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Project Management

Provide here an overview of the contents (structure) of this chapter. Explain the project management approach your group followed and justify why you think it is a good approach.

Scope

Defining the scope of Bloem is essential for keeping our efforts focused on the project's core objectives. By mapping out exactly what is included in the project, we can prevent scope creep and make sure every team member understands the roadmap. The Work Breakdown Structure (WBS) in Figure 1 below illustrates how we have divided the project into manageable phases to ensure we reach a successful final prototype.

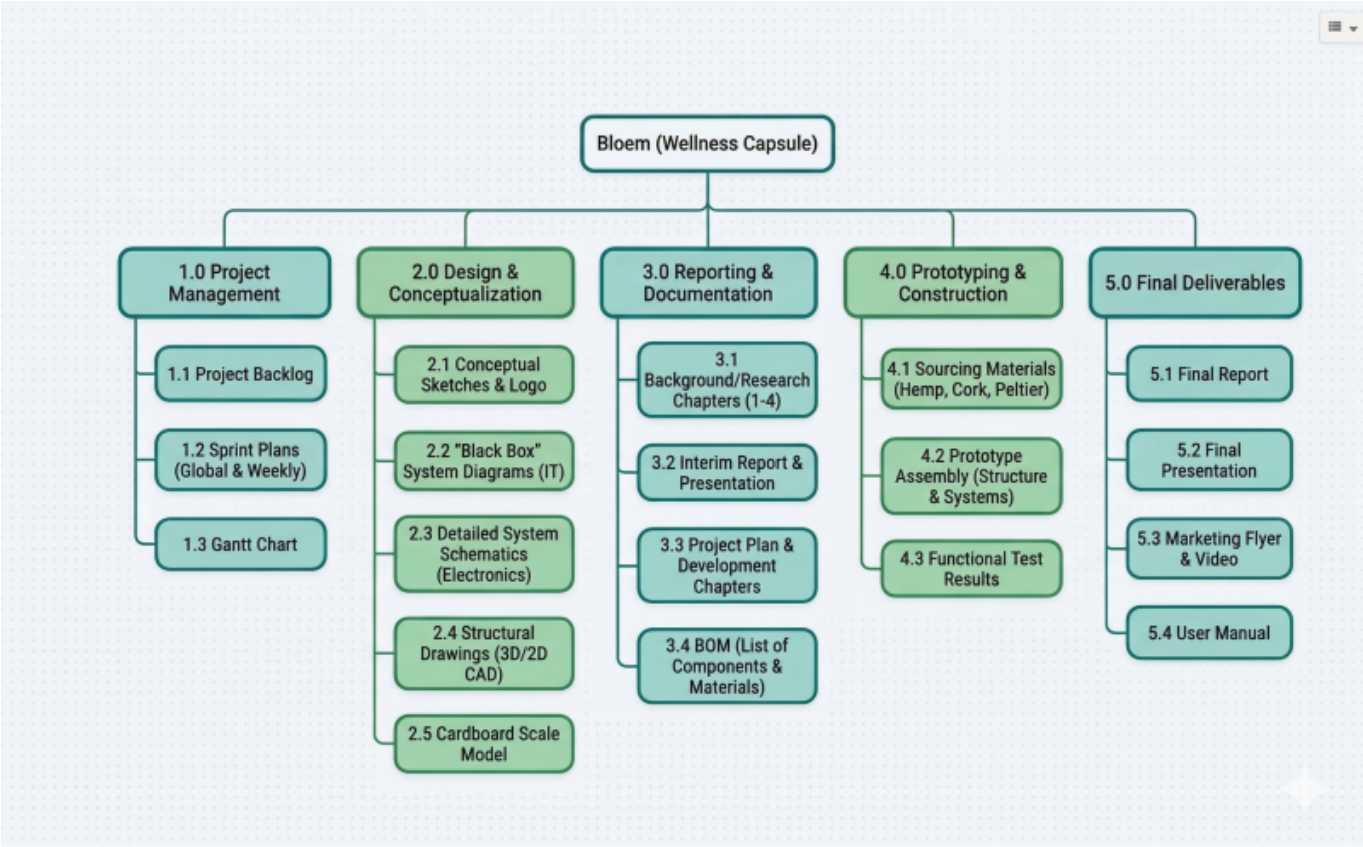

Figure 1: WBS

Time

3.2 Time

In this section, we lay out the schedule and all the major deadlines we have to hit throughout the semester. this is shown in Table 1. Tracking these milestones is really important because it keeps the whole team accountable and makes sure we're actually making steady progress on Bloem. It also helps us see if we're falling behind early on, so we can fix things before they become a real problem.

Table 1: Key milestones

Task	Proposed date
Choose the project proposal	2026-02-28
System Diagrams & Structural Drafts	2026-03-11
List of Components and Materials	2026-03-18
Project Backlog, Global Sprint Plan, Initial Sprint Plan and Release Gantt Chart	2026-03-21
System Schematics, Structural Drawings and cardboard scale model	2026-03-25
Interim Report and Presentation	2026-04-12
Interim Presentation	2026-04-16
3D model video	2026-04-22
Final List of Materials	2026-04-29
Refined Interim Report	2026-05-02
Packaging Solution	2026-05-13
Functional Tests	2026-05-27
Final Report, Presentation, Video, Paper, Poster and Manual	2026-06-13
Final Presentation	2026-06-18
Demonstration of the operation of the prototype	2026-06-25

Cost

The cost analysis for this project considers both the physical components required to build the Bloem prototype and the estimated personnel effort needed to design, develop, and integrate the final solution. Based on the current Bill of Materials, the project cost is mainly driven by the structural elements of the capsule, while the electronic system represents a smaller but essential part of the total investment.

3.3.1 Material Cost

The list of materials below summarizes the components required for the construction of the Bloem capsule, including structural materials, interior elements, control hardware and electronic components.

Table 2: Cost of components Correct all prices: value + space + €

Category	Component	Qty	Unit Price	Total Price	Link
Materials	Cork insulation GO4CORK	10	€31.98	€349.79	Link
Materials	Planed wooden slat WHITE CASQUINHA	16	€4.09	€65.44	Link
Materials	SPAX screws	1	€18.99	€18.99	Link
Materials	Hemp Granules 15	1	€28.41	€28.41	Link
Materials	Plywood Interior Poplar B/BB (wooden shell)	6	€48.55	€291.34	Link
Materials	Wide Square k2 L-brackets	2	€7.93	€15.86	Link
Materials	Pattex wood glue	1	€36.85	€36.85	Link
Materials	Birch plywood board (wooden floor)	4	€107.25	€429.00	Link

Category	Component	Qty	Unit Price	Total Price	Link
Materials	Plywood Interior Poplar B/BB (sliding door)	2	€48.55	€97.10	Link
Materials	Foam board (soft seating area)	1	€43.00	€43.00	Link
Materials	Birch plywood board (seat frame)	4	€107.25	€429.00	Link
Materials	Galaxy Tab A9	1	€159.00	€159.00	Link
Electrical Components	ESP-WROOM-32 ESP32-S Development Board	1	€5.00	€5.00	Link
Electrical Components	RGB 12 V LED light strip	1	€16.00	€16.00	Link
Electrical Components	N-channel MOSFET transistor	1	€17.90	€17.90	Link
Electrical Components	Ohm resistor	1	€11.85	€11.85	Link
Electrical Components	BH1750FVI light sensor	1	€6.10	€6.10	Link
Electrical Components	LM2596 adjustable buck converter	1	€1.10	€1.10	Link
Electrical Components	12 V power supply	1	€5.60	€5.60	Link
Electrical Components	LogiLink SP0057 speaker	1	€12.40	€12.40	Link
			Total Material Cost	**€2061.89**	

The total material cost of the Bloem prototype is therefore **€2061.89**. Most of this value comes from the structural and interior construction materials, especially the cork insulation, plywood panels, flooring, and seating structure. The electronic system has a comparatively lower cost, with a total of **€98.11**, while still enabling the interactive lighting and sound features required by the concept.

3.3.2 Personnel Cost

In addition to the material cost, the development of Bloem also involves a significant personnel investment. This includes the time dedicated to concept development, structural design, 3D modelling, UI design, electronics integration, sourcing, testing, and documentation. Considering a multidisciplinary student team working on the project over a full semester, the personnel effort represents a much higher value than the prototype materials alone.

Assuming a team of six members, each contributing an average of 6 hours per day over a four-month period, excluding weekends, the total effort corresponds to approximately **3168 working hours**. Using a reference rate of **€14.00/h**, the estimated personnel cost is **€44352.00**.

When combining the physical materials with the estimated labor effort, the total project value of Bloem is **€46413.89**. Although the actual out-of-pocket prototype expense is mainly associated with the materials, this broader estimate better reflects the real cost of taking the concept from design to a fully developed engineered solution.

Quality

For the Bloem project, quality is about more than just building a nice-looking capsule. It is divided into two main areas: how well the physical product performs and how clear and professional our documentation is.

Bloem Product Quality

The quality metrics for the physical prototype are focused on three main points:

- **Durability and Materials:** The structure must pass load and stress simulations to ensure the egg-shaped design is stable. We are using sustainable materials like cork and hemp, which need to be high quality to ensure the capsule lasts.
- **Functionality:** Every feature we planned, like the sensor integration and the tablet interface, must work perfectly. The user needs to have a smooth experience when controlling the environment inside.
- **Environmental Impact:** To keep our footprint low, we are sourcing materials as locally as possible and focusing on a “circular” design that uses bio-based components.

Documentation Quality

To make sure our report and wiki are easy for the supervisors and other students to follow, we follow these rules:

- **Consistency:** All sections use the same font styles, sizes, and structure. Whether it's the IT part or the Marketing part, it should feel like one single project.
- **Clarity:** We avoid over-complicating the language. We use technical terms when necessary, but we try to keep the explanations direct and easy to read.
- **Visual Appeal:** Every page and document must include the ISEP logo and our Bloem project logo following the color scheme we chose for the brand.

People & Stakeholder Management

3.5 People

At the start of the project, we talked about our different backgrounds and what each of us is good at. This helped us figure out who would take the lead on things like the technical system or the structural design. However, we decided right away that these roles wouldn't be fixed. Since Bloem is a project where everything—from the sensors to the physical shell—has to work together, we stay flexible. If one person has a huge workload or gets stuck on a specific task, the rest of the team jumps in to help, regardless of our “official” focus.

We meet every week for our sprint planning to go over what we’ve done and what’s coming up next. These meetings are key for us to stay aligned and to move people around to different tasks depending on what needs the most attention that week. It keeps the project moving forward and makes sure no one is overwhelmed.

The supervising teachers also play a huge role in the project. They don't just grade us; they act as guides who give us feedback when our ideas get too complicated or when we're not sure how to solve a technical problem. Their input helps us keep the “big picture” in mind and ensures that Bloem is actually realistic and buildable.

Even though we don't have strict individual roles, we still track our main stakeholders to understand who is involved in the project's success. An overview is seen in Table 3.

Table 3: Project Stakeholders

Stakeholder	Role	Description
Team Bloem	Owners	The core group responsible for the design, build, and management.
Benedita Malheiro	EPS Coordinator	Overall management and organization of the EPS program.
Project Supervisors	Advisors	Providing technical advice and feedback to guide the development.
ISEP	Main Sponsor	Providing the tools, workspace, and funding for the prototype.
Office Workers	Target Group	The end-users who provide the need and feedback for the capsule.
Suppliers	Partners	External providers for our cork, hemp, and electronics.

Communications

3.6 Communications

Staying in sync is the only way we can manage all the different parts of Bloem. To keep things moving, we use a few specific tools to stay connected. Daily talk happens on **WhatsApp**, where we coordinate quickly or ask for help if someone gets stuck. For the official side, we use **Microsoft Teams** to store our report drafts and all project files. We also rely on **Jira** to manage our weekly sprints, which helps everyone see exactly what needs to be done and who is working on what.

We meet in person during class hours several times a week.

Table 4 shows the actual communication channels we use for the project.

Table 4: Communication Channels and Purpose

Stakeholder	Channel	Frequency	Purpose
Team Bloem	WhatsApp, Teams & In-person	Daily / Whenever necessary	Quick updates, file sharing, and sprint planning.
Project Supervisors & EPS Coordinator	MS Teams & In-person	Weekly	Presenting our progress and getting feedback on the work.
ISEP	Email & MS Teams	As needed	Official university updates and program management.
Suppliers / Customers	-	-	N/A (Internal university project).

By sticking to these channels, we make sure we don't lose any information and that everyone stays on the same page as we move toward the final build.

Risk

3.7 Risk Management

Risk management is essential to identify, evaluate, and mitigate potential issues that may arise during the development and implementation of the Bloem capsule. Each identified risk is assessed based on its probability of occurrence and its potential impact on the project. A 5×5 risk matrix is used to classify risks and support decision-making regarding mitigation strategies. This matrix is shown in Figure 2.

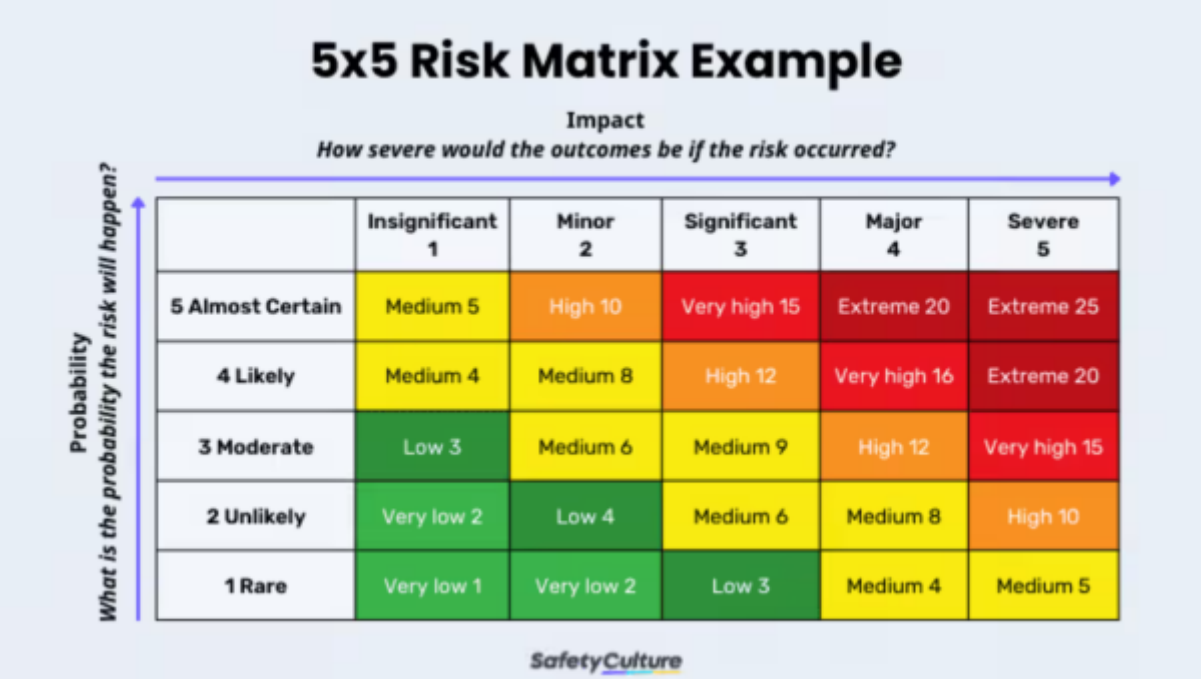

Figure 2: Risk analysis matrix (adapted from [cite Guevara, 2024 reference])

Table 5 shows a risk assessment of the system. Here is a definition of the probability and impact levels.

The probability levels are defined as:

- 5: Almost certain
  * 4: Likely
  * 3: Moderate
  * 2: Unlikely
  * 1: Rare

The impact levels are defined as:

- 5: Severe
  * 4: Major
  * 3: Significant
  * 2: Minor
  * 1: Insignificant

Risk levels are calculated by multiplying probability by impact and are interpreted as:

- 1–4: Acceptable

* 5–9: Adequate
* 10–16: Tolerable
* 17–25: Unacceptable

Table 5: Risk Analysis

Risk	Probability	Impact	Risk level	Response	Risk handling
Hardware integration issues (LEDs, sensors, ESP32 not working together)	3	4	12 - Tolerable	Mitigate	Perform early prototyping and incremental testing of all electronic components
Tablet/app connectivity problems (communication between tablet and system fails)	3	4	12 - Tolerable	Mitigate	Use reliable communication protocols and test integration regularly
User interface usability issues (confusing booking or controls)	3	3	9 - Adequate	Mitigate	Conduct user testing and iterate UI design based on feedback
Structural instability of the capsule (design or assembly weaknesses)	2	5	10 - Tolerable	Mitigate	Validate structure through simulations and reinforce critical joints
Delays in material delivery or unavailable components	2	3	6 - Adequate	Transfer	Identify alternative suppliers and order materials early
Time management issues within the team	3	3	9 - Adequate	Mitigate	Establish clear deadlines and monitor progress regularly
System does not provide expected relaxation experience	2	4	8 - Adequate	Mitigate	Test lighting and sound scenarios and adjust based on user feedback
Power supply or electrical failure inside the capsule	2	5	10 - Tolerable	Mitigate	Ensure proper circuit design and include safety measures (fuses, regulators)

Risk	Probability	Impact	Risk level	Response	Risk handling
Overcomplication of features leading to unfinished implementation	3	4	12 - Tolerable	Avoid	Prioritize core functionalities and reduce scope if necessary
Legal or safety compliance issues (indoor installation, user safety)	2	4	8 - Adequate	Mitigate	Follow safety guidelines and ensure materials and electronics meet standards

The risk analysis shows that most identified risks fall within the adequate and tolerable categories. These risks can be managed through proper planning, iterative testing, and continuous monitoring throughout the project lifecycle. No risks were classified as unacceptable, meaning the project is considered feasible within the defined scope, provided that mitigation strategies are effectively implemented.

