Heat Variant

Air administration

Fill, User guide(?),

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# Intro

This project was created to give the residents of an apartment complex the ability to view the air in their apartment, and the bills related to it, on the web, as well as give the landlord the ability to view the resident’s usage and bills.

Using a ESP32 microcontroller with a BME680 gas sensor, the temperature, pressure, humidity, and air quality in each apartment, can be stored and displayed using the Heat Variant project.

For this project, there were a few **requirements**:

* *Loose*:
  + I’ve decided to use the programming language C for the ESP32 microcontroller.
  + Java Script for the frontend, in Vue.
  + Python for the API.
* *Strict*:
  + DevOps for project management.
  + I’ll be using the InfluxDB image through Docker.
  + ESP32 microcontroller with a BME680 gas sensor.
  + For the frontend, I’ll be using Vue, a JavaScript framework.

**User Login:**  
The user will get a login from the admin when moving in.  
On their main page, they’ll get an Overview.

* Displays their current air data.
* Displays their air data over a selected period (Median).
* Displays last month’s payment, with the ability to pick different periods of time.

**Admin Login:**  
The admin will have access to

* See a specific or all residents current air data.
* View last months or all payments a resident has made.
* Error messages when an error within the system has occurred.
* Create a new Login for an apartment.
* Delete an old login when resident moves out.
* Reset a forgotten login.

# Version 1

The database will be deployed with a preset apartment complex, with 6 floors and 2 apartments on each floor.

# Attachments

1. Planning stage.A white board with writing on it

   Description automatically generated
2. Login Screen – V1.

A screenshot of a computer

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1. Creating an account – V1.

A screenshot of a login form

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1. Admin Page – V1.

A screenshot of a computer

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1. User Page – V1.

A screenshot of a computer

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1. User Data – V1.

A screenshot of a graph

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1. Extras – V1.

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