# PROJECT PLAN

## *Group: 02-04 Synq*

## *Client: Noise Control*

***City: EINDHOVEN***

*<< You write the project document as an agreement between you and your client. In this you record agreements regarding the assignment and you show that you understand what the request is from your client. You also indicate how you are going to approach the assignment, why you choose it and what the end result is.*

*You can use this template for all projects – chapters or parts that are not applicable to the specific project (eg the section Testing and Configuration Management for non-software assignments) can be omitted.*
*Texts in <<italic>> are for informational purposes what should be in each section and should be removed from the final document*

*It is important that this document looks neat and tidy. This means at least that it is error-free and that the layout looks as usual within your IT direction (eg media design). The project document partly determines the first impression, so pay attention to that. Also, do not write unnecessary details in the document.*
*>>*

| | | |
|---|---|---|
| **Date** | **:** | **11-9** |
| **Version** | **:** | **01** |
| **Status** | **:** | **Updated** |
| **Author** | **:** | **Justin, Jasper, Koen, Emir (All)** |

**Version**

| Version | Date | Author(s) | Amendments | Status |
|---|---|---|---|---|
| 01 | 11-9 11:15 | Justin, Emir | 1.1-1.2-1.3-4.1 | Created |
| 02 | 18-9 11:22 | Emir, Koen, Jasper | 2.1-2.2-2.3-2.4-3.1-3.2-3.3-3.4-4.1-4.2 | Finished |
| | | | | |

**Communication**

| Version | Date | To |
|---|---|---|
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| | | |

## Inhoudsopgave

# 1. Project Assignment

## 1.1 Context

The assignment involves creating a noise control dashboard. It is for a company specializing in environmental monitoring and smart city solutions, offering products like noise sensors and data analytics platforms.

The assignment is driven by the growing concern over noise pollution, stricter regulations, and increased awareness of impact on the health of students and faculty of gym halls caused by high levels of noise.

## 1.2 Goal of the project

**Problem/Opportunity:** The issue at hand revolves around the escalating problem of noise pollution in school settings, which adversely affects the way students learn and function. The opportunity presents itself in the form of crafting a comprehensive and interactive dashboard dedicated to raise awareness about noise control measures.

**The most Ideal Situation:** Envision an all-encompassing dashboard with the following key features:

1. **An interactive and informative product:** A dashboard / brochure that is fully interactive and engaging for the users. It will visualise the problem and its solutions and inform schools in an effective manner.
2. **Historical Data Analysis:** The website will house a repository of stored noise data, empowering users to analyse trends, identify patterns, and gauge the efficacy of noise control measures over time.
3. **Alerts and Notifications:** Users will receive prompt notifications when noise levels surpass predefined thresholds.
4. **User-Friendly Interface:** Designed with user convenience in mind, the dashboard will offer a concise and easy to grasp overview of the presented information.

**Benefits:** This project yields numerous benefits:

1. **Enhanced Noise Management:** By delivering accurate information and insights based on research, it empowers and raises awareness for proactive noise control measures and it allows for the students to have a better learning environment.

2. **Data-Informed Decision Making:** Users can make informed decisions predicated on data and trends, thereby improving, noise mitigation strategies, and community involvement.

3. **Elevated Quality of Learning and sport environments:** Reduced noise pollution contributes significantly to a heightened quality of life for student and teachers in affected locales.

4. **Resource Allocation Efficiency:** Municipalities can allocate resources more judiciously by focusing noise control efforts where they are most needed, based on data-driven insights.

In summary, the overarching objective of the dashboard for noise control is to tackle the mounting issue of noise pollution, offering real-time data, insights, and empowerment tools to manage and mitigate noise effectively. This initiative promises an array of benefits for individuals, communities, and organizations, all while boasting the adaptability to evolve and expand its capabilities to meet changing needs.

## 1.3 The assignment

**Assignment:** Create an interactive dashboard / brochure to raise awareness about noise levels in gym halls for schools.

**Client Requirements:**

- A interactive dashboard / brochure
- Extensive research into the problem
- User-friendly interface.

**Minimum Quality Requirements:**

- Effective manner of conveying the information
- User-friendly dashboard.
- Relevant and up-to-date information.

## 1.4 Scope

| The project includes: | The project does not include: |
|---|---|
| 1 Dashboard to show statistics | 1 Open website |
| 2 Animations<br>3 Login Page<br>4 Average results<br>5 Target results<br>6 Documentation | 2 (No mobile website)<br>3 Overwhelming visuals<br>4 |

## 1.5 Conditions

**Technology by company**

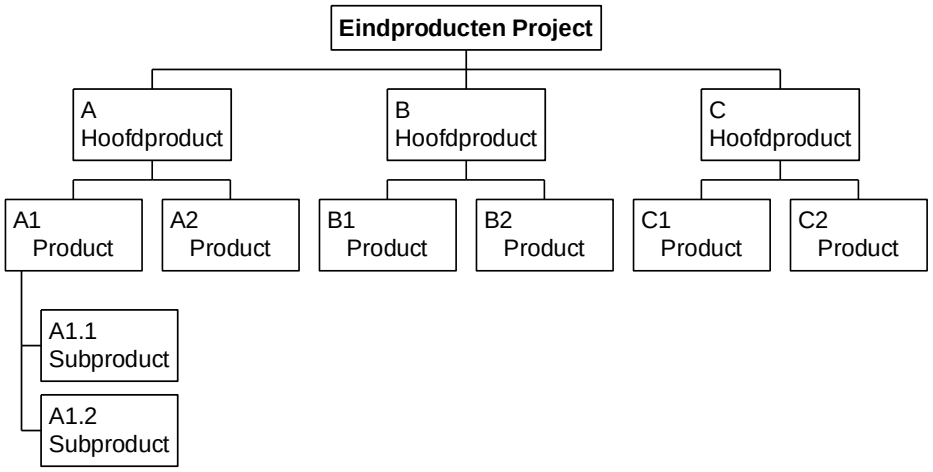
- Access to web
- Tools to get to see the noise
- Good environment to secure the collected data

**Will be added more info when we get more info about the client**

## 1.6 Finished products

*<<A Product Breakdown Structure of the end and intermediate products that the project will deliver with a short description in text of each product. The end products are more than the project plan and the product itself. Also, for example, requirements and architecture documents and research and test reports are typical parts of a PBS. These documents are important for the relevant stakeholders during development as well as during the transfer and during the management phase. During the project you can change the PBS and you can add or remove products in consultation. >>*

PBS Project




## 1.7 Research questions

**Main Research Question**

How can we design and develop an effective and user-friendly dashboard for monitoring loud noises that optimally serves the needs of various stakeholders?

**User Needs and Requirements**

- What are the specific needs and requirements of stakeholders regarding noise monitoring and reporting?
- How do user needs vary based on roles and responsibilities, and how can these needs be prioritized in the design and development process?

**User Experience and Interface Design**

- What design principles and best practices should be applied to create an intuitive and visually appealing user interface for the dashboard?
- How can we ensure that the dashboard is accessible and user-friendly?
-

**Feedback Integration and Iterative Development.**

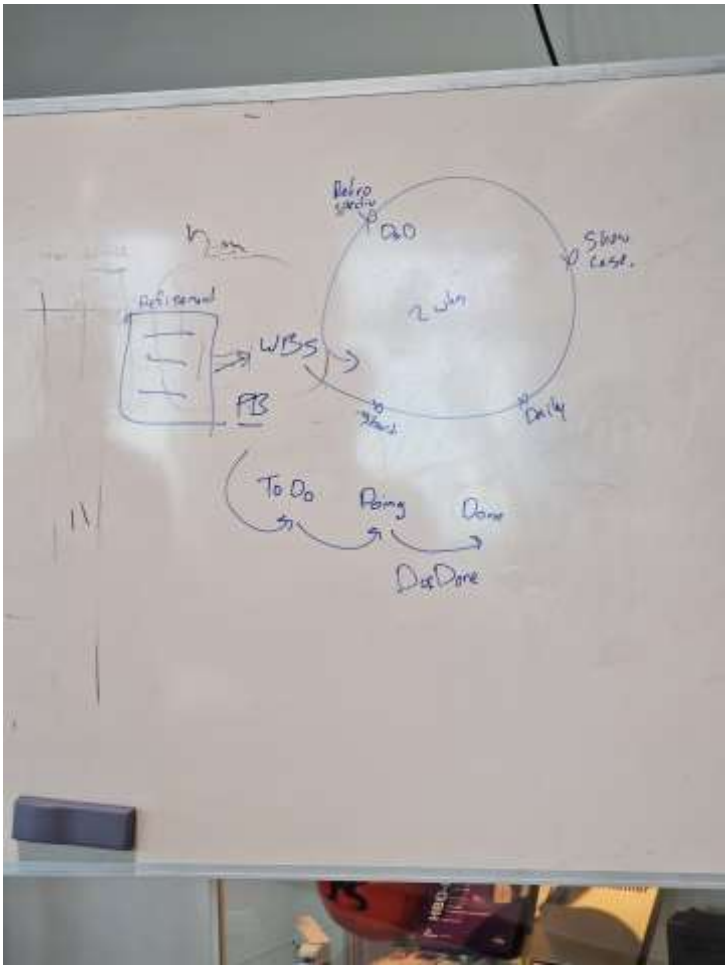
- How can we gather meaningful feedback from stakeholders during the development process to guide iterative improvements?
- How should the feedback loop be structured to ensure continuous enhancement and alignment of the dashboard with user needs and expectations?

# 2. Approach and Planning

## 2.1 Approach

*<< Indicate here which method you follow in your project plan, for example whether you use a waterfall or scrum method. Also indicate how you will approach the problem definition phase and completion phase. With a scrum approach you can think of length of sprints, set-up of your sprints, stand-up, set-up of demos, retrospective, etc.)>>.*

We will use the scrum method during our project to make sure all tasks are clear for everyone and to indicate what needs to be done and when. We are using Trello to do this. For now, we have set the lengths of our sprints to every 2 weeks. We agreed that we will have a stand-up with our team members to discuss what needs to be done for the day, then we will have our daily where we will work on the product backlogs. Afterwards we will have a showcase where we will get feedback and then in the retrospective, we will discuss what can be improved, define our DOD, and what needs to be done next.




### 2.1.1 Test approach

When testing we will make a testable prototype, test this with our users and / or stakeholders and re-iterate with the feedback that we get. This way we can improve upon our product and identify any shortcomings and remedy them before we implement them into our final product.

## 2.2 Research methods

**User Needs and Requirements**

Interview and Surveys

**User Experience and Interface Design**
Prototype testing, client focus group

**Feedback Integration and Iterative Development.**
Getting feedback by client throughout the whole project. Reflecting between us and client.

## 2.3 Breakdown of the project

*<<Show the rough breakdown in phases or sprints of the project here.>>*

Research Phase
We will research the needs of our client and our users, to define what needs to be done.
Testing Phase
With our knowledge gained from the research phase we can make prototypes and conduct testing, to identify any shortcomings, and to further develop our final product.
Development Phase
In this phase we will start on developing the final product and implementing everything that we defined during the previous phases.

## 2.4 Time plan

*<< Depending on your project method, you will be able to work out the phasing in more or less detail. Below is a possible table that you can use for this.*
*Note that with an agile approach, most projects still have a problem analysis/orientation phase (or 'sprint 0'), as well as a completion/evaluation phase.*
*Also make sure that you reserve enough time for your portfolio and start on time.>>*

| Phasing | Effort | Start | Ready |
|---|---|---|---|
| 1 Research | Research doc + WF | 18-9-23 | 2-10-23 |
| 2 | | | |
| 3 | | | |

# 3. Project Organization

## 3.1 Team members

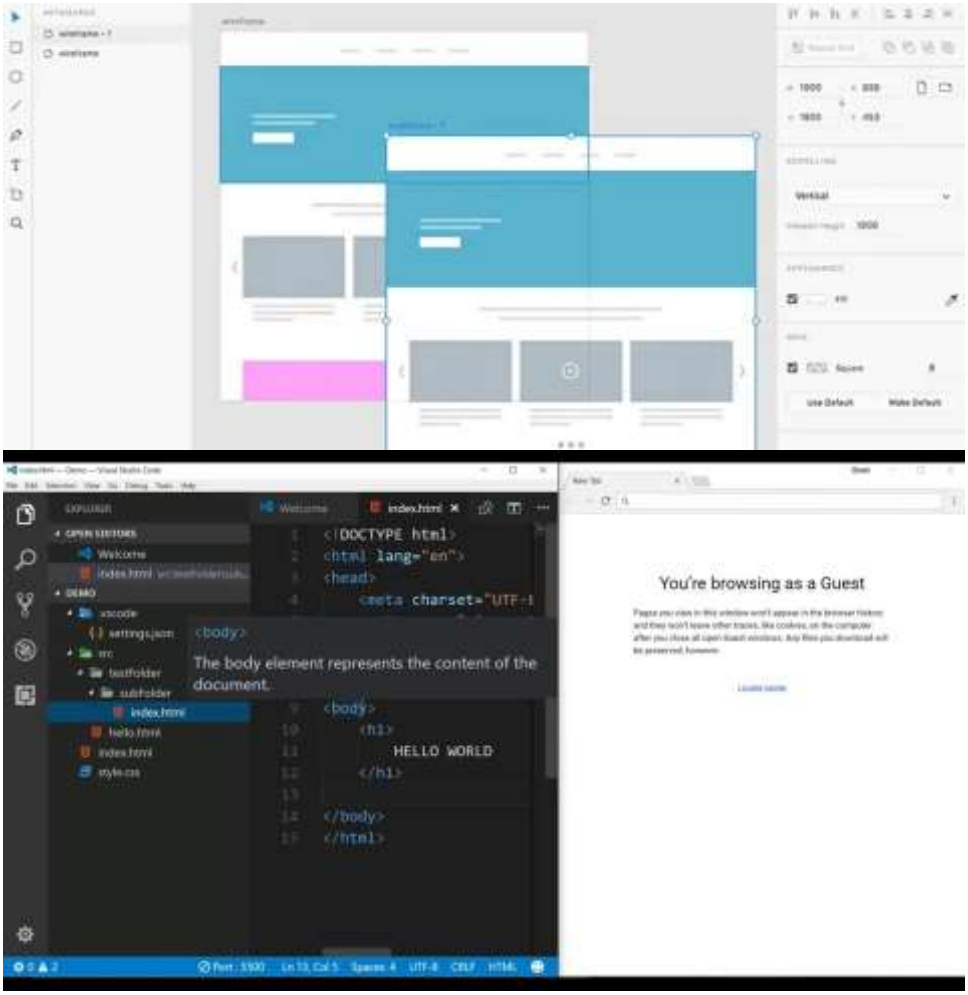
## 3.2 Communication

| Name + Phone + e-mail | Abbr. | Role/tasks | Availability |
|---|---|---|---|
| *Justin Veenhuis*<br>*+31619370325*<br>*509805@student.fontys.nl* | - | *Designer, Coder* | *Every Day* |
| *Emirhan Turunc*<br>*+31615268791*<br>*441450@student.fontys.nl* | - | *Designer, Planner* | *Monday: 9:00 - 12:30*<br>*Tuesday: 9:00 -16:00*<br>*Wednesday: Not available*<br>*Thursday: 9:00 -16:00* |
| *Koen Hilbrands*<br>*+31641486277*<br>*519462@student.fontys.nl* | - | *Jack 0f all trades* | *Every day from 09.00 - 17.00* |
| *Jasper van den Heuvel*<br>*+31619009293*<br>*514889@studen* | | *Designer, coder* | *Daily from 09:00 till 17:00* |

Every Monday at 9:30 we have a stand-up meeting with Matthijs Kuiper, he will chase our progress in the project and advise us on using scrum for our project.
Also, on Monday we will have a meeting with our client, to present our progress and to ask for feedback. We will plan these meetings ourselves every week.

## 3.3 Test environment

Our test environment will be primarily on the computers we use to develop our product. During the design phase we will use figma and Adobe XD to make prototypes to use for testing and in the coding phase we will use our live servers for testing.




## 3.4 Configuration management

*<<omit this section if not applicable>>*

*<<Describe how the archive is set up (for example your GIT repository structure with branching strategy). Pictures about, for example, your branching strategy can help with this. If possible, describe which baselines and releases you foresee.>>*

# 4. Risks

## 4.1 Risks and fall-back activities

| Risk | Prevention activities included in plan | Fall-back Activities |
|---|---|---|
| 1 Absence of a team member | The other team members will stay in touch with the absent member to make sure that everyone stays up to date and on schedule.<br><br>Communication is KEY. This means that each team member will always communicate it if they cannot be present for whatever reason. | Absent team members will still need to make their contribution to the project as agreed upon with the entire team, unless there is a valid reason that cannot be done, (for example: illness). In which case the other team members will try their best to take on the tasks of the absent member |
| 2 Loss of work | Team members will make sure to regularly save their work and make backups of their work.<br><br>When they are done with their work, they will send it to the other members so that everyone has a copy in case a member loses theirs. | If despite the prevention activities work is still lost, team members need to communicate clearly with each other to make a plan to recover and / or remake the lost work.<br>Communication is key here, depending on the time that is left for the project, the scope of the previously lost work may need adjustment so that deadlines are still met. |
| 3 Scope Creep | We will use scrum methods and define clear targets as a team to make sure we keep on schedule and keep our scope realistic and doable.<br>We will also communicate weekly with our client to make sure the scope of the project is clear for us and the client.<br>This way, we can make sure we don't run into any scope creep and cause any project requirements to expand beyond the initially defined scope. | If for any reason, such as changes in stakeholder expectations or insufficient project planning, the scope expands beyond what we expected, we will need to communicate with each other and our client and talk about how we can reduce the scope, or any other factor in the project to still deliver a product our stakeholders are satisfied with. |

# 5. Other

*<< Describe here everything that is relevant but that you cannot put elsewhere in the document.>>*