

Table of Contents

- Project Management** 3
- Scope 3
- Time 3
- Cost 4
- Quality 4
- People & Stakeholder Management 5
- Communications 5
- Risk 5
- Procurement 6
- Project Plan 6
- Sprint Outcomes 11
- Sprint Evaluations 11
- Summary 11

Project Management

In this chapter, we will develop our project management approach by describing several aspects such as the scope, time, project plan and our understanding and use of Jira, particularly with sprints.

Scope

The scope of our project focuses on the research and development of a solution up to the proof-of-concept stage. Indeed, in this project, we are following the demonstration process to prove that the solution we propose can be developed and be viable in the future.

Boundaries of the project: We are studying and developing the idea of a Healing Cocoon to reduce children's anxiety in the waiting room before a medical appointment. We are focusing on the structure, design, materials, app and devices.

Product scope (*extent of what the project will produce*): Throughout the project, deliverables will be produced, such as: flyer, leaflet, 3D models, drawings, designs, detailed schematics.

Project scope (*summary of the work needed to produce it = WBS still to do*)

Time

To make sure we finish this project within the 15-week semester, we break our work down into small, weekly goals. We use task-tracking software to organize who is doing what every week. This flexible approach allows us to design the physical pod and write the software at the same time. While our weekly tasks are flexible, we make sure to always pay attention to the major deadlines and closely monitor progress over time.

Here the details of the milestones of our project:

2026-02-28 Choose and share top-3 preferred project proposals via email (epsatissep@gmail.com)

2026-03-11 Upload "black box" System Diagrams & Structural Drafts to Deliverables

2026-03-18 Upload List of Components and Materials (Deliverables)

2026-03-21 Define the Project Backlog (what must be done and key deliverables - every member should preferably participate in every task), Global Sprint Plan, Initial Sprint Plan (which tasks should be included, who does what) and Release Gantt Chart of the project and insert them on the wiki (Report)

2026-03-25 Upload detailed System Schematics & Structural Drawings (Deliverables) and do the cardboard scale model of the structure

2026-04-12 Upload Interim Report and Presentation (Deliverables)

2026-04-16 Interim Presentation, Discussion and Peer, Teacher and Supervisor feedbacks

2026-04-22 Upload 3D model video (Deliverables)

2026-04-29 Upload final List of Materials (local providers & price, including VAT and transportation) to Deliverables

2026-05-02 Upload refined Interim Report (based on Teacher & Supervisor Feedback)

2026-05-13 Packaging solution (Deliverables and Report)

2026-05-27 Results of the Functional Tests (Report)

2026-06-13 Final Report, Presentation, Video, Paper, Poster and Manual (Deliverables)

2026-06-18 Final Presentation, Individual Discussion and Assessment

2026-06-23 Update the wiki, report (suggested corrections), upload refined deliverables in shared section of MS Teams (source and PDF), printed copy of the poster, brochure and leaflet for EPS coordinator

2026-06-25 Submit prototype and user manual, prototype demonstration

Cost

We need to clearly separate two different prices: the price of the final product and the budget we have right now. While the final Healing Cocoon will be sold to clinics for about 2000 € to 2500 €, our goal right now is just to build a working test model (prototype) to prove our technology works.

For this first prototype, the EPS program gave us a 100 € budget limit. To make sure we don't spend too much, we are using affordable, easy-to-find materials for the physical frame. For the smart system, we are using low-cost electronic sensors and a basic microcontroller (ESP32).

Table 1: Planned vs. Actual Costs

Required component	Description	Total Budget (€)	Actual Costs (€)
Smart brain & sensors	ESP32 board, and sensors for light, carbon dioxide and humidity	25.00	3.67
Output devices	Scent sprayer, speaker amplifier, and relay switch	25.00	22.98
Power supply	5 V 2 A USB wall plug	25.00	7.26
Building materials	Fiberglass rods, hula hoop, spandex, acoustic foam, PVC	40.00	(Pending purchase) 0.00
Total prototype budget		100.00	53.91

Quality

To make sure the Healing Cocoon is safe for children and works perfectly in a real clinic, we set clear quality goals. We constantly check our work through team reviews, teacher feedback, and physical testing.

Building & Hardware Quality

- Wheelchair access - The opening and inside of the pod must be big enough for a standard child's wheelchair to roll right in without the child needing to stand up.
- Cleanliness & Hygiene - All inside surfaces must be easy to wipe down and made of materials that stop germs from spreading. They must also survive standard clinic cleaning sprays without getting damaged. This will be done by checking the manufacturer's safety sheets and testing the materials with cleaning sprays.
- Fast Electronics - When the smart system (the ESP32) senses something, the lights, sounds, or scents must react in less than 2 seconds so the experience feels magical and natural. This is going to be tested by running the code and testing the electronics over and over to find any delays.

We are also focusing on clear and consistent report for keeping the track of our progress and milestones achieved. We use a final “cross-check checklist” before submission, ensuring all numbers, part names, and deadlines match across every single chapter.

People & Stakeholder Management

To make sure our project runs smoothly, we have clearly defined the roles of our internal team members and identified the external groups (stakeholders) who care about the success of the Healing Cocoon.

The Project Team (Internal) Our team is made up of six international students from different academic backgrounds. Because we have different skills, we divided the project responsibilities to match our strengths:

1. Ronja Kruse (Dental Technology): Provides medical insights for the clinic environment, helps with B2B marketing, and designs the wheelchair-accessible layout.
2. Hanna Kaczmarek (Industrial Biotechnology): Focuses on ergonomic dimensions, market analysis, and the business SWOT analysis.
3. Anouc Goedhart (Industrial Design Engineering): Leads the 3D design models, branding (flyers/leaflets), and the visual identity of the Cocoon.
4. Daniel Aagaard Pérez (Informatics Engineering): Handles the smart system hardware, projector integration, and the detailed technical schematics.
5. Julie Bonnet (Packaging Engineering): Manages material selection, eco-efficiency research, and building the physical cardboard scale model.
6. Kemal Yilmaz (Electronics - ICT): Develops the software app, the user interface (UI), and database management.

Key External Stakeholders These are the people outside our team who are impacted by our project:

- EPS Supervisors & Teachers: They guide our academic progress and grade our deliverables. We manage their expectations by meeting all deadlines and updating our Wiki logbook.
- Clinic Directors (The Customers): The private dentists and therapists who will buy the Cocoon. We manage them by proving the product is easy to clean and will save their clinic time and money.
- Patients & Parents (The Users): The anxious children and their parents. We manage their needs by ensuring the final pod is safe, calming, and inclusive.
- Local Suppliers: Companies like F. Marques da Silva and Artnovion who provide our materials.

Communications

Document how your team will manage communications, describing communication channels, meetings, etc.

Risk

Identify key risks (product and project level), evaluate them and define how they should be handled (responses) and monitored. Perform quantitative and qualitative risk analysis and use the results to define the appropriate risk responses.

Procurement

Document your procurement management strategy including make vs buy decisions, materials/services to be acquired, sources, costs, timings, etc.

Project Plan

1. Description of the project schedule and its key phases using a Gantt chart

We decided to organize the tasks according to whether they belong to:

- the initiating phase of the project (Figure 1)
- the development phases of the project (Figure 2)
- the deliverables to be submitted (Figure 3)

HEALING SPACES

TEAM 6: Anouc, Daniel, Hanna, Julie, Kemal, Ronja

Beginning of the project:

Poster week:

TASKS	ASSIGNED TO	ADVANCEMENT	START	DUE DATE
Global activities/starting of the project				
Looking for needs/problems in healthcare/wellbeing	All	100%	2026-02-23	2026-02-28
Brainstorming on solutions and make the decision	All	100%	2026-02-28	2026-03-10
Background and related work/Bibliography/State of the Art (interim report)	All	100%	2026-03-01	2026-03-15

