

HW9: Low-Fi Prototypes

Warm up due Wednesday at 4pm (grace period until 11:59pm)

Main due Monday at 4pm on Courseworks (no grace period – feedback will be given in class)

Note: if your TA feedback meetings are Tuesdays, then you may have slightly different deadlines. Please turn in assignments according to instructions given by your TA.

Warm-up:

- **Group.** For each member of the group, what topic will each group member continue to explore in the prototyping stage? (Everyone should list every group member and their topic)
- **Group.** For each topic:
 - How do you imagine it meet the requirements?
 - **Domain:** What is the domain?
 - **Topic:** What is the specific topic that can be taught in 10 minutes?
 - **Expert:** Who in your group already knows this topic?
 - For each person – what is their background on the topic? Describe in a short sentence.
 - **User:** Who in the class has said that they are interested in learning this?
 - What’s their name and a few biographical details.
 - Why is that person interesting is learning it, including a real-world example of something that truly motivates them to know this?
 - *Example: Lydia is a 30-something NBA fan who regularly watches games with her husband and his friends. Although she watches the NBA a lot but is always confused about what a pick and roll is. She’s liked it explained so that she can identify it while she is watching a game.*
 - Show a picture of that person.
 - **Media:** What media would you use?
 - *Example: Videos of a pick and roll in slow motion, and paused at key steps.*
 - **Quiz:** What would you quiz them on to access if they have learned the material?
 - What is one positive piece of feedback your TA gave you on this idea?
 - What is one negative or cautionary piece of feedback your TA gave you on this idea? (this might be a caution like “this is risky because there’s not enough data” or “this has the danger of being too simple, so you have to make sure the topic is deep enough, etc”)

What to turn in:

- A PDF/image of a Google Slide with the answers for each of the topics (one per group member)

Although this work is all being done collectively, everyone in the group must turn in the work individually. (You may turn in identical work)

Note: You may not turn in a link of a google Slide – because then you could edit it after turning it.

Main Assignment

Each group member will create their own Google Doc Prototype of how you would **teach a topic interactively through media**. This will require finding (or creating) some media. You don't have to find/create all of the media, but you need to have enough to be a proof of concept. If you don't know if you have enough, contact your TA.

When thinking of interactive approaches for learning, let yourself be inspired by other good examples of learning in multiple setting – other apps, in-class learning, informal learning, perhaps even examples shown in class etc. (think about the competitor analysis you did.) Don't worry too much about being “novel” or “creative” – as you apply the interactive technique to your own domain and problem it will naturally evolve to be different from the examples you are inspired by. Remember, Sal Khan wasn't focused on being creative, he was focused on helping Nadia pass a fractions test. What he came up with was novel because he address a problem better than anyone had before.

Remember, the goal of a low-fidelity prototype is to determine if the design concept has end-to-end coherence. A good analogy is to think of the key frames of a movie. For each screen of the interface, you should know:

1. What is the subgoal/**state** the user is in?
2. What are the **options**? (what to do in the state to help accomplish their subgoal?)
3. How does the user **transition** to the next state(s)?

Remember, users need some choices in an interface to achieve their goal, but you should guide them towards a “golden path” by using good default selections for option whenever possible.

For each prototype create one Google Slide deck that has the following:

1. Topic information (remind your TA of the topic):
 - a. A slide with the title of the topic and who in your group was responsible for it.
 - b. A slide with the information from the warm up for this topic
2. Low-fidelity prototype
 - a. The interface should be broken down into 10-15 states, each with their own slide. Be sure users can navigate through them to achieve their goal. Probably 1 home screen, 5-8 slides for teaching the material and 5-8 states for quizzing users on the material
 - b. Include enough media to prototype the interactive technique. If you can't find media for that domain, you'll have to pick a different idea.
 - c. Once you create your google slides, print them to PDF to turn them in.
 - d. You will run this prototype on your TA (and possibly others) in class on Monday.

What to turn in:

For each topic, turn in:

1. A PDF of the slides
2. A link to the slides

Although this work is all being done collectively, everyone in the group must turn in the work individually. (You may turn in identical work)

FAQ: Why do we all have to turn in all the work? Isn't that redundant?

In team work, often the biggest challenge is working as a team. Everyone has a different schedule and find times to coordinate is hard. Everyone has a different personality and working style. It's hard to communicate effectively. Every teacher who has assigned teamwork immediately notices that the performance of the group is directly related to how well the team works together.

In this class, we try to facilitate group work by providing ways to break up the work amongst the team and then bring the work back together as a whole. I promise you, if you didn't have to turn bring your assignments together at least half the groups wouldn't know what the other team members are doing.

Yes, it's redundant, but in a good way. Team communication often requires redundancy to get everyone on the same page.

That's the intent of the structure of the homework. If this is not working for your team, please let your TA know, and let's work out something that is better for you.