Procurement

3.8 Procurement

Procurement is an important part of the Bloem project because the solution combines architectural materials, furniture elements, and electronic components that must be acquired from different types of suppliers. For this reason, the purchasing strategy was defined to balance cost, availability, delivery time, and reliability, while also keeping the overall concept feasible from a construction point of view. Our procurement plan is shown in Table 6.

The structural and interior elements of the capsule are mainly sourced from building-material suppliers and wood specialists. Components such as cork insulation, wooden slats, plywood boards, brackets, and adhesives are purchased from suppliers that can provide materials in the required dimensions and in relatively short lead times. Whenever possible, local or regional suppliers are preferred, since this reduces transportation effort and simplifies replacement in case of damaged or unavailable items.

The electronic subsystem follows a different procurement approach. Microcontrollers, sensors, converters, and low-cost supporting modules are acquired from specialized online suppliers, since these components are generally more affordable and easier to find through international platforms. At the same time, items such as the speaker and LED strip are sourced from retailers with faster shipping and easier purchasing conditions. Backup suppliers are also identified for the most relevant electronic elements in order to reduce the risk of delays during assembly and testing.

For the user interface, the team selected a commercial tablet that offers sufficient performance for session booking and environmental control without requiring advanced specifications. This avoids overspending on hardware while still ensuring that the interface can be demonstrated under realistic conditions.

Overall, the procurement strategy for Bloem is based on using reliable suppliers for large structural materials, specialized vendors for electronics, and alternative sources whenever delivery or stock

issues may arise. This mixed approach provides flexibility during implementation and supports both the physical construction of the capsule and the integration of its interactive features.

Table 6: Procurement Plan

Item	Primary Supplier	Backup Supplier	Estimated Cost (€)	Lead Time (Days)	Shipping Time (Days)	Notes
Cork insulation GO4CORK	Leroy Merlin	Local insulation supplier	349.79	2–5	1–3	Main acoustic and thermal insulation material
Planed wooden slat WHITE CASQUINHA	Leroy Merlin	Maxmat	65.44	1–3	0–2	Used for the internal wooden framing
SPAX screws	Leroy Merlin	Maxmat	18.99	1–3	0–2	Fastening elements for structural assembly
Hemp Granules 15	Datapixel	Local sustainable materials supplier	28.41	2–5	1–3	Complementary insulation material
Plywood Interior Poplar B/BB (wooden shell)	ToSize	Local wood supplier	291.34	3–7	2–5	Used for the main shell of the capsule
Wide Square k2 L-brackets	Leroy Merlin	Maxmat	15.86	1–3	0–2	Reinforcement of structural joints
Pattex wood glue	Leroy Merlin	Local hardware store	36.85	1–3	0–2	Adhesive for wood assembly
Birch plywood board (wooden floor)	Leroy Merlin	Local wood supplier	429.00	2–5	1–3	Flooring base of the capsule
Plywood Interior Poplar B/BB (sliding door)	ToSize	Local wood supplier	97.10	3–7	2–5	Material for the sliding door panel
Foam board	Feira dos Tecidos	Local upholstery supplier	43.00	1–3	1–3	Soft seating area
Birch plywood board (seat frame)	Leroy Merlin	Local wood supplier	429.00	2–5	1–3	Frame supporting the seating area
Galaxy Tab A9	Worten	Local electronics retailer	159.00	1–2	0–2	Interface device for booking and control
ESP-WROOM-32 ESP32-S Development Board	AliExpress	Amazon	5.00	2–5	5–10	Main controller for the electronic subsystem
RGB 12 V LED light strip	Worten	Amazon	16.00	1–3	1–3	Ambient lighting system

Item	Primary Supplier	Backup Supplier	Estimated Cost (€)	Lead Time (Days)	Shipping Time (Days)	Notes
N-channel MOSFET transistor	Worten	Mauser	17.90	1–3	1–3	Switching element for LED control
Ohm resistor	Worten	Mauser	11.85	1–3	1–3	Supporting electrical component
BH1750FVI light sensor	AliExpress	Amazon	6.10	2–5	5–10	Measures light intensity
LM2596 adjustable buck converter	AliExpress	Amazon	1.10	2–5	5–10	Voltage regulation module
12 V power supply	AliExpress	Amazon	5.60	2–5	5–10	Power source for prototype electronics
LogiLink SP0057 speaker	Mauser	El Corte Inglés	12.40	1–3	1–3	Audio output for relaxation soundscapes
		Total Estimated Cost	**2061.89**			

Project Plan

The project is organized into one-week sprints to support an iterative and flexible development workflow. The full timeline is presented in Table 7, which serves as a structured reference for monitoring progress and ensuring alignment with the overall project goals.

Table 7: Global Sprint Plan

Sprint	Start	Finish	Status
1	26/02/2026	04/03/2026	Finished
2	05/03/2026	11/03/2026	Finished
3	12/03/2026	18/03/2026	Finished
4	19/03/2026	25/03/2026	Finished
5	26/03/2026	01/04/2026	Ongoing
6	02/04/2026	08/04/2026	Planned
7	09/04/2026	15/04/2026	Planned
8	16/04/2026	22/04/2026	Planned
9	23/04/2026	29/04/2026	Planned
10	30/04/2026	06/05/2026	Planned
11	07/05/2026	13/05/2026	Planned
12	14/05/2026	20/05/2026	Planned
13	21/05/2026	27/05/2026	Planned
14	28/05/2026	03/06/2026	Planned

Our project backlog works as a roadmap for the team, helping us stay on top of all the EPS milestones. We've arranged these tasks to make sure the workflow stays consistent and that we're hitting our deadlines as we build Bloem. The detailed list of these items and their current status is provided in Table 8 below.

Table 8: Project Backlog

PBI	Title	Status
A	Define project theme	Done
B	Upload “black box” System Diagrams & Structural Drafts	Done
C	Upload List of Components and Materials (draft)	Done
D	Define Project Backlog, Global Sprint Plan & Initial Sprint Plan	Ongoing
E	Release Gantt Chart of the project	Ongoing
F	Upload Detailed System Schematics & Structural Drawings	Planned
G	Cardboard scale model of the structure	Planned
H	Interim Report and Presentation	Planned
I	3D model video	Planned
J	Final List of Materials	Planned
K	Refined Interim Report (based on feedback)	Planned
L	Packaging solution	Planned
M	Results of the Functional Tests	Planned
N	Final Report, Presentation, Video, Paper, Poster and Manual	Planned
O	Final Presentation, Individual Discussion and Assessment	Planned
P	MS Teams folder upload (refined deliverables + code + drawings)	Planned

To manage our time effectively, we’ve broken the project down into one-week 'sprints.' This allows us to focus on specific tasks each week and ensures that we are making steady progress toward our final goals. Table 9 shows our schedule, including the duration of each task and who is responsible for leading them.

Table 9: Sprint Plan

Sprint	Task	Importance	Responsible	Involved
26/02/2026 - 04/03/2026				
1	Choose and share top-3 preferred project proposals	5	Everyone	Everyone
05/03/2026 - 11/03/2026				
2	“Black box” System Diagrams	3	Everyone	Everyone
2	Structural Drafts	4	Carlota	Everyone
2	Write Background and Related Work chapters	3	Amelia & Timon	Everyone
2	Brainstorm other ideas inside the Smart Buildings topic	5	Everyone	Everyone
12/03/2026 - 18/03/2026				
3	Research Components and Materials	3	Everyone	Everyone

Sprint	Task	Importance	Responsible	Involved
3	List of Components and Materials (initial upload)	5	Amalie & Lena	Everyone
3	Write Marketing chapters	2	Timon	Everyone
3	Improve BlackBox Diagram	2	Lena	Everyone
19/03/2026 - 25/03/2026				
4	Detailed System Schematics	5	Amelia	Everyone
4	Structural Drawings	5	Carlota	Everyone
4	Cardboard scale model of Bloem	3	Kaiko	Everyone
4	Create a flyer draft	3	Kaiko	Everyone
4	Update Material List	3	Mohammed	Everyone
4	Settle on a name and logo	4	Everyone	Everyone
4	Write Project Plan & Development chapters	2	Lena & Carlota	Everyone
26/03/2026 - 01/04/2026				
5	Create Case Study Presentation	3	Mohammed	Everyone
5		3	Mohmmed	Everyone
02/04/2026 - 08/04/2026				
6				
09/04/2026 - 15/04/2026				
7				
16/04/2026 - 22/04/2026				
8				
23/04/2026 - 29/04/2026				
9				
30/04/2026 - 06/05/2026				
10				
07/05/2026 - 13/05/2026				
11				
14/05/2026 - 20/05/2026				
12				
21/05/2026 - 27/05/2026				

Sprint	Task	Importance	Responsible	Involved
13				
28/05/2026 - 03/06/2026				
14				
04/06/2026 - 10/06/2026				
15				
11/06/2026 - 17/06/2026				
16				
18/06/2026 - 25/06/2026				
17				

Figure 3 provides a visual overview of our complete schedule. It allows us to track the duration of each task at a glance and see how they fit together over the semester, making it easier to manage the long-term deadlines for Bloem.

