HW8: Low-Fi Prototypes

Warm up due Friday at 11:59pm (grace period until 8am the following day)
Main due Wednesday at 1pm (or otherwise before your section starts) on Courseworks (no grace period – feedback will be given in class)

Note: if your TA feedback meetings are not Wednesdays 1-2:30, then you may have slightly different deadlines. Please turn in assignments according to instructions given by your TA.

Warm-up:
- **Group**: **Topic assignments for prototypes**. 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). Put all this information on one slide.
- **Group: Topic details**. For each topic, answer the following. Put the answers for each topic on a separate slide.
    - 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 why they want 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"
    - Who will you run your prototype on? (Either give a name or an idea of how you will find this person).

What to turn in:
- A PDF of a Google Slide deck with the answers for each of the topics
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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 to a Google Slide deck– 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.

Prototype. For each prototype create a 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 build in Google Slides as described in lecture.
    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, share them with your TA.
3. Run this prototype on a target user as described in class. Remember to listen to user feedback and look for any moments or confusion, or hesitation (or other critical incidents).
    a. Was the user able to make it through the prototype?
    b. Do you think the topic was too hard, too easy, or about right for a 10-minute lesson?

      c. Include a slide with 3-5 insights you learned from running the prototype. Include both positive and negative findings.
4. Be prepared to present your prototype and your findings during your TA section.

Prototype Assessment: After running all the prototypes decide where you think you what ideas you might want to keep working on.
1. If you are in a group, decide which prototypes you think are most promising and why. Explain this is a short write up (2-3 sentences).
2. If you are a 1-person group, decide if your prototype was reasonably successfully, or whether you might want to explore other topics.

What to turn in:
1. A PDF of the slides for your prototype only (not your group)
2. A link to the slides for your prototype only (not your group)
3. A PDF of a document assessing the prototype.