Figure 1: Tasks from the project initiation phase

Marketing (interim report)				
Market analysis	Anouc	100%	2026-03-06	2026-03-10
Business Idea formulation	All	100%	2026-03-06	2026-03-12
Business Model	Ronja, Hanna	70%	2026-03-05	2026-04-01
SWOT analysis	Ronja, Hanna	25%	2026-03-28	2026-04-04
Cocoon system design				
Choose the colors	All	80%	2026-03-17	2026-03-25
Analyze and select hygienic/acoustic interior materials	Julie	0%	2026-03-25	2026-03-30
Redesign Cocoon layout for wheelchair accessibility	Ronja	50%	2026-03-22	2026-03-25
Draft Detailed System Schematics & Structural Drawings	Daniel	50%	2026-03-14	2026-03-25
Finalize the ergonomic dimensions	Hanna	20%	2026-03-22	2026-03-25
App Design				
Add a database	Daniel, Kemal	0%	2026-03-30	2026-04-22
Design UI mockups (including voice-to-text?) (add an interface)	Daniel, Kemal	0%	2026-03-30	2026-04-22
Projector output integration	Daniel, Kemal	0%	2026-03-30	2026-04-22
Backend App - develop local controller logic to bridge UI inputs to projector/scent actuators	Daniel, Kemal	0%	2026-03-28	2026-04-22
Prototype development				
3D design model	Anouc	30%	2026-03-17	2026-03-25
3D model video	Kemal	0%	2026-04-04	2026-04-22
Build cardboard scale model	Julie	0%	2026-03-24	2026-03-25
Communications/Advertisement				
Communication tools	Ronja	15%	2026-03-18	2026-06-13

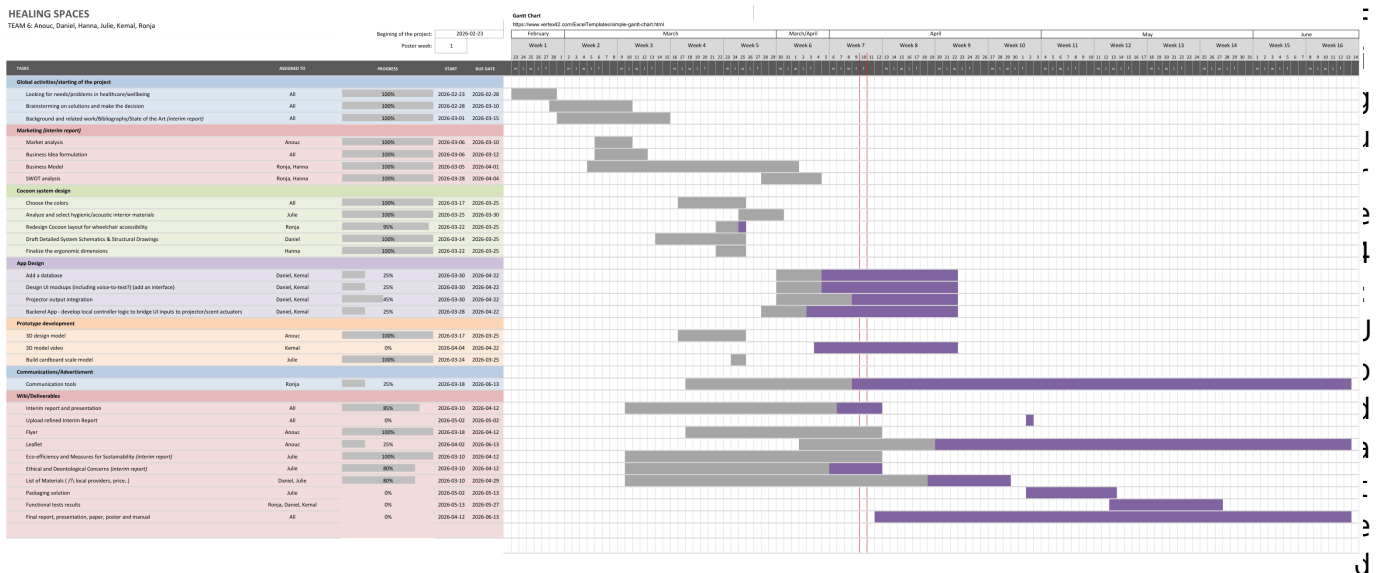
Figure 2: Tasks from the development phase

