

Lecture 13, Oct 8, 2021

Types of Design

1. Conceptual Design: Rough initial ideas
 - e.g. What type of bridge do we want? Suspension, truss, etc
2. Embodiment Design: Specify details, prototypes
 - Hit the reference designs, guidelines, handbooks, etc
3. Detailed Design: Specific details
 - e.g. What specific fastener should we use?
 - Figure out every single little component, and step right into production
4. (Sometimes) Production (Re)design
 - “Make it work in *our context* with our materials, peoples, etc”

Possible Ways to Frame

- There are many ways to frame the same problem:
 1. Design for the behaviour
 2. Design out of the behaviour
 3. Change the interaction between user and object
 4. Question the concept of the object
- Reference designs help you decide which way of framing is more opportunistic

Design Briefs

- The design brief answers:
 - Am I able to resolve it? (at what design level)
 - What is the need for it? Is it worth my time?
 - Has it already been solved? (reference designs)
 - What does success look like? (requirements)
 - How can I approach it? (which framing is in scope)
- What is the opportunity? (Purpose)
 - What is the observed behaviour? (Background)
 - Why is it interesting or worth pursuing? (Justification)
 - What do we have to go on? (Background)
 - What has been done before? (Reference Designs)
 - Who cares? (Stakeholders)