer Living Room:



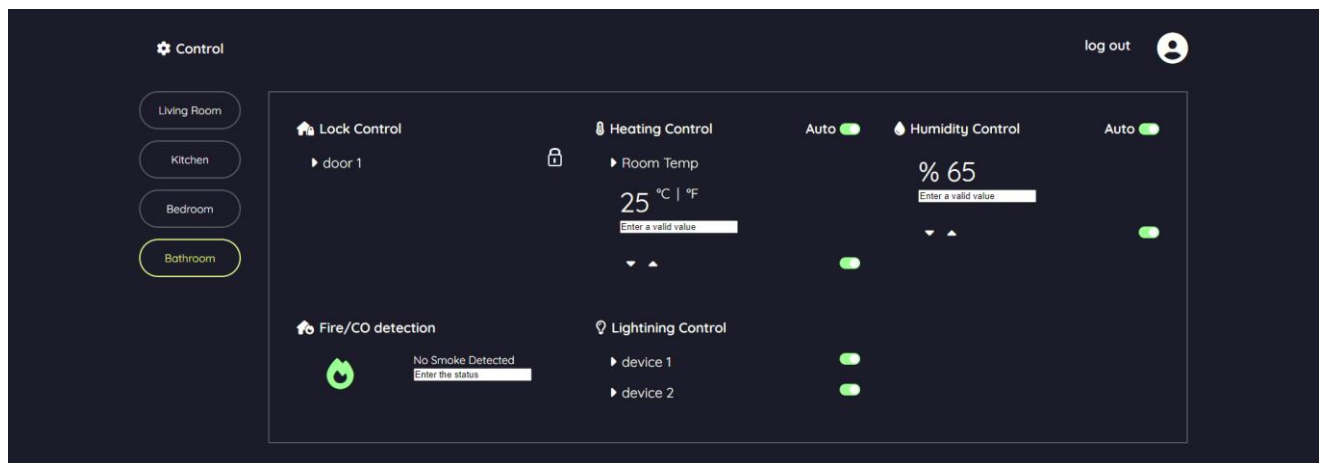
Consumer Kitchen:



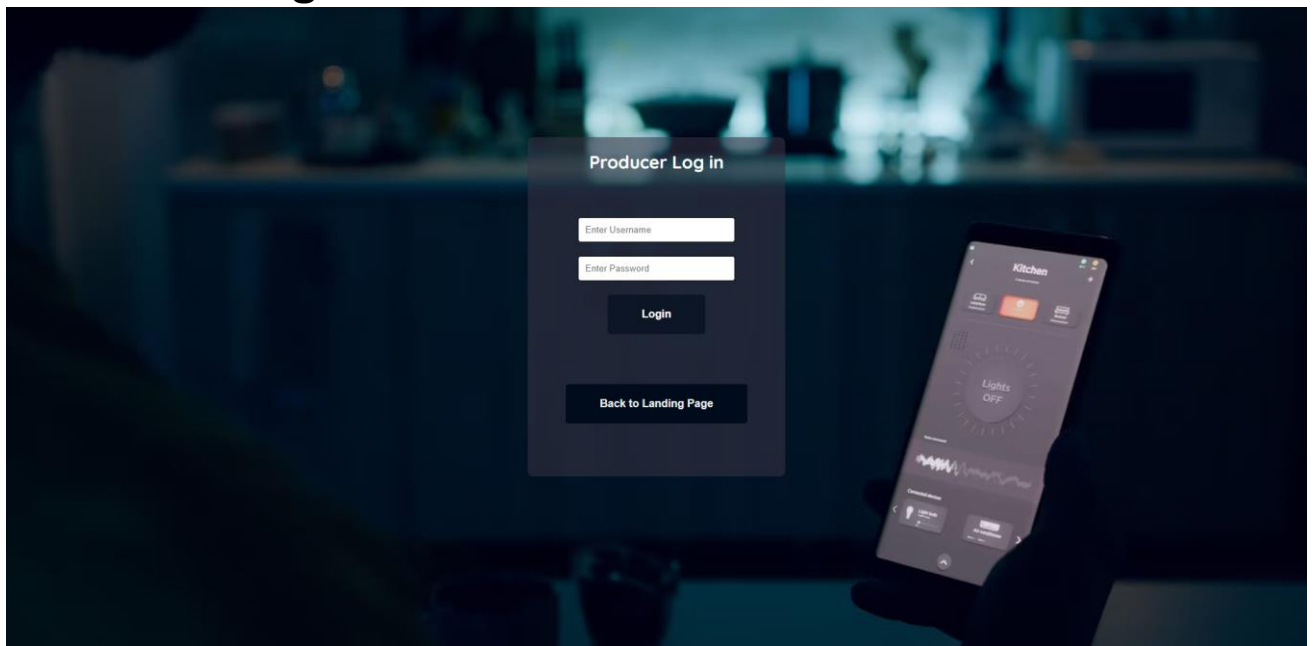
Consumer Bedroom:



Consumer Bathroom:

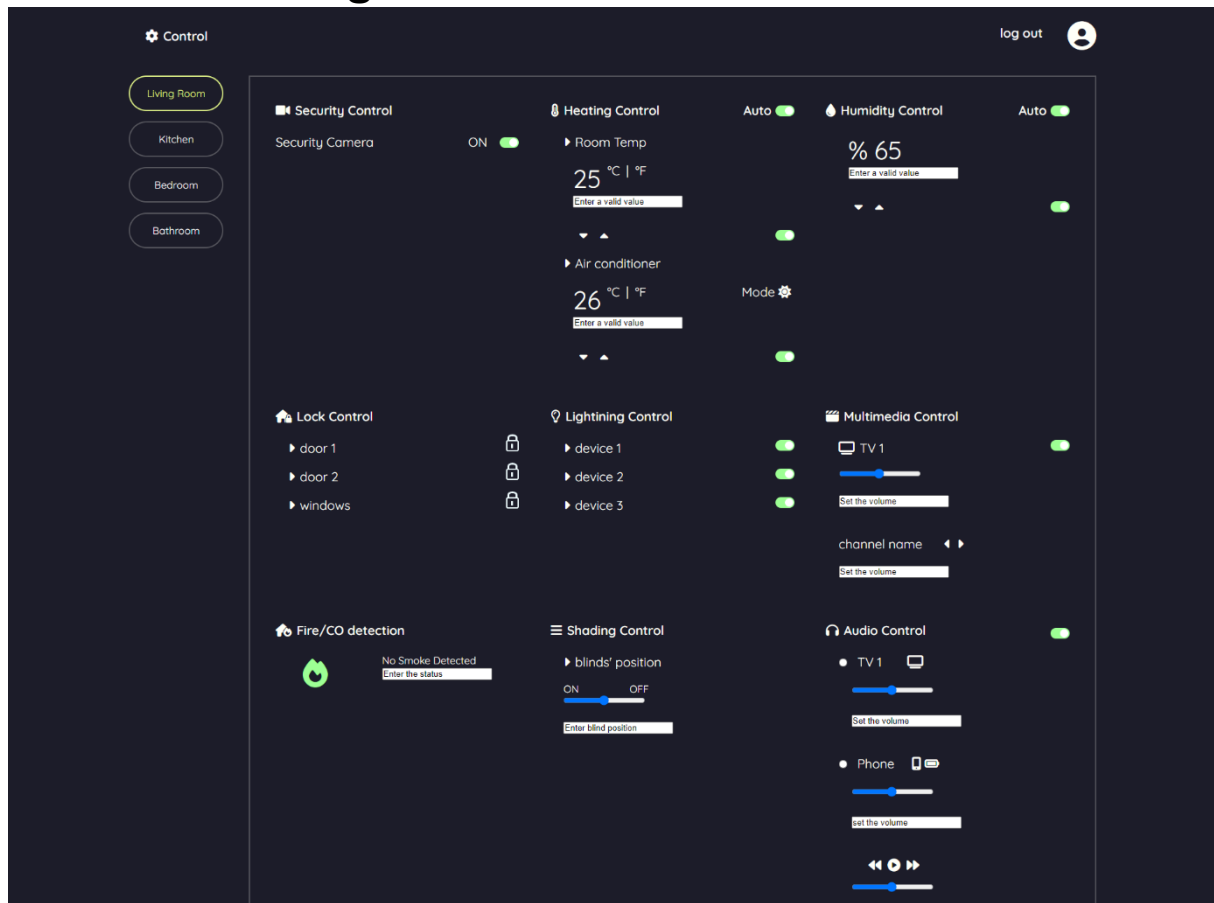


Producer Log in:

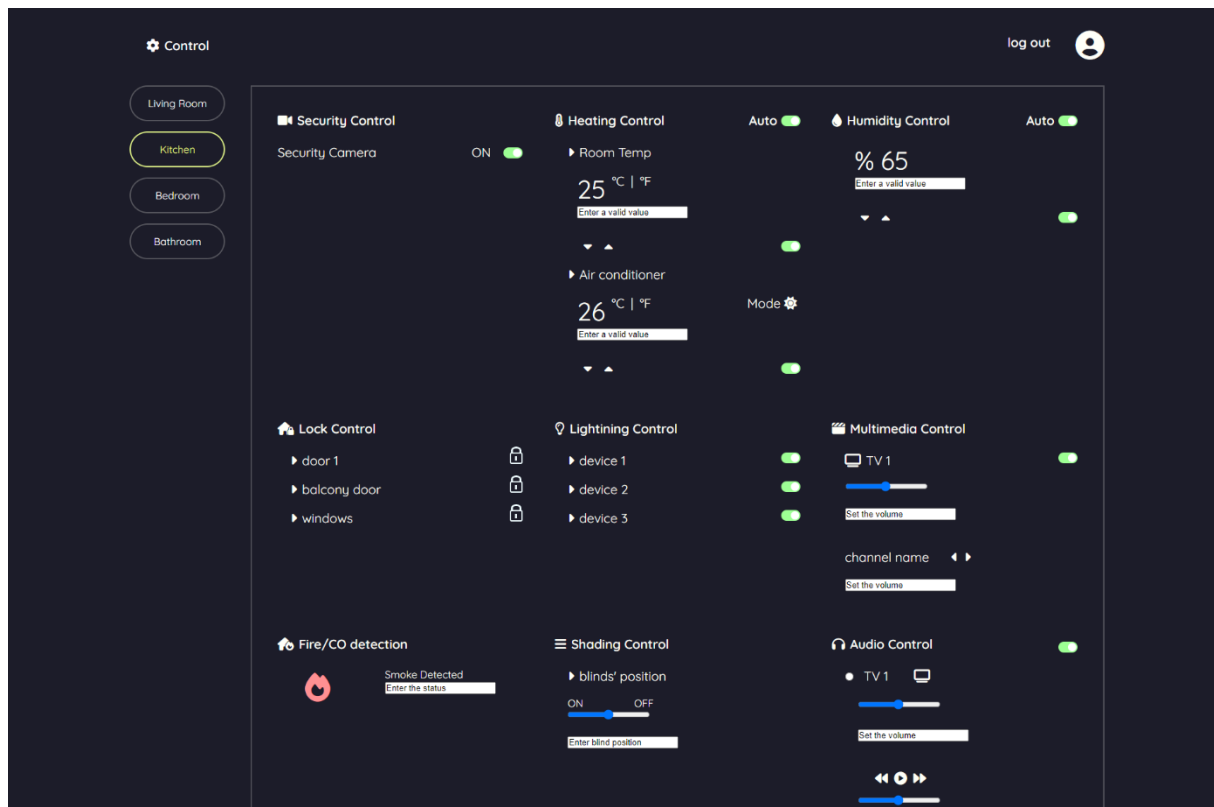


- On the producer page, we have the same control panels but also there are input fields in panels that allow us to change the data.

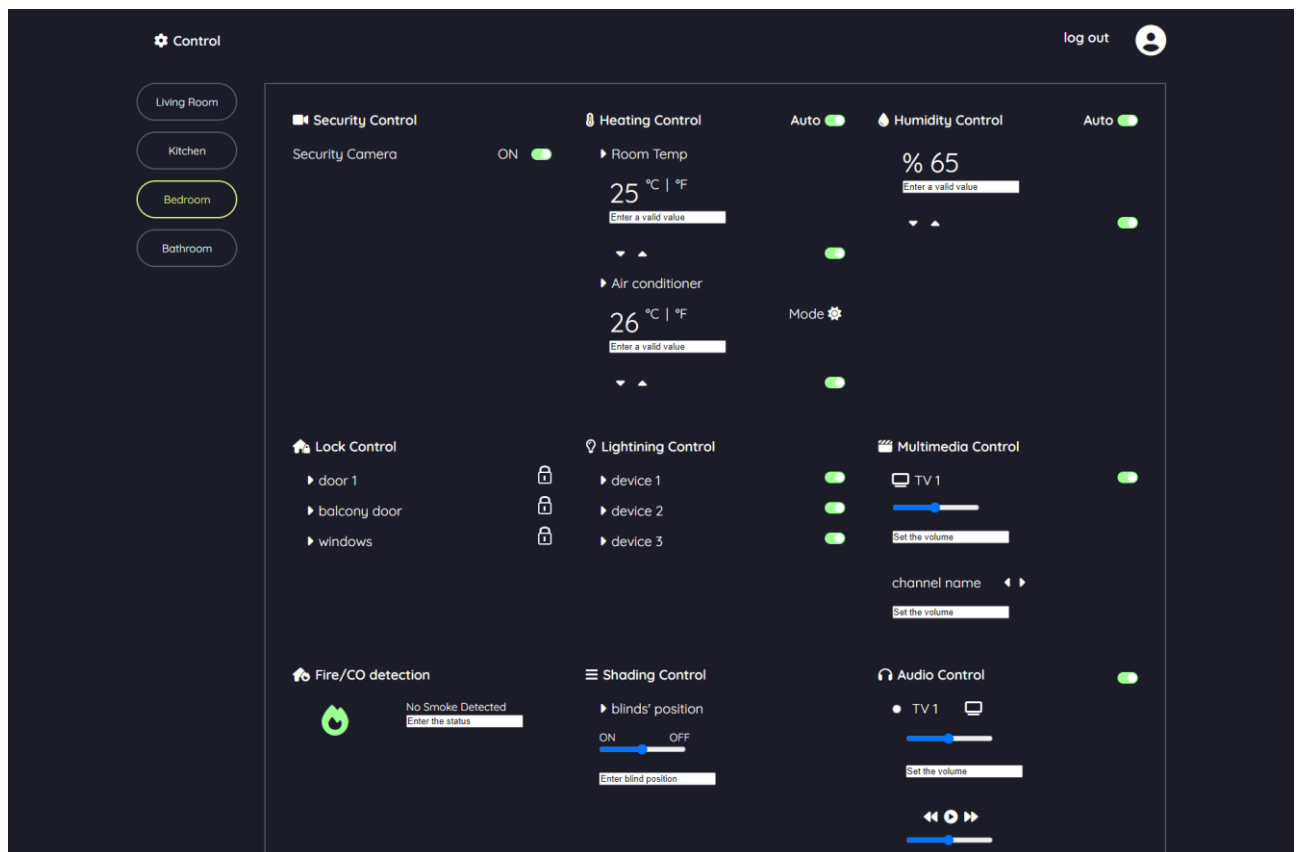
Producer Living Room:



Producer Kitchen:



Producer Bedroom:



Producer Bathroom:

