Logbook

This logbook contains all relevant information regarding the evolution of the project.

Weekly Report

1st Week Report

We got the different subjects presentented to us. We met with the teammembers and discussed which ones would be interesting. We selected our 3 main projects:

1. Smart Ergonomic Multipurpose Public Equipment
2. Breeding of Endangered Insects
3. PureCircles Assessment System

Project assigned to us: Smart Ergonomic Multipurpose Public Equipment

2nd Week Report

Tasks done:

- Communication presentation
- Design thinking to broaden our views
- Thinking about problems in public (we had some tunnel vision)
- brainstorm on idea about people jaywalking
- Preparation of Project Management tool

3th Week Report

This week we had to make some important decision about the product. We brainstormed about how the product would look, we kept in mind that it had to be ergonomic and most importantly safe. By making the black box we got a clear vision what kind of electronic components we wanted to have in our module. We worked a lot on defining the Jira tool, so that we could plan our work in advance and distribute work equally.

4th Week Report

Tasks done this week:

- Decided name of our product
- First draft of logo and flyer are made
- Wrote state of the art
- Thinking about the look of the product and changing some things after meeting with supervisor

- Send mail to government to get some info about traffic lights
- Selection of materials and components that we'll be using in the prototype
- Wrote introduction of the wiki
- Project management on wiki and on jira

5th Week Report

Tasks done this week:

- New Design of our Product (Considering the product's appearance and making minor adjustments following a meeting with the supervisor)
- Cardboard Model
- Structural Drawings
- System Schematics
- Selection of components & materials
- Project management and work on wiki and on jira
- Send a second mail to government

6th Week Report

This week we needed to finish the interim report and we still had a lot of work to do, so we finished the sustainability, ethics and deontology and a big part of the marketing. We also kept changing our logo so we decided on the final one this week. The layout and bibliography of the report was uncomplete so we had some work changing this as well.

7th Week Report

During the past week, our team has been working on preparing the interim presentation, which involves creating a supporting PowerPoint and practicing timing and coordination for the presentation. Alongside this, we have made progress in our written report, and the wiki, and finished off the Ethics and Deontology report while also defining the Marketing strategy.

8th Week Report

This week the team has been focused on updating the list of materials for the prototype and defining some materials for the final product. We also worked on the ethics case for next week's presentation for the Ethics and Deontology subject and the 3D video of the final product made with SolidWorks.

9th Week Report

- Start programming smashy
- Thinking about engagement when playing
- prototype drawings and partial plans were made so that we can start producing it once we have the materials.
- Refining the report with the feedback we got from the supervisors

10th Week Report

This week, the focus laid on improving the wiki based on the interim report feedback regarding all chapters. Apart from that, the idea of our app was further developed and first ideas about the packaging of the product were researched. Furthermore, the components list was finalized and the 3D Model Video, aswell as the drawings were updated.

11th Week Report

The packaging was finished, but not yet uploaded in deliverables. A good oversight still has to be made. The app requirements were discussed and defined. The measurements of the prototype had to be changed, because there was still a plexi glass available that was smaller then the one asked. So now everything has to be adjusted to the size of the glass. The 3D video was finished this week together with the poster, flyer and leaflet. The programming is still being improved and worked on.

12th Week Report

This week we completed the stress analysis. We made progress with the programming of the product and gave further thought to the prototype. Our questions about the prototype were answered. In the area of media design, we started with the user manual and made initial considerations regarding the promotional video.

13th Week Report

This week we finished the functional tests on the software. We started making the prototype on Friday, but it's not finished yet. And we proceeded to make the user manual. On the weekend we finished the paper.

14th Week Report

This week, the team worked on the prototype. The wooden and acrylic parts have been constructed separately, and the electronic part functions. Regarding the paper, it was reviewed and the stress analysis was implemented.

15th Week Report

This week the video was filmed and edited together. The prototype is finished with all the electrical components in there. The presentation was made and all information was gathered. We made some final changes in the wiki, like putting in some extra references, add information about the app,...

Meetings

1st Meeting (2024-02-22)

Agenda:

1. Presentation
2. Modus operandi
3. Project proposals
4. Electronic logbook (Wiki)

Minute:

We listened to all the project proposals. Afterwards we voted with the group to determine which 3 projects seemed most interesting to us.

2nd Meeting (2024-02-29)

Agenda:

1. Present different ideas.
2. Facilities for projects.
3. Deliverables.
4. What's in the name “Smart Ergonomic Multipurpose Public Equipment”
5. What to put in Report on Wiki?

Minute:

Leader of the meeting: Colin

The explanation about the wiki has brought a lot of clarity in terms of what is expected of us there. We should consider making the game for more than 1 person waiting, the game should be worth it playing it multiple times when it's your daily route. We exchanged ideas and paths of thinking with the teachers and we know what we want and what they suggest. The black box diagram was one of the deliverables that they explained and we know what to do for now.

