

Lecture 29, Nov 23, 2021

Requirements for Design Critique

1. Justify “best” concept
 - Should evoke the reaction of “I believe in this design”, or “I know why I should not believe in this design”
 - If the final design doesn’t satisfy the objectives, it’s still a legitimate conclusion to have, you just have to say why, and still identify the one that sucks least
 - Needs sufficient embodiment work (critical components have been developed enough to demonstrate that the concept is workable)
 - Needs detailed design in some areas so critical decisions can be made because the details are known
2. Demonstrate sufficient verification
 - Detailed objectives:
 1. Prototypes for all 4
 1. Prototypes need to all have specific purposes
 2. Measurements for every metric
 3. Need comparison matrices (use as base)
 4. Everyone needs to be on the same page
 5. Simple reasons why we did what we did
 - Required:
 - Need concepts to test, need measurements to take
 - If we have very diverse ideas, some designs might not have measurements for some metrics

Problem Solution Structure

1. Describe the situation from which the problem emerges
2. Isolate the problem (design brief)
 - This part is already done, so keep it short
3. Explain the solutions
4. Evaluate the solution
 - Research
 - Testing
 - For each, identify what you have learned and what you hope to learn from it
 - Prototypes
 - For each, identify what you have learned and what you hope to learn from it
 - “Candidate A is better than Candidate B”
 - ... in part because of *this criterion* that allows us to compare *these measurements* we made
 - ... by using *these prototypes* as inputs to *this measurement process*
 - ... which has *this unit* and focuses on *this characteristic*
 - ... which relates to *these objectives*
 - ... which we elicited from *these stakeholders*”
 - * Confidence is limited to the confidence level of the prototypes

Presentation Storyboard

1. Find your highlight point
 - What does your audience care about?
 - This could be the best design or why the designs don’t work
 - The final design
 - A critical test that gives you confidence
 - A key relationship to a reference design or research
 - An aspect of your process or decision making
 - The most unbelievable point
 - Don’t make it a mystery

- Focus on your degree of confidence
 - Watch teammates for things that make you say “we have to talk about that next week”
 - Record all your activities!
2. Create a rough outline
 3. Remove anything weak
 - Don't need too much story or detail on things that don't matter
 4. Create the learning arc/refined outline
 - How will the audience get to the highlight?
 5. Sketch slides
 6. Build slides
 7. Practice and refine

Presentation Tips

1. Be ruthless about time control
2. Start with a substantive overview
 - Talk about what you're going to talk about
3. Make meaningful hand-offs
 - Introduce the next person that's speaking and say what they'll be speaking
4. Focus, even when you're not speaking
5. Support the speaker