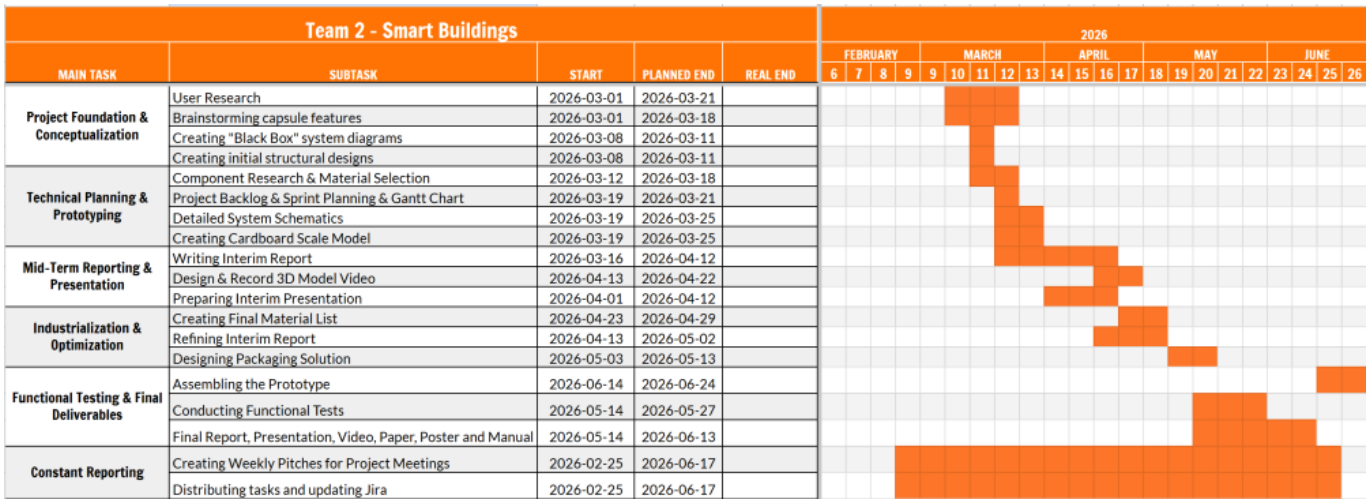

Figure 3: Gantt chart

Sprint Outcomes

Include the outcomes of all sprint reviews (what was the sprint backlog, completion status, planned capacity vs. achieved velocity).

Table 10 shows the outcome of sprint 1.

Table 10: Sprint 1 Overview

Sprint	Task	Duration	Responsible	Involved
26/02/2026 - 04/03/2026				
1	Choose and share top-3 preferred project proposals	5	Everyone	Everyone

Sprint 1 Summary:

Main Achievements:

- Held our first team meetings to discuss project interests.
- Researching and ranking our top 3 project choices for the supervisors.
- Agreed on the initial vision for a dehumidifier structure.

Progress Check: 100% of the planned work for this week is finished.

Workload Stats:

- **Tasks Planned:** 1
- **Tasks Finished:** 1

Table 11 shows the outcome of sprint 2.

Table 11: Sprint 2 Overview

Sprint	Task	Duration	Responsible	Involved
05/03/2026 - 11/03/2026				
2	“Black box” System Diagrams	3	Everyone	Everyone
2	Structural Drafts	4	Carlota	Everyone
2	Brainstorming Smart Building concepts	3	Everyone	Everyone
2	Write Background and Related Work chapters	4	Amelia & Timon	Everyone

Sprint 2 Summary:

What we got done:

- Explored different “Smart Building” ideas and officially chose the wellness capsule.
- Developed the “Black Box” diagrams to map out how the sensors and systems will interact.
- Carlota started the first structural sketches to visualize the egg-shaped design.
- Amelia and Timon began writing the Background and Related Work sections for the report to provide the research foundation for our project.

Current Status: All 4 tasks for this sprint were completed on time.

Workload Summary:

- **Planned Tasks:** 4
- **Completed Tasks:** 4

Table 12 shows the outcome of sprint 3.

Table 12: Sprint 3 Overview

Sprint	Task	Duration	Responsible	Involved
12/03/2026 - 18/03/2026				
3	Research Components and Materials	4	Everyone	Everyone

Sprint	Task	Duration	Responsible	Involved
3	List of Components and Materials (initial upload)	2	Amalie & Lena	Everyone
3	Write Marketing chapters	2	Timon	Everyone
3	Improve BlackBox Diagram	2	Lena	Everyone

Sprint 3 Summary:

Tasks Completed:

- The whole team researched sustainable materials (like cork and hemp) and technical components to ensure the capsule meets our wellness goals.
- Amalie and Lena compiled the initial material list and uploaded it to the project wiki.
- Timon drafted the Marketing chapters.
- Lena refined the Black Box diagram based on the new research and feedback from our supervisors.

Status Update: 100% of tasks were finished by the end of the week.

Efficiency Metrics:

- **Tasks in the plan:** 4
- **Tasks carried out:** 4

Table 13 shows the outcome of sprint 4.

Table 13: Sprint 4 Overview

Sprint	Task	Duration	Responsible	Involved
19/03/2026 - 25/03/2026				
4	Detailed System Schematics	5	Amelia	Everyone
4	Structural Drawings	5	Carlota	Everyone
4	Cardboard scale model of Bloem	3	Kaiko	Everyone
4	Create a flyer draft	3	Kaiko	Everyone
4	Update Material List	3	Mohmmed	Everyone
4	Settle on a name and logo	2	Everyone	Everyone
4	Write Project Plan & Development chapters	4	Lena & Carlota	Everyone

Sprint 4 Summary:

Key Results for this period:

- Officially rebranded the project to **Bloem** and finalized the core logo concept to match our “nature meets wellness” theme.
- Kaiko built the first physical scale model using cardboard to test the dimensions and the egg-shaped curve of the capsule.
- Amelia and Carlota produced the detailed technical schematics and structural drawings needed for the upcoming prototype phase.
- We started working on the Project Plan and Development chapters.
- Updated our material list and created a first draft of the marketing flyer to promote Bloem's

benefits.

Current Status: Sprint successfully completed with 100% of tasks finished.

Effort Breakdown:

- **Tasks in the plan:** 7
- **Tasks carried out:** 7

3.12 Sprint Evaluations

Sprint 1 Evaluation

In the first sprint, the team focused on getting organized. We chose our initial topic and attended the introduction sessions. It was mostly about figuring out how we would work together and getting the basic tools ready. The reflection is shown in Table 14.

Table 14: Sprint 1 Reflection

Aspect	Reflection
Positive	Good teamwork and high motivation to start the project.
Negative	More time could have been spent looking at different project ideas to avoid changing ideas in the future.

Sprint 2 Evaluation

During this sprint, we did a deep dive into Smart Buildings and officially decided to create the wellness capsule. We started on the first structural drawings and the Black Box diagrams to see how it would all work. We also began the first research chapters for the report. See Table 15.

Table 15: Sprint 2 Reflection

Aspect	Reflection
Positive	Settling on the wellness capsule gave the team a clear and exciting goal.
Negative	It was a bit challenging to define the technical inputs/outputs while the design was still changing.

Sprint 3 Evaluation

Sprint 3 was all about research. We looked into sustainable materials to see what would work best for the shell. While the marketing chapters were being drafted, the IT side focused on refining the system logic. We also uploaded our first official list of components. See Table 16.

Table 16: Sprint 3 Reflection

Aspect	Reflection
Positive	Timon did an amazing job writing an extensive marketing part of the report.
Negative	The research for the material list could have been conducted in a more detailed way.

Sprint 4 Evaluation

This was a big week for us. We officially rebranded to **Bloem**, finalized the logo and built a physical cardboard model to check the scale. We also did the detailed technical drawings and worked on the

Project Plan and Development chapters to document our progress. Shown in Table 17.

Table 17: Sprint 4 Reflection

Aspect	Reflection
Positive	It felt relieving to finally settle on a name and branding decisions after a long time of debating them
Negative	The workload for the drawing part was very high and we should have planned to start it earlier.

Summary

This chapter showed how we kept the Bloem project organized from the very first week. By using tools like Jira and a Gantt chart, we were able to map out a clear timeline and make sure everyone knew their roles. Breaking the semester into weekly sprints was really helpful because it allowed us to stay on top of the workload and adjust our plans as we moved from brainstorming to technical design.

Throughout these first four weeks, the team successfully navigated the shift from a broad “Smart Building” concept to the specific Bloem wellness capsule. We've now reached a point where we have a solid technical foundation, including detailed drawings and a physical cardboard scale model.

With the project management and initial planning now established, the following chapter will focus on our Marketing Plan and how we intend to position Bloem in the wellness market.