ASSIGNMENT 3 – STORYBOARD AND LOW-FI PROTOTYPES

DUE: NOVEMBER 17, 2022

OVERVIEW

Build a storyboard and paper prototypes for the early stages of your project's user interface, starting from the solution and value proposition you defined in Assignment 2. This assignment must be done in group: you can use the all the lab hours devoted to this assignment to start working on it and complete the work in the following days.

TASKS AND STORYBOARD

1. **Define 3 tasks.** These tasks should be core to the solution and the value proposition of your project, as per Assignment 2. You should have 1 simple task, 1 moderate, and 1 complex task. Remember that a task describes what a user is trying to achieve (*user behavior*), not how to complete the task itself (system features).
2. **Create a storyboard.** Start by defining the context, the actors, the problems/needs they have, and then how your solution help solving/satisfying them. Think about how your narrative will weave together your three tasks: the storyboard must represent at least two of the tasks just defined. The storyboard must be a "traditional" one (i.e., comic-strip-like). It should include 4 to 8 panels and fit on one A4 paper. Try to stay within one sheet of paper: use a second one *if and only if* you really need the space! It is also a good idea to use a *black thick pen* to draw your storyboard: this trick helps you in not focusing on details, while keeping the final result more visible once in digital format.

LOW-FI PROTOTYPES

1. **Brainstorm different ways to realize your solution.** Explore at least two different modalities (e.g., speech, AR/VR, touch, …, tablet, smartwatch, etc.) for realizing the goal of your solution, exemplified in the storyboard. A modality is either a way of interacting or a device type. Write down the two modalities you chose and why you selected them.
   Beware: If your theme already defines some modalities, you can pick one of them or merge one with a totally different modality (e.g., speech, smartwatch, etc.) for the second realization. For instance, if the theme is around "AR/VR", you can choose 1) AR and 2) VR, or 1) AR and 2) AR+speech, or…
2. **Make two paper prototypes.** Each prototype should clearly connect to your solution and value proposition, build upon the storyboard and tasks, and realize *one of the modalities* you chose.
   As a reminder, a paper prototype concretely shows all the fundamental elements, the major functionality, the main "screens" of a user interface, but it is realized with pen and paper, and it is hand drawn. Paper prototypes are really effective for rapid ideation.
   Create *hand-drawn* paper prototypes: in this way, you can focus on the concepts, on the information architecture, on the main functionality, and not on fine-tuning the pixels representing

the shadow of a button. Paper prototypes must be in *black and white*, since you do not need (nor want) to focus on visual design aesthetics (yet).
The realized paper prototypes should be *complete enough* for allowing teachers to understand the essence of your application and to guide a hypothetical new user through each of your three tasks. A prototype can contain entire screens, useful to show the initial state, or "cutouts", which are more appropriate for dynamic UI elements (e.g., dialog boxes or some particular menu items). Again, small details are not important right now (e.g., the copyright policy page) and do not need to be included.
Finally, the interface depicted in your paper prototypes should enable your target users to navigate, recover from errors, and change their minds. Ideally, a developer should be able to use your prototypes to create functional apps with a defined flow.

3. **Make two high-level flow diagrams.** For each prototype, write some captions, draw some arrows to explain the high-level flow of the "screens" of each prototype, so that it is easier to understand how it works. Those captions/arrows must not be in the paper prototype, but in a separate figure (which will include the "screens" of the prototype).
4. **Pick your best prototype to move forward.** Make a list of *pros and cons* for each prototype and give the reasoning for your choice: they could stem from your knowledge about your target users, from a quick trial with 1-2 people, from how well they cover the 3 tasks, from a motivated design reasoning/intuition (e.g., according to some guidelines or principles), or from a combination of them.
   If it makes sense, you can also consider moving some features from one prototype to the selected one (for example, if this minimizes some disadvantages of the selected prototype). In this case, keep track of any change that you plan to perform.

DELIVERABLES

Create a new directory called "A3" in your assigned group repository on GitHub and upload, by the deadline, a set of slides (in PDF) and the paper prototypes (their digital versions, as photos or scans, in two PDFs). Keep in mind that any other material might be useful when preparing the final report.

The slides should contain:

1. Intro
   a. Project title and team members
   b. Value proposition
   c. Problem/solution overview
2. Tasks and storyboard
   a. List of the simple, moderate, and complex tasks
   b. Storyboard: why you chose it, which are its strengths and weaknesses, and how well it achieves the identified goal/user need
3. Modalities exploration
   a. Overview of the alternatives you considered
   b. Present the two selected alternatives and the motivation
4. Paper prototype #1
   a. Include the high-level flow of the "screens" of your prototype
   b. How does it connect to the storyboard and the three tasks?

5. Paper prototype #2
    a. Include the high-level flow of the “screens” of your prototype
    b. How does it connect to the storyboard and the three tasks?
6. Selection rationale
    a. Report the top pros/cons for each prototype
    b. Which of the two prototypes did you choose?
    c. How do you choose? Give the reasoning of your choice
    d. If you are moving features from a prototype to the other: explain why and list the changes that the team plans to perform