

Final Design Submission

Design Thinking & Innovation
Tools



D'source Project



Open Design School



MoE's Innovation Cell

Section: T16, Week 16



**THINK!
DESIGN**

Design Thinking & Innovation (DT&I)

Section: T16

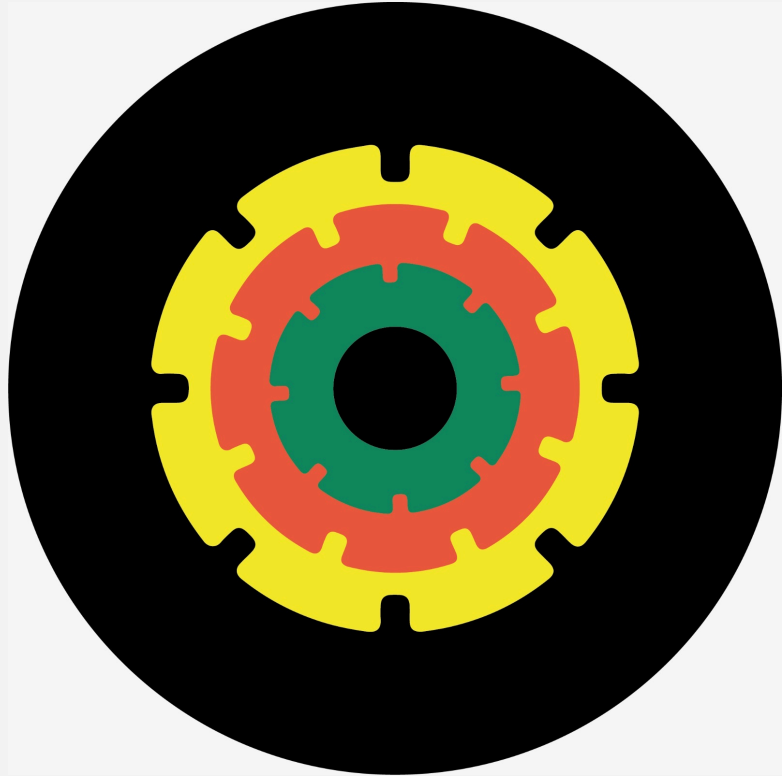
Week 16



**THINK!
DESIGN**

Design Thinking & Innovation (DT&I)

Prof. Ravi Poovaiah
IDC School of Design, IIT Bombay



DT&I Tools

T16 Final Submission details

Module T16:

THINK!
DESIGN



T16.1

Final Design Submission



What to Submit?

- finalise all aspects of the design solution and
- document the whole design process from week 1 to 16 in the form of:
 - (a) a written report and
 - (b) a slide presentation.
- the link for submissions will be sent over the email



Overview of what to submit?

Presentation should include

- . WHO - for whom it was designed
- . WHAT - what was designed?
- . WHY - why was this an important problem to address?
- . Issues - what were the problems encountered?
- . HOW - what was the process used in the design?
- . Design - what was designed?
- . show iterations of the design evolution
- . demonstrate your final design (maybe using a scenario)
- . show highlights of the prototyping story
- . Next steps?
- . References and acknowledgments



Details of the submission:

DT&I Project week 1 to 16 Report + Presentation:

Week 1 to 16 Report:

- the report documents the summary progress of the project from week 1 to 16 mainly in text + Images format

Number of pages:

- the report has 1-2 page/s for every week

Specifications:

- A4 size, vertical format, 11 point type, Line spacing should be 1.5 spacing times the font size.

Week 1 to 16 Presentation Slides / Pages:

- The presentation documents the summary progress of the project from week 1 to 16 in visual format

- the presentation includes the mappings and tables + the use of 1 tool for every 2 weeks

Number of slides:

- The presentation has 1-2 slides for every week

Specifications:

- the presentation slide is of 254mm x 143mm or 16:9 ratio, horizontal format, 14 point type, single spaced



Final Submission steps:

(Finalise Design > Report + Presentation > Submission)



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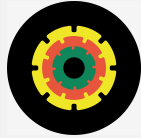
T16.2

Presentation Essentials and Tips



Presentation Essentials:

- a. Present in an engaging and crisp manner
- b. Design the slides/visuals to reflect the relevance of your topic
- c. Use your communication design skills to make the presentation visual
- d. Design proper layout; use appropriate type, colour and background
- e. It makes sense to have main titles, sub titles and then running text/images
- f. Have a summary/content slide in the beginning
- g. Make good use of appropriate medias in the presentation
- h. Use appropriately theatre, drama, story, scenarios, video, etc. to convey your ideas
- i. Preparing a script is a good idea – reading text from the slide should be avoided



Presentation Tips:

- a. Never underestimate the need to rehearse. This can be usefully done alone, with team members, and with novice audiences. Video tape your self (to get confidence).
- b. Never underestimate how long it takes to describe things clearly to a novice audience.
- c. Never underestimate how little the audience knows about what is so interesting about your project.
- d. Do not be dull when you speak, audiences want to engage in your enthusiasm.
- e. Make slides visible from the back of a room (try them out!)
- f. Do not talk over any audio in your presentation.

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T16.3

Design Work Fundamentals



Design Work Fundamentals:

Experience the Problem:

It is easy to understand the problem if you role play the user and experience the problem by going to the environment and trying out the product or service by yourselves.

Group Inquiry and Ideation:

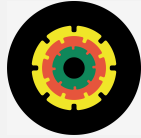
Ask questions. Brainstorm. One needs to build on another's idea. No criticising even if the idea is ridiculous. As Edward de Bono say's 'think lateral and not just vertical'.

Interdisciplinary Design Efforts:

It is valuable to have an inter disciplinary team members who have different skills. For example a combination of Engineer, architect and Graphic Designer can bring in different skills and knowledge into the group.

Co-operative and Collaborative Design Process:

Work together co-operatively as small groups (around 2/3) to search, discuss, ideate, work, brainstorm and body-storm so as to cross relate experiences and expertise



Design Work Fundamentals . . .

Participatory Design Process:

Involve users (children and others) in various stages of the design process. Observe them in action, converse with them, show them your ideas, get feedback, etc.

Don't give up:

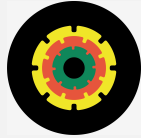
Conviction, courage, taking risks, try out even crazy or bad ideas, being positive, getting involved.

Sharable 'Note Book':

Start an open sharable note book to document your ideas. Take notes, look for key words, draw doodles, sketches, make diagrams, network connections, mind maps, annotate, create wish list, etc.

Document the Process:

Document interactions, usability, activities, feedback, etc... Use digital photography to observe users, document users in action, and build narrative stories about their experiences.



Design Work Fundamentals . . .

Space in the class/home for the design project:

The wall in your classroom/home becomes the space to display all that is connected with the design project – references, articles, pictures, photos, mind maps, diagrams, keywords, etc.

Make Use of Visualization Skills:


Make use of your visualization and story building skills for representations in all the design stages – visually mapping of information, visualizing concepts through sketches, scenario building, final presentations, etc.

Presentation Methods:

Let it be engaging and crisp – include project goals, ideas and process of design. Make good use of appropriate medias in the presentation. Use appropriately theatre, drama, story, scenarios, video, etc. to convey your ideas .

Learning a skill that you do not have:

It is always a good objective to have to acquire a skill that you may not already have while doing this project – this could be sketching skills, typographic skills, oral presentation skills, etc.



**Thanks very
much for
Listening**

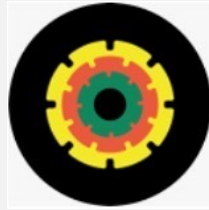
DT&I Tools
Section: T16
Week 16

DT&I Tools – Week 1-8:



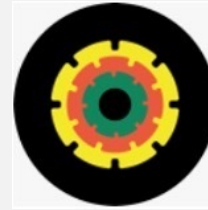
Week 1

> Brain-Storming



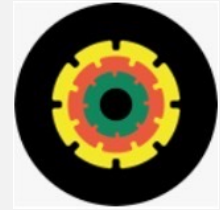
Week 2

> Mind-Mapping



Week 3

> 5W + 1H Questions
> 5W + 1H Matrix



Week 4

> User Participant Mapping

Week 5

> Contextual Inquiry

Week 6

> Questionnaires
> Cue Cards

Week 7

> Artifact Mapping,
> Activity Mapping and
> Spatial Mappings

Week 8

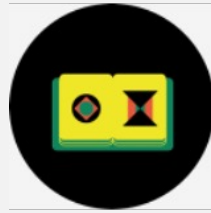
> Personas
> OIOR Table

DT&I Tools – Week 9-16:



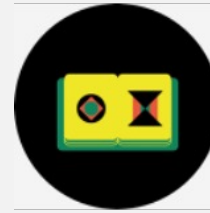
Week 9

- > Brainstorming
- > Idea Sketching
- > SCAMPER
- > Lateral Thinking



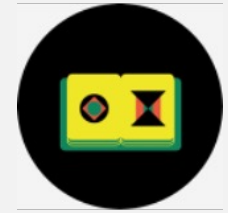
Week 10

- > Synectics
- > Analogical Thinking
- > Metaphors,
- > Concept Evaluation
- > Concept Maps



Week 11

- > Prototyping Part 1
- > Soft Prototype
- > 'Rough Sketches',
- > Paper Prototype
- > Scenarios/ Storyboarding



Week 12

- > MVP
- > Proof of Concept (PoC)
- > Info Architecture
- > Experience Design

Week 13

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

Week 14

- > Usability Studies
- > Iterate and Finalise Design

Week 15

- > Business Model
- > Pitch Presentation
- > IP, Creative Commons, Open Source & Design

Week 16

- > Final Design
- > Report
- > Presentation

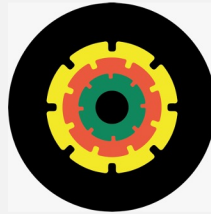
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DT&I Course – Week 16:



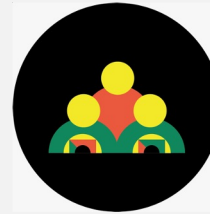
DT&I
Process
(20%)

- > Final Design
- > Report
- > Presentation



DT&I
Tools
(20%)

- > Report
- > Presentation Tips



DT&I
Project
(50%)

- > Final Report Submission
- > Final Presentation Submission



DT&I
Cast Study
(10%)

- Expert Discourse:
- > Innovation and Creativity



Supporting Organizations:



D'source Project



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MoE's Innovation Cell



Credits:

Presented by:
Prof. Ravi Poovaiah



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Credits:

Camera & Editing:
Santosh Sonawane



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Credits:

Think Design Animation:
Rajiv Sarkar



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Credits:

Graphic Icons:
Shweta Pathare



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Credits:

End Title Music:
C P Narayan



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Credits:

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