3th Meeting (2024-03-07)

Agenda:

1. Presentation of progress and new ideas
2. Questions: Jira/ Wiki project management
3. Further approach

4. Feedback

Minute:

Leader of the meeting: Florian

Presenting the further developement of our ideas and first sketches has brought up some new feedback and thoughts, which we are going to discuss and include in the developement process. Some noted points were: Distance from the road for kids and general safety while interacting with the module, standards/ norms for traffic lights, vandalproofness, interaction between multiple people and inclusiveness. Questions regarding project management work were answered and will be discussed in project management class.

4th Meeting (2024-03-14)

Agenda:

1. Blackbox feedback
2. Materials/Components
3. Flyer & Logo
4. New design of our module
5. Email to government for light usage
6. Schematics, Drawings and Cardboard model: how detailed?

Minute:

Leader of meeting: Jurjen
Asking about the materials/components list has clarified which components the team will need for the project. The feedback on the flyer & logo was mostly positive. The feedback on the new design has lowered our concern for not meeting safety standards and brought up new ideas for example photochromatic paint and a light sensor for knowing the state of the traffic light. The meeting also helped for knowing who to sent emails to regarding traffic lights. Our questions for the schematics have been answered so now it is known which level of detail is needed.

5th Meeting (2024-03-21)

Agenda:

1. New Design
2. Cardboard model
3. Structural Drawings
4. System Schematics
5. Selection of components & materials

Minute:

Leader of meeting: Magdalena

Today's meeting went very well; the teachers and we communicated effectively with each other. We were able to answer each other's questions, and there was a positive atmosphere in the room. Unfortunately, we still haven't received a response from the relevant public authorities regarding our inquiries about the installation. In general, we feel that the teachers are enthusiastic about our project and didn't have any major concerns to raise. Overall, it seems like we're making great progress and moving in the right direction with our project.

6th Meeting (2024-04-04)

Agenda:

- What is the S&P assessment?
- What is the paper?
- Renewed 3D model. Prototype or final?
- Reaction on the mail send to the government?
- Changes to the material and components list
- Content of interim presentation
- Report update

Minute:

Leader of meeting: Mats

We still don't have any response from the city hall about the traffic lights, so we keep waiting for answers. This blocks us a bit in the design because we don't know if we have to keep the button in mind for our design. 3D drawing changes are good, it's better if we have both prototype and final model. The material and components list has to include all parts, even bolts,... We discussed a bit about the bibliography that's not always working.

7th Meeting (2024-04-11)

Agenda:

Interim presentation.

Minute:

Feedback on the interim presentation.

8th Meeting (2024-04-18)

Agenda:

- Questions about material selection for the prototype
    - Power supply
    - Possibility of stripping the cables (buy)
    - Screen size
- Component + material list for the final product as well or only for the prototype
- Term of “jaywalking”
- 3D video
- Any answer from the government regarding the button issue?

Minute:

Meeting leader: Selma

Asking about the material list cleared up some of the questions the team had regarding the components. For next week, the material list to provide should include VAT and transport costs (for next Wednesday). After showing the 3D video, the group took from the feedback that the product should have more zoom and explanations of each component, also add music. Regarding the engagement issue, users need a reward in order to want to play and interact with the product, for next week an idea and some backup propositions will be presented.

9th Meeting (2024-04-24)

Agenda:

- List of materials and components exceed 100€
- Engagement playing our game
    - Coupons
    - Stickers
    - Competitions / Giveaway
- Reaction from town hall
- Marketing refined report (feedback - deliverable)

Minute:

Meeting leader: Colin
We discussed the possibilities for engagements for SMASHY such as stickers, the educational component. Finally we said we're going to make an app and it's possible to connect by scanning an NFC reader with a phone. We didn't got reaction from the town hall, because the supervisor first want us to have one specific idea that they can present. There was some feedback on our report, for example where to write table, figure, references and the layout

10th Meeting (2024-05-02)

Agenda:

- App implementation for game engagement
- Final component list changes with NFC tag and other provider → under 100€
- Programming only for prototype–> testing not possible for real design
- Packaging solution discussion
- Functional test: what should they consist of? Scientific or not?
- CNC machine available?
- 3D Video Update + Drawings → Solidworks watermark

Minute:

Leader of the meeting: Florian

We presented our Idea of the app that is going to be included and we received positive reactions. The updated components list got approved, questions about programming and the prototype itself were answered. The updated 3d Model Video and drawings were presented and feedback about removing the outside lock on the model and the watermark in the Video was given. For our packaging solution we are going to have to gather more information in order to defend ourselves and demonstrate that this is the best option.

11th Meeting (2024-05-16)

Agenda:

- App specifics
- Components
- Packaging
- 3D Video
- Poster

Minute:

Leader of meeting: Jurjen

In this meeting, the components have been supplied by the teachers and discussed. We discussed the changes we can do to save cost on materials. We are reusing an old plexiglass with smaller measurements than asked. Furthermore, our app ideas have been shared and the problem with the white mark on the 3D video was discussed again.

12th Meeting (2024-05-23)

Agenda:

- Stress analysis
- Other questions: needed tools, paper,…

Minute:

Leader of meeting: Magdalena We mainly talked about the stress analysis, otherwise only all our questions regarding work on the prototype (drilling, soldering, components,…), functional test and the paper were answered.

13th Meeting (2024-05-29)

Agenda:

- final stress analysis (What type of file to upload it?)
- First draft of the manual
- functional tests not ready (due to sickness Jurjen)

Minute:

leader of meeting: Mats
In this meeting we went briefly over the manual, discussing what should be in there. The background color was a bit too dense to read fast and there should be a user manual on the app as well. Going through the paper there was some feedback such as: changing the title and what should be in the control sections.

14th Meeting (2024-06-06)

Agenda:

- feedback on the marketing (paper)
    - should we add another marketing strategy example?
- Prototype: glue it and cover it with the stickers or rebend another acrylic plate?
- NFC tag

Minute:

Meeting leader: Selma

During the meeting, the team asked for feedback on the marketing subchapter for the paper and will receive feedback shortly. Some refinements for the paper were pointed out to work in the next few days. Regarding the prototype, some stickers were proposed to solve the visible breakage on the

acrylic plate. Also, the team got the confirmation that the LEDs can be glued.

15th Meeting (2024-06-13)

Agenda:

- What should be in the final presentation?
- When presentation uploaded?
- How to upload the code?

Minute:

Leader of meeting: Mats

We discussed what should be in the presentation, the supervisor gave us a good oversight of everything. Everything should be uploaded by Sunday. The code needs to be uploaded on github or a similar site.

Activities

Start	End	Task	Description	Who
22/02/2024	24/02/2024	Chose a top 3 of the list proposals	Everyone voted a top 3 himself and afterwards we put in together for a general top 3 Whole team	
29/02/2024	05/03/2024	Black box diagram and the structural draft	Make the black box in Miro and the structural draft	Whole team
01/03/2024	08/03/2024	Project Management	Make the backlog, gannt chart and sprint plan	MG
08/03/2024	12/03/2024	Flyer and logo draft	Get a first draft of the logo and how the flyer could look	MD
08/03/2024	13/03/2024	Selection materials & components	Make a list of what materials and Components we want to use in our prototype	MG and JdV
07/03/2024	14/03/2024	State of the art	Do some research on what things already exist	FH,SC and JdV
19/03/2024	19/03/2024	Cardboard model	Make a cardboard model of our prototype	MG & MD
15/03/2024	21/03/2024	Project management	Doing all the project management tasks on the wiki	MG & SC
15/03/2024	10/04/2024	Marketing	Writing the marketing in the wiki	JdV & CH
21/03/2024	05/04/2024	Sustainability	Writing the sustainability part on the wiki	MG & MD
21/03/2024	07/04/2024	Ethics and deontology	Writing the ethics and deontology part on the wiki	SC
21/03/2024	03/04/2024	3D model	Make the 3D model of SMASHY	FH
03/04/2024	30/04/2024	3D video	Make the 3D model video of the product	FH
08/04/2024	10/04/2024	interim presentation	Making and rehearing interim presentation	Whole team

Start	End	Task	Description	Who
15/04/2024	23/04/2024	Final selection materials & components	Make the final list of what materials and components we want to use in our prototype	MG & JdV
11/04/2024	30/04/2024	Refine report	Implementing the feedback from supervisors into the report	Whole team
22/04/2024	26/05/2024	Programming	Programming the final game	JdV
24/04/2024	01/05/2024	prototype schematics	Drawing the prototype schematics	MG
01/05/2024	15/05/2024	Packaging	Make the packaging for the product	MG & CH
17/05/2024	23/05/2024	Stress analysis	Making a stress analysis of the module on itself and fixture	FH
01/05/2024	30/05/2024	Paper	Write the scientific paper	Whole team
26/04/2024	28/05/2024	Functional test	Doing tests on the hardware and software of SMASHY	JdV
23/05/2024	05/06/2024	Manual	Making a manual on how to play the game and how to install the module.	FH, MG and JdV
31/05/2024	05/06/2024	Making prototype	Making the physical prototype and adding the components to it.	FH, MG and JdV
10/06/2024	15/06/2024	Video	Making a video promoting our product and telling the project development.	MD, MG and CH
08/06/2024	17/06/2024	Presentation	Change the presentation from interim presentation to final presentation	Whole team