

Design project stage 2: Concept development

Submission guidelines

- The teams need to consolidate the concepts after working on feedbacks on ideation. The guidelines for consolidation are enclosed along-with.
- **Each team** will finalize **3 concepts** that are substantially different in configuration and/or working principle.
- Submit: Only ONE file to be submitted per team; make sure to mention your **names and roll numbers** on the first slide. Maintain the terminology used in the following guideline.

Deliverables

- A. SINGLE *.PDF file;** made with slide-based presentation to explain concepts (include sketches and photographs of mock-ups)
- B. Video recording** explaining concepts (5 minute); all the team members will participate (Upload on your own drive, embed link, share viewing permissions)

3 big concepts:

Examples of mock-ups and sketches are as mentioned below in the document for your reference.

Concept sketches (Of each concept, as many required to explain)

The sketches for concepts should demonstrate the following

- **Human interaction** – sketches demonstrating how people will use it (refer to the examples incorporate)
- **Product environment** (how and where people will use it)
- **Details that cannot be explained through mock-ups** (due limitation of materials /complexity of design)

Low fidelity mock-ups

Choose materials that best simulate the intended materials and are available around. (DO NOT use workshop technologies / expensive materials for these) You may use parts from existing products. The mock-ups should demonstrate the following.

- **Product configuration:** How the structure and parts come together to make a complete product, tentative size, scale
- **Usability:** demonstrate how the given task will be performed using the product (a few aspects can be 'make-believe' similar to how children play) in the given environment

- **How does the product work:** working principle and addressing the design opportunities?
- **Details:** Any details that are critical for the product showing mechanisms / joinery / usability

Slide-based presentation

The purpose of this presentation is to document the design stage and help you with the presenting it an audience. Note that the importance will be given to how the concepts solve the problems and their representation in sketches and mock-ups. The focus has to be the communication of the concepts; and how convincingly the concepts are demonstrated, avoid 'decoration' of the slides/ fancy templates.

Slide order as follows

1. Project brief + Team name + Student names & roll numbers (2 slides)

(State the revised project brief only if you have after the feedback)

Need statement accompanied by

- User group
- Environment/ context
- Design opportunities: 3-5 specific issues in a concise manner

2. Concept presentation (6-8 slides):

Sketches and mock-ups of 3 consolidated concepts

Use materials from waste, make use of existing shapes and properties of materials/ objects for the low fidelity mock-ups.

3. Annexure (around 3-5 slides):

Not to be presented in the recorded video. Mention the learnings and challenges faced in making mock-ups e.g. identifying materials. You may include failed attempts/ rejected options.

Examples for sketches:	Examples of mock-up / proof of concept
	
<p>Spice/ condiment dispenser.</p> <p>Notice the environment shown in light lines. Interaction with the product is explained with human figure/ hands and arrows.</p>	<p>The concept proposes metal pipes in the final product; wheels will need work later. Smart use of paper, pipes, compartments and foam for wheels. Ref: https://helixdesign.com/tangents/new-productdevelopment-process-importanceprototyping/</p>
	
<p>The product (backpack) sketch demonstrates the configuration, adjustments of belt and how a person can use it (sideways, on back and how will they mount it on a hook when not using it)</p>	<p>Validation for preservation of food (paneer) using readymade terracotta and SS utensils (Documented over a few days)</p>

	
<p>The environment/ context has been demonstrated well. The details have been enlarged to demonstrate. You may use an actual photograph of a person and draw the product on him/her.</p>	<p>The mock up is good to understand product size, interaction; with the placement of handles, buttons, speaker, and the paper scroll to understand the screens. <i>Ref: https://www.ruturaj.design/cassette.html</i></p>

Note: the sketches and mock-ups demonstrate very specific aspects of mechanisms/ usability. The 'validation' or preliminary testing is the main objective.

Reference videos for low fidelity prototyping

[Video 1](#)

[Video 2](#)

[Video 3](#)

[Video 4](#)

General Notes:

- It is of utmost importance that each team works **TOGETHER** to discuss, plan, and have the best possible communication.
- The limitation on the number of slides is flexible; but 5 min. limitation for the video needs to be strictly followed.
- Make sure to carefully read the instructions a couple of times as a group; note the deadline.
- Do not be creative with the format and instructions. The exercises are thoughtfully planned with certain learning objectives for each one.