Project Requirements

Nr	Requirements
1	Basic: Import data from CSV to an Entity-Relationship database.
2	Basic: Create/Update Rooms (id, size, available doors, windows, lights and fans).
3	Basic: Update and remove rooms.
4	Basic: Visualize available rooms.
5	Basic: Visualize static information for each room (id, size, available doors, windows, lights and fans).
6	Basic: Develop a line chart that shows real-time data regarding light/fan/window/door.
7	Basic: Develop a line chart that shows the co2/temperature values and the number of people for each room over time.
8	Basic: Save rooms structure (rooms + static information) in a .csv file.
9	Basic: Automatically add random values of co2/temperature/number of people for a specific room.
10	Basic: Live update of visualizations for co2, temperature, and lights/ventilators/windows/doors status for each room.
12	Remote Control: Allow to lock/unlock doors via the user interface.
13	Remote Control: Allow to turn on/off lights via the user interface
14	Remote Control: Allow to open/close windows via the user interface.
15	Remote Control: Allow to turn on/off fans via the user interface.
16	Security: Send alarm if temperature is above 70 degrees celsius.
17	Security: Unlock all doors if temperature is above 70 degrees celsius.
18	Energy Saving: Turn lights on if there are people in the room.
19	Energy Saving: Lights should be turned off if the room is empty.
20	Energy Saving: Turn off running devices if the room is empty.
21	Air Quality: Open window + activate fan if co2 values are > 1000 parts per million (ppm).
22	Air Quality: Change room color in user interface based on co2 values.

- green if co2 values are < 800 ppm
- yellow if co2 values are between 800 and 1000 ppm
- red if co2 values are above 1000 ppm