



Intro to Design Thinking

Semester-V Unit-IV

SEMESTER –V

UNIT-4

DAY -1

PROTOTYPING

WHAT IS A PROTOTYPE?

A prototype is a simple model of an idea or a solution that has been proposed for a given problem statement.

Design Thinking teams share the prototype with end users to quickly test or validate their ideas without getting into actual implementation phases.

How does a prototype help?

A prototype helps to quickly get answers to the following questions:

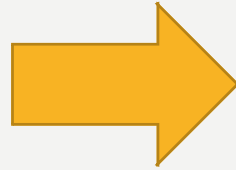
- Do the users think that the prototype can scale up to an actual product/service that can solve their challenges?
- Do they think it is all wrong and will not serve their purpose?
- What changes would the users suggest in the prototype?

SIMPLE TO ELABORATE PROTOTYPES



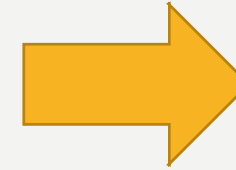
**Simple
(Low-fidelity)**

Sketch, paper cut-out, high level process flow, schematic diagram, short skit



**Average
(Medium-fidelity)**

Detailed storyboards or sketches, paper / hard crafted models, detailed process flow, detailed diagram



**Elaborate
(High-fidelity)**

Wireframes, functional prototypes, etc.

WHAT HAPPENS NEXT?

Here's a quick activity.

You just learnt that a prototype is shared with the end users (for whom we are trying to solve the problem) to get their feedback on it.

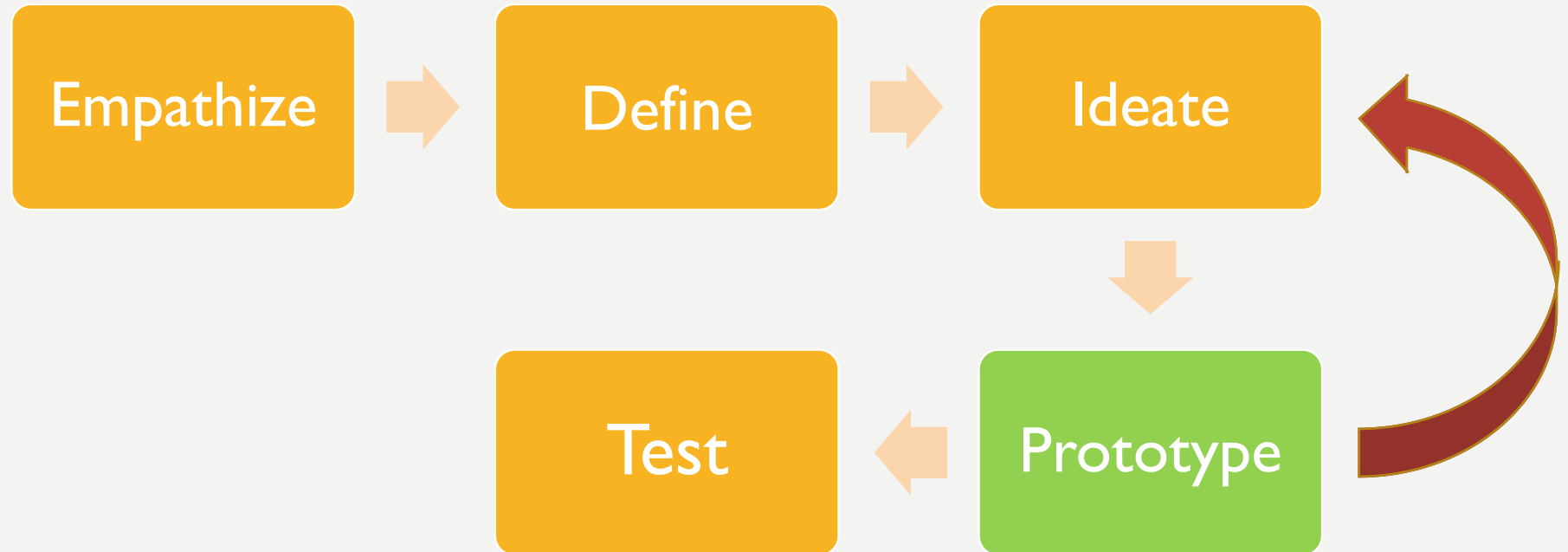
What do you think happens next?

You have one minute to think and then type your answer into the chat box.

Take a minute to think
and type in your
thoughts

FAIL FAST, FAIL OFTEN

Yes, prototype is the phase where iterations begin in the Design Thinking process. Based on user inputs, the first simple (low-fidelity) prototype is modified, updated and fine-tuned into elaborate (high-fidelity) prototypes and finally a functional prototype.



Fail fast and often as innovative breakthroughs arise from failure.

DAY -2

**PROTOTYPE
YOUR IDEA**

LINKS FOR PROTOTYPING

- <https://www.youtube.com/watch?v=85muhAaySps>
- <https://www.youtube.com/watch?v=JMjozqJS44M>
- <https://www.youtube.com/watch?v=y20E3qBmHpg>
- <https://www.youtube.com/watch?v=yafaGNFu8Eg>
- https://www.youtube.com/watch?v=k_9Q-KDSb9o
- https://www.youtube.com/watch?v=x48qOA2Z_xQ
- <https://www.youtube.com/watch?v=KWGBGTGryFk> - digital
- <https://www.youtube.com/watch?v=lusOgox4xMI> – native
- https://www.youtube.com/watch?v=JMjozqJS44M&list=RDQM-Ttdev0fs3k&start_radio=1 - paper

DIFFERENT WAYS OF PROTOTYPING

- Role playing e.g. Ideo team actually trying to fit into a small space for airline service design (how close can you get when you are sleeping) or restaurant workflow – remap the flow of employees as they are producing food to make it more efficient and higher quality

<https://www.youtube.com/watch?v=hkAFdlrTR00>

- Storyboards detailing the journey
- <https://www.youtube.com/watch?v=rv5N6wXjVNg>
- <https://www.youtube.com/watch?v=bGgaaXYe6nc>
- Creating small videos to highlight the multiple touchpoints of an experience
- https://www.youtube.com/watch?v=x48qOA2Z_xQ
- Mock ups
- <https://www.youtube.com/watch?v=Vx8jyVTazew>
- Paper Prototype, Digital Prototype, Native Prototyping

CREATE A PROTOTYPE -

- A Mobile App to improve canteen services at your university campus
- An ideal school building & an ideal classroom
- An eco-friendly residential apartment
- Furniture for your classroom – chair, table, cupboards, etc.
- Masks to prevent corona