**USER STORIES**

**Group 4 - “CliMate” -** Dorin Teodorov, Nick Mulders, Minh NT Nguyen, Chiem Dings, July Trendafilov

Lighting System:

1. As a resident/visitor I would like to change the light functionality, according to my needs on an accessible interface.
2. As a resident/visitor I would like to have specific modes for the rooms I’m in so that the lights can complement the current activity.
3. As a resident/visitor I would like to change the intensity of the light that is currently running depending on my preferences.

**Acceptance Criteria:**

* + Changing the lights will be done via a remote controller
  + Implemented modes like party and focus
  + The user will change the intensity via a dial

Air Conditioner:

1. As a resident/visitor I would like to have circulating air within the house so when it's too hot I can remain comfortable.
2. As a resident/visitor I would like the ability to manually turn the air conditioning on or off whenever I want to.
3. As a resident/visitor I want the air conditioning to be turned off automatically when the desired temperature has been reached so that I can save money and reduce noise.

**Acceptance Criteria:**

* + A temperature sensor will be used to determine when it’s too hot
  + A way to remotely control (mobile app or panels)
  + The user should be able to set a temperature threshold

Panels:

1. As a resident/visitor I would like to easily control most features within the room in one place
2. As a resident/visitor I would like to see important information displayed such as temperature and humidity and other statuses in one place
3. As a resident/visitor I would like to receive messages regarding my health or suggestions about my lifestyle
4. As a resident/visitor I would like to have a user-friendly panel for my room with useful and easy to access options/customization and important information

**Acceptance Criteria:**

* + Each room will have its own panel
  + Each panel displays automatically the information needed
  + The sensors will detect when it’s the time to send a message to inform the user via the panel or the app regarding windows or fire etc.
  + The panels are easy to use, having touch screen and easy to understand interface

Heater:

1. As a resident/visitor I would like to have a heater that turns on if the temperature gets below a specified threshold.
2. As a resident/visitor I would like to be able to turn on the heater whenever I want to.
3. As a resident/visitor I would like to set a temperature preference for the heater to turn on so that I can be more comfortable in the house.
4. As a resident/visitor I would like my heater and air conditioner to cooperate, so they will not activate at the same time even if I mess with the preferred temperature setting.

**Acceptance Criteria:**

* + A temperature sensor will be used to determine when it is too hot
  + A manual mode will be added so the user can choose when the heater is on or not
  + The user should be able to set a temperature threshold
  + The fan and heater will react and respond well to each other by communicating in which state they are

Air purifier:

1. As a resident/visitor I would like my home to smell pleasantly
2. As a resident/visitor I do not want to worry about bad smells and manually having to spray Interior perfume
3. As a resident/visitor I do not want to worry about visitors having trouble with unpleasant smells

**Acceptance Criteria:**

* + A sensor to detect bad smells
  + The user should not be worrying about unpleasant smells due to the device
  + Generally, the smell will always be kept the same

Ventilation:

1. As a resident/visitor I want to make sure that I am living in a healthy environment and clean ambient
2. As a resident/visitor I want to keep records of the air quality within my home
3. As a resident/visitor I want the air quality in my room to be automatically adjusted when it is decreased.

**Acceptance Criteria:**

* + Fans and CO2 sensors will assure a healthy environment
  + The resident can read the message from the sensor on the panels, therefore, they can check the current air quality.
  + The user will notice the ventilation fan which turns on when the air quality is low**.**

Mobile app:

1. As a resident/visitor I would like to have access to all the systems through my phone, so I do not have to turn them manually.
2. As a resident/visitor I would like to be able to control the climate in my apartment from a long distance, such as when I am at work.
3. As a resident/visitor I would like to get information and statistics for all the systems at my place as well as alerts.

**Acceptance Criteria:**

* + An agile phone app will have fast access to all the necessary information for the user.
  + The phone app will be connected to all the systems at the same time via cloud services
  + There will be a panel for every subsystem to yield user-friendly design

Fire Alarm:

1. As a resident/visitor I would like to feel safe in my house by having a fire alarm so that I do not have to worry all the time. Given a high level of particles in the air, the alarm goes off.
2. As a resident/visitor I would like the fire department to be notified in case of a fire so I do not have to worry about a fire while not being home
3. As a resident/visitor I want to be notified while sleeping, given there is a fire

**Acceptance Criteria:**

* + A sensor that detects CO2
  + With a message that is sent to the phone app the user will be notified
  + A buzzer making a loud noise in case of a fire, the sound will be different than the gas leak buzzer

Gas detector:

1. As a resident/visitor I would like to feel safe in my house by having a gas detection alarm so that I do not have to worry all the time.  
   Given a high level of particles in the air, the alarm goes off
2. As a resident/visitor I would like the national breakdown service being notified in case of a gas leak so I do not have to worry about a gas leak while not being home
3. As a resident/visitor I want to be notified while sleeping, given there is a gas leak

**Acceptance Criteria:**

* + A sensor that detects Methane or Propane
  + With a message that is sent to the phone app the user will be notified
  + A buzzer is making a loud noise in case of a gas leak different than the fire alarm