







D'source Project Open Design School

MoE's Innovation Cell



Prototyping Part 3:
Human Factors / Ergonomics
Systems Mapping
Hi-fidelity prototyping
3D Modelling & Printing

Design Thinking & Innovation Project

Section: P13, Week 13



Design Thinking & Innovation (DT&I)

Section: P13

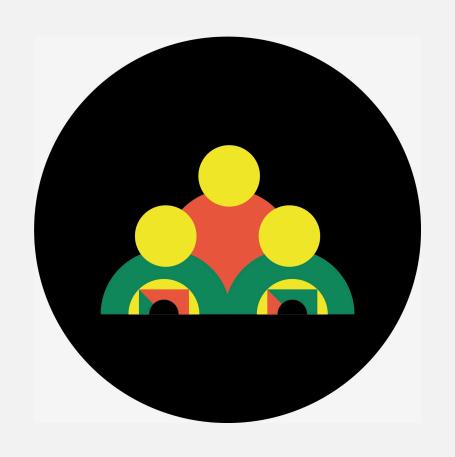
Week 13



Design Thinking & Innovation (DT&I)

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IDC School of Design, IIT Bombay



DT&I Project

P12 Module P12:
Human Factors /
Ergonomics
Systems Mapping
Hi-fidelity prototyping
3D Modelling & Printing



Project:



Content

P13.1: Human Factors/ Ergonomics

P13.1: Systems Mapping

P13.1: Hi-fidelity Prototyping

P13.1: 3D Modelling and Printing





P13.1

DT&I Project:

Human Factors / Ergonomics
Systems Mapping
Hi-fidelity prototyping
3D Modelling & Printing



Why is 'Prototyping' Part 3 Important?



Hard Prototyping part 3 takes you to the final version of the idea or concept. And, helps one to visualize, make it tangible, test, get feedback and change/iterate.

Prototyping Part 3 involves Hard Prototyping, the next version of ideas and concepts. At this point of time, we have discussed the merits of using Human Factors (Ergonomics) to make sure the design aligns with the capabilities and limitations of the user. Systems mapping gives you an worldview of the solution interconnecting with the parts of the system. Hard prototyping makes the solution come alive with all its details.

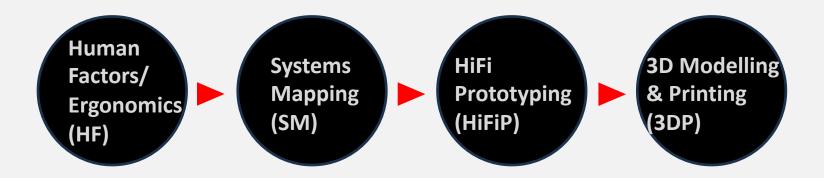
Soft > Medium > Hard



Prototype part 3:

(HF > SM >HiFiP> 3DP)







DT&I Project – Part 3 Steps:





1. Note down the Final Concept chosen



2. Apply Human Factors to the concept

- Physical, Cognitive and Social



3. Make Systems
Level Mapping of
your final concept
to get an overview



4. Make use of High Fidelity Prototyping with finer details, textures and refinements



5. Make use of 3D Modelling and Digital Printing techniques



6. Get feedback from users



DT&I Project

Section: P13

Week 13



DT&I Course – Week 13:



DT&I Process (20%)

- > Human Factors / Ergonomics
- > Systems Mapping > Hi-fidelity prototyping
- > 3D Modelling & Printing



DT&I Tools (20%)

- > Human Factors / Ergonomics
- > Systems Mapping
- > 3D Modelling & Printing



DT&I Project (50%)

- > Apply > Human Factors / Ergonomics
- > Systems Mapping
- > Hi-fidelity prototyping > Hi-fidelity prototyping
 - > 3D Modelling & Printing



DT&I **Cast Study** (10%)

> Case Study Project: **Design Of Bamboo Sliver Furniture**



Supporting Organizations:

D'source

D'source Project



Open Design School



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Presented by: Prof. Ravi Poovaiah



D'source Project





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End Title Music:

C P Narayan







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