Wiki/Deliverables					
Interim report and presentation	All	<div style="width: 25%;"></div>	25%	2026-03-10	2026-04-12
Upload refined Interim Report	All	<div style="width: 0%;"></div>	0%	2026-05-02	2026-05-02
Flyer	Anouc	<div style="width: 80%;"></div>	80%	2026-03-18	2026-04-12
Leaflet	Anouc	<div style="width: 0%;"></div>	0%	2026-04-02	2026-04-12
Eco-efficiency and Measures for Sustainability (interim report)	Julie	<div style="width: 40%;"></div>	40%	2026-03-10	2026-04-12
Ethical and Deontological Concerns (interim report)	Julie	<div style="width: 50%;"></div>	50%	2026-03-10	2026-04-12
List of Materials (/ /\ local providers, price..)	Daniel, Julie	<div style="width: 30%;"></div>	30%	2026-03-10	2026-04-29
Packaging solution	Julie	<div style="width: 0%;"></div>	0%	2026-05-02	2026-05-13
Functional tests results	Ronja, Daniel, Kemal	<div style="width: 0%;"></div>	0%	2026-05-13	2026-05-27
Final report, presentation, paper, poster and manual	All	<div style="width: 0%;"></div>	0%	2026-04-12	2026-06-13

Figure 3: Deliverables and Tasks related to the Wiki

We divided the tasks according to our strengths and areas of expertise, but some compromises had to be made to meet the needs of the project's progress. For example, marketing tasks are primarily managed by Hanna and Ronja, even though their fields of study are unrelated to this topic.

Figure 4 presents the updated Gantt Chart.



Gantt Chart

Figure 5 contains the semester schedule (before the last update of the Gantt Chart for the interim report): each purple bar represents the planned time for its completion, with the start and end dates set. The gray area indicates the progress of the task, allowing us to see if we are ahead of schedule or if we still need to do more work on the task.

We observed that the beginning of the project was lengthy in terms of identifying the problem and potential solutions. Indeed, we had several different ideas, and we were only recently able to choose and focus on the final topic of our project. This required a great deal of time for reflection, discussion, and research, some of which were successful, others not. We now have to complete numerous tasks within the same timeframe, some with imminent deadlines; these are the tasks we must focus on first.

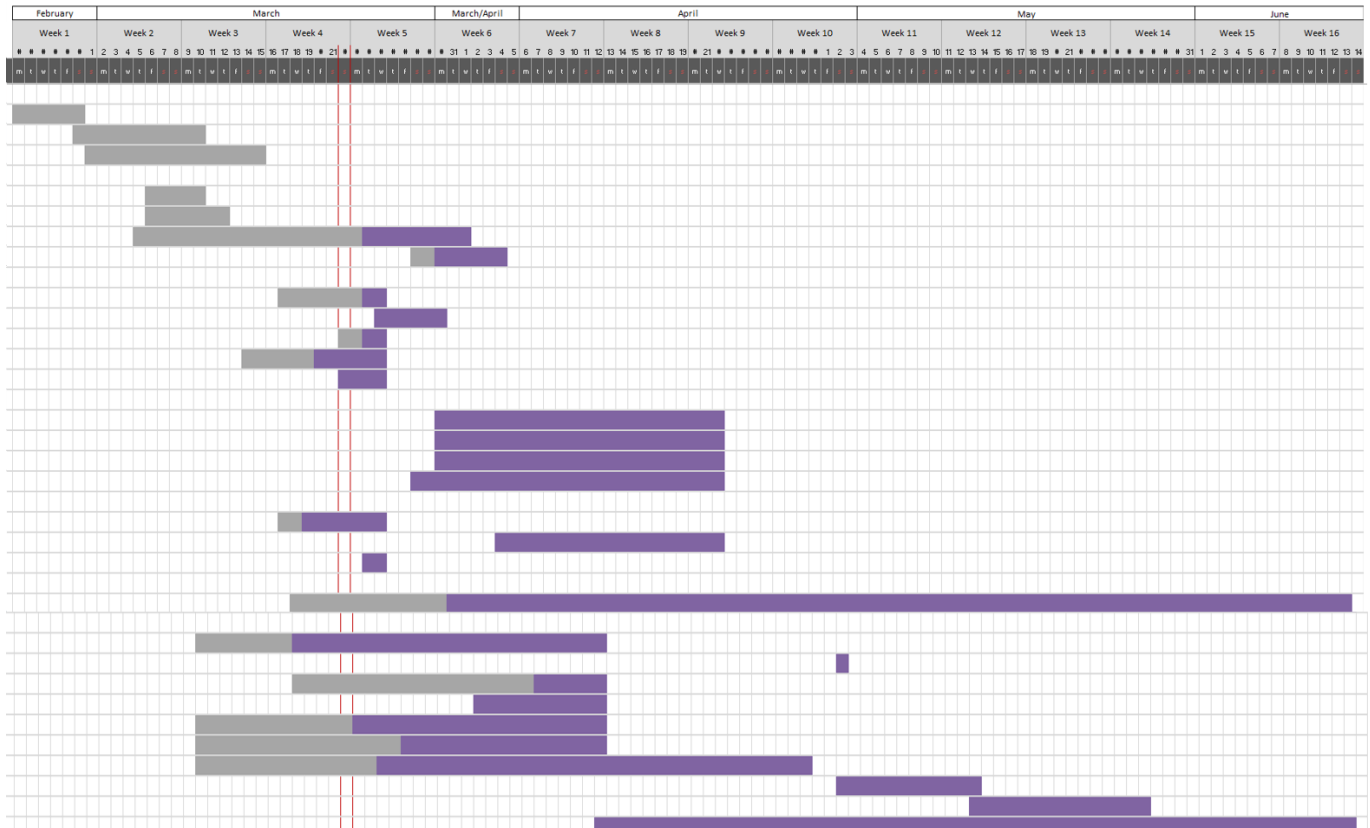


Figure 5: Gantt chart with, for each task, a bar indicating the task completion time (in purple) and its progress (in grey).

2. Sprint backlog and sprints created in Planner on Jira:

First of all, discovering and using Jira was not easy for our team. Despite the explanations that we thought we understood, some parameters and steps were not completed successfully on time, notably the timely launch of certain sprints.

Figure 6 is one of the first sprint we organized (but forgot to launch it on time).

Figure 7 is the last sprint we launched, which takes place from April 7th to 14th.

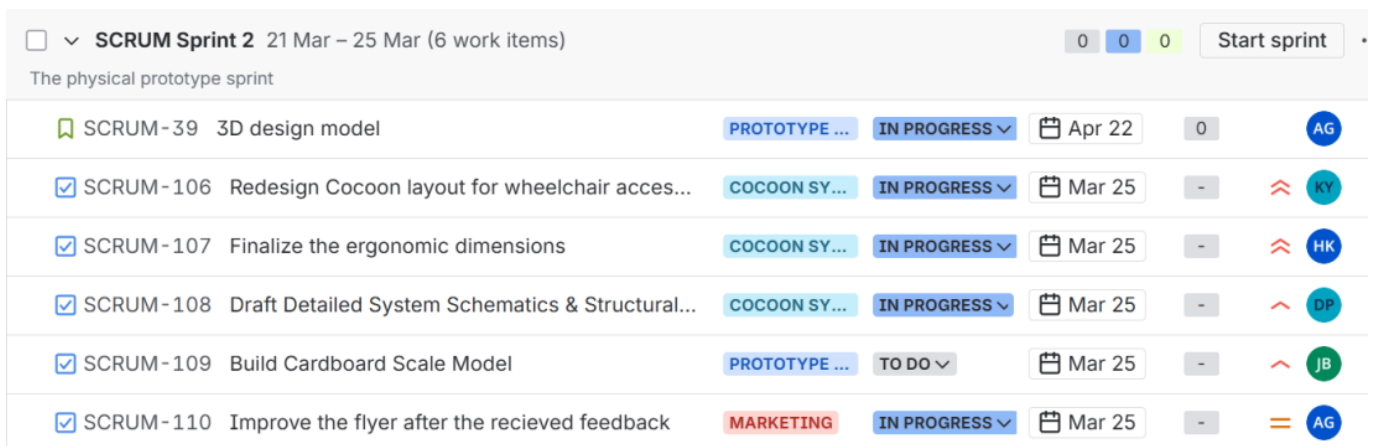


Figure 6: Scrum Sprint 2

SCRUM Sprint 3 7 Apr – 14 Apr (8 work items)		0	0	0	Complete sprint
Materials, wiki and preparing the interim presentation					
SCRUM-115	Start page	DELIVERABLES/WIKI	DONE	Apr 1	DP
SCRUM-111	Interim report and presentation	DELIVERABLES/WIKI	IN PROGRESS	Apr 12	RK
SCRUM-34	Analyze and select hygienic/aco...	COCOON SYSTEM DE...	DONE	Mar 30	JB
SCRUM-112	Final List of Materials LOCAL pr...	DELIVERABLES/WIKI	IN PROGRESS	Apr 29	KY
SCRUM-107	Finalize the ergonomic dimensi...	COCOON SYSTEM DE...	DONE	Apr 1	HK
SCRUM-106	Redesign Cocoon layout for wh...	COCOON SYSTEM DE...	DONE	Apr 1	KY
SCRUM-74	Flyer	DELIVERABLES/WIKI	DONE	Apr 12	AG
SCRUM-117	Detailed Schematics few chang...	PROTOTYPE DEVELOP...	DONE	Apr 1	DP

Figure 7: Scrum Sprint 3

Figure 8 is the curent backlog (edited on April 9th) with tasks that still need to be completed.

Backlog (10 work items)		0	13	0	Create sprint	
SCRUM-39	3D design model	PROTOTYPE DEVELOP...	IN PROGRESS	Apr 22	0	AG
SCRUM-40	3D model video	PROTOTYPE DEVELOP...	TO DO	Apr 22	-	KY
SCRUM-51	Add a database	APP DESIGN	IN PROGRESS	Apr 22	-	KY
SCRUM-52	Design UI mockups (including voice-to-text?) (add an interface)	APP DESIGN	IN PROGRESS	Apr 22	-	DP
SCRUM-104	Backend App - develop local controller logic to bridge UI inputs to ...	APP DESIGN	IN PROGRESS	Apr 22	13	DP
SCRUM-98	Projector output integration	APP DESIGN	IN PROGRESS	Apr 22	-	DP
SCRUM-60	Ethics and Deontology	DELIVERABLES/WIKI	IN PROGRESS	Apr 12	-	AG
SCRUM-47	Logbook	DELIVERABLES/WIKI	IN PROGRESS	-	-	HK
SCRUM-73	Communication tools	ADVERTISEMENT	IN PROGRESS	-	-	RK
SCRUM-75	Leaflet	DELIVERABLES/WIKI	IN PROGRESS	Jun 13	-	AG

Figure 8: Last backlog edited on April 9th

Finally, 9 is the Jira planner in which we created the Epics, Stories, and corresponding tasks.

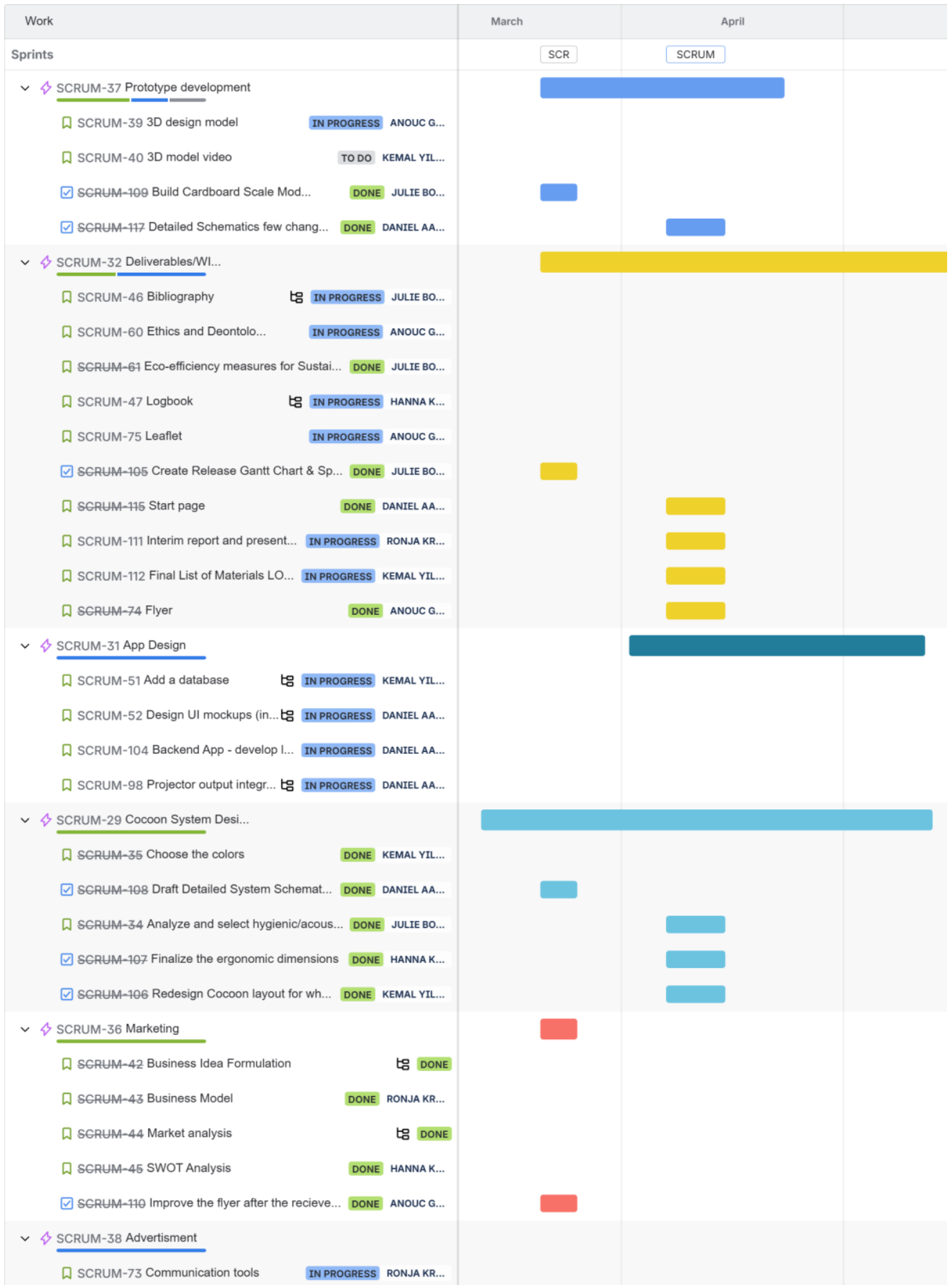


Figure 9: Jira Planner

3. Prioritization, estimation process and underlying challenges

We tried to prioritize tasks based on the deadlines and deliverables to respect, but it was also based on our estimated workload and the time it would take.

The tricky part was finding compromises based on each person's areas of expertise and the time the tasks could take.

Provide a summary of the sprints that were executed, along with sprint goals.

Sprint Outcomes

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

Sprint Evaluations

Include the summary of all the sprint retrospectives, including any actions implemented as part of the team's continuous improvement strategy.

Summary

Provide here the conclusions of this chapter and make the bridge to the next chapter.

From:

<https://www.eps2026-wiki6.dee.isep.ipp.pt/> - **EPS@ISEP**

Permanent link:

<https://www.eps2026-wiki6.dee.isep.ipp.pt/doku.php?id=report:prm>

Last update: **2026/04/21 14:13**

