**Comfort Home**

**Project Plan**

**Project description:**

The goal of the project is to create a system that can ventilate a room based on measurements done by wireless sensors that can measure CO2, humidity, temperature or particulate matter. The way it works is using sensor readings sent to a ventilation box over ZigBee we determine if and how much the room should be ventilated.

**USE CASES FILLED IN ON THURSDAY**

**Project organization:**

* **Roles and responsibilies:**

We decided that everyone will take part in coding, reviewing as well as testing code. That way we all get to experience all parts of the project and develop the most as programmers. We determined that Victor is going to be the scrummaster of our group. He is also going to take part in coding, reviewing and testing, but he will also have the responsibility of arranging meetings, taking notes of how meetings went and checking documentation.

**Project way of working:**

* **Standup meeting setups**

We plan on meeting every Thursday and Friday because we don’t have any lectures on these days, but we also agreed on meeting on other dates in case something urgent is to be done or we have to discuss something that won’t take more than 20 minutes.

* **Sprint demos**

We will have a sprint demo every 3 weeks. We also plan on documenting goals for our next sprint demo on what needs improving and what needs implementing.

* **Communication plan**

We plan on meeting at least 2x per week. We also set up a WhatsApp group, a GitLab repository and a Discord chat. We plan on using WhatsApp for setting up meetings and notifying others when somebody won’t be able to attend. GitLab will be used as our version control software and we will use Discord when we want to discuss something on weekends when we are all home.

* **Testing strategies**

We will try to develop similar systems simultaneously so that once we reach a milestone, we can try to combine them and test them together. That way we can do more tests and react quicker to potential problems.

**Deliverables:**

1. Working sensors used to determine state of air in rooms
2. Working way of communication between sensors and ventilation box
3. Working ventilation box used to determine if and how much rooms should be ventilated
4. Frequent communication with stakeholders

**Risks analysis:**

|  |  |  |  |
| --- | --- | --- | --- |
| **Risk** | **Probability** | **Impact** | **Countermeasures** |
| Members not attending meeting | Medium | Member misses out on information and feedback | Maintain communication and arrange a second meeting |
| Problems understanding and implementing requirements | Medium | Delivering a final product that does not fit the requirements | Frequent meetings with stakeholders discussing progress |
| Lack of communication | High | Misunderstandings that lead to incompatible systems | Maintain a good tone and try to be friendly and understanding |
| Trying to overachieve and running out of time | Low | Delivering a product that Is not yet finished | Try to manage our time and plan ahead |

**Configuration management:**