

Project Milestone 2: Prototyping Submission

There are five parts to this submission. Each subpart is meant to be completed as a group, by discussion among group members.

1. Market Research (2 points):

Research existing products similar to your idea. Identify their weaknesses, limitations, or areas where they could be improved. Use these findings to make your product smarter and tailor your core concept to potential users.

2. Feasibility Assessment (2 points):

Engage in critical reflection and thoughtful reasoning to evaluate your idea's feasibility (in the scope of this course). Discuss the technical, legal, and ethical aspects of your idea.

3. Form Factor (4 points):

With the help of drawings clarify the following aspects of your product's physical form:

- Physical appearance
- Affordances
- Size estimation – consider a reasonable energy source such as a battery
- Materials that align with design goals
- Configuration for user-centric functionality and interactions

4. Advanced Mockup (10 points):

Use 3D CAD software like Fusion360 or a vector-based graphics tool to design a prototype.

5. Reflection (2 points):

- A brief of your understanding, experience, knowledge, learning process, challenges faced, and insights gained on the task and the process, submitted as a group.
- Must also outline the allocation of work for each group member.
- This reflection must not exceed one page.

Deliverables

Deadline: Tuesday, 03.12.2024, 23:59h

Group Submission of a *.zip archive "group[number]_project_prototyping.zip" to TUWEL, containing the following files:

- A *.pdf of your market research (max. 0.5 page)
- A *.pdf of your feasibility assessment (max. 0.5 page)
- A *.pdf of your form factor descriptions (max. 1 page)
- Depending on your chosen tool, hand in only **one** of these formats:
 - 3D CAD file (*.f3d [preferred] or *.STEP)
 - Vector graphics file
- A *.jpg or *.png of your rendered prototype
- A *.pdf of your reflection (max. 1 page)