ASSIGNMENT 5 – HIGH FIDELITY PROTOTYPE

DUE: 7 DAYS BEFORE EACH EXAM DATE

OVERVIEW

Build an interactive high-fidelity prototype with code and conduct a usability test on it. This assignment must be done in group: you can use all the lab hours devoted to this assignment to start working on it and complete the work in the following weeks.

PREPARATION AND EXECUTION

1. **Create an interactive high-fidelity prototype with code.** Starting from the screens of the medium-fidelity prototype and the plan you made in Assignment 4, develop your code prototype to be sufficient for a usability test, with the programming languages and frameworks you prefer. We suggest you rely on what you learned in previous courses (e.g., Web Applications I), whenever possible.
   The underlying functionality of the prototype does not have to work completely, but a participant should be able to complete *all* your three tasks. Unlike your med-fi prototype, the hi-fi prototype must look and feel like a real application. Simulating a realistic experience is more important than back-end computation or scalability. As for the other prototypes, the trivial (yet mandatory) steps and some of the underlying functionality does not have to be fully implemented. Data should be stored in a persistent way. See the "expectations" below for more details.

2. **Conduct a usability test.** Conduct a usability test with <u>at least</u> 1 participant per team member (i.e., if the group has 4 members, you must do 4 tests). Participants should fall within your target user base. You may test with no more than 1 Politecnico student unless you have permission from the teacher of your slot.
   Do not test with people you know well and, especially, people who have already seen or be involved in your project. Follow the procedure <u>described and exemplified in class</u> and write the details in a *test protocol* (script):
   - Select and recruit participants.
   - Define which role each team member will play (facilitator, observer, …).
   - Refine your three tasks (optionally) and define their criteria of success, with related metrics.
   - Decide on any questionnaires to be used before/after the test.
   - Prepare an informed consent form.
   - Debrief each participant, i.e., prepare some questions you would like to ask.

   During the tests, take some pictures of participants doing the evaluation and plenty of notes.
   After all the tests, prepare a list of potential changes that your group would like to implement to fix the main emerged issues.

Hi-Fi Prototype Expectations

To re-iterate, the prototype can combine interactive features with hard-coded elements. You should balance pre-scripted content with interactive elements to assess the user experience and allow the users to complete your three tasks. Tailor this balance based on your project's needs, ensuring that the prototype serves as a useful tool for gathering feedback and insights, while being clear that it does not represent the full functions of a completed product.

In details:

- It should cover the three previously defined tasks.
- It should respect the constraints of the target device (e.g., size, controls/widgets) and other attributes of your target platform.
- It should clearly apply good and consistent visual design aspects.
- It should be *more functional* than your previous prototypes, yet not a full-functional application.
- It should simulate a realistic experience. The trivial, yet mandatory, steps and some of the underlying functionality does not have to be fully implemented. For example, applications requiring a large set of items can instead have a sufficient amount of pre-stored data.
- Information that can be manipulated by users must be stored in a *persistent way*, e.g., it should not disappear after a refresh or a restart of the prototype.

Deliverables

Create a new directory called "A5" in your assigned group repository on GitHub and upload, by the deadline, the test protocol in PDF with the filled-up consent forms and questionaries (if any). How you run the test and the summary of its results (together with the photos) will be in the final report.

Finally, the code of the prototype must be present by the deadline in the (new) GitHub repository associated to your group, which is named as your project.