# FINAL REPORT

# OVERVIEW AND SUBMISSION INSTRUCTIONS

By the deadline of 7 days before each exam date, you will have to deliver two artifacts as a group:

- 1. The **code** of your high-fidelity prototype, in the assigned repository named after your project.
- 2. The final group report, as a document (not slides), synthetizing the entire process followed for the creation of your semester-long project. For this, you should use the material prepared for the various assignments and your notes. Make sure that the written document is cohesive, engaging, and understanding for someone unfamiliar with your project. The PDF of the report must be in your group repository.

In addition, the *individual report* for the heuristic evaluation should already be in a "A3" folder in your group repository and cannot be changed.

Finally, the "<u>Introduction to the course</u>" slide describes what happens at the exam day with the score associated to each of the three artifacts.

# FINAL REPORT GUIDELINES

Follow the outline reported below using separate sections for the top-level items. When appropriate, you can link any requested additional material from the A1, A2, A4, A5 folders of your group repository.

- 1. Project name, value proposition, team members' names, and group name.
- 2. Problem/solution overview (2-4 sentences).
- 3. Needfinding
  - a. Description of the domain of interest within your theme, and why you choose it.
  - b. Interviews
    - i. Participants (who you interviewed, who was the immediate/extreme user, who the domain expert, how many interviews you did, etc.)
    - ii. Methodology and execution (location, recruitment, consent, questions, materials, team member roles, which observation or contextual inquiry was done —if any, etc.).
    - iii. Results (pictures embedded in the report, summary of the answers, key quotes, what you learned, etc.).
      - Any additional material used for the interviews (e.g., the consent form) can be added at the end of the report (appendix) or linked from an external document.
  - c. Synthesis
    - i. Briefly summarize the brainstorming process to extract the needs (what you did, which tool was used, etc.).
    - ii. List of brainstormed user needs (with pictures included in the report), each connected to one or more interviews and answers.
    - iii. Present the 3-4 deep user needs and why you selected them.
  - d. Solutions

- i. Report the 5 (or more) solutions for each deep user need you thought and how you created them.
- ii. The top solution you picked, the rationale behind it, and how you decided on it.

#### 4. Tasks and Storyboard

- a. List of the simple, moderate, and complex tasks. Why did you choose them? Why are they important for your target population?
- b. Include the storyboard, and specify why you chose it, which are its strengths and weaknesses, and how well it achieves the identified tasks and user need.

## 5. Low-fidelity Prototypes

a. Modalities exploration: describe alternatives you considered, report which are the two selected alternatives and why you selected them. Report your target devices/platforms.

## b. Paper prototypes

- i. Report the two realized paper prototypes, inserting a comprehensive set of digital photos or scans of them (captions included) in the report.
- ii. Summarize how they connect to the storyboard, the project goal, and the three tasks. How well they make the most of the adopted modalities?
- iii. Include the high-level flow of the "screens" of both paper prototypes.

#### c. Heuristic Evaluations

- i. Summarize what you did, as a group, to prepare and execute the heuristic evaluation on your prototype: how did it go? What did it happen during the evaluation?
- ii. Describe the heuristic evaluations you received for your prototypes, summarizing the evaluation results from the evaluators.
- iii. Fully report the list of the violations for both prototypes, with duplicates merged.

## d. Selection

Report which paper prototype you selected and why.
If you decided to move features from one to another, specify which ones and how you planned to do them.

#### 6. Medium to High-Fidelity Prototype

- a. Report what tool you used to create the two screens of the medium-fidelity prototype.
- b. Describe why and how those two screens are the most significant ones. Which are the fixed violations (level 3-4) in both screens?
- c. Add a publicly accessible link to the two screens of your medium-fidelity prototype (e.g., a link to the Figma project).
- d. Write how you planned to solve the violations in the high-fidelity prototype, referring to the list of violations reported in the "Low-Fidelity Prototypes" section. If you disagreed with the evaluators and disregarded a violation, justify the decision.

# 7. High-fidelity Prototype

- a. Describe the tool, framework, libraries, ... used and why you selected them.
- b. Add a link to the (provided) GitHub repository containing the full code of the prototype.
- c. Explain and motivate any significant design choices and changes you applied to the prototype, which did not stem from fixing the violations (i.e., they are not included in "Medium to High-Fidelity Prototype" section, point d).
- d. Describe and report the pictures of the most significant screens of the prototype, and why they are significant to you. Show the fixes to the violations ("Medium to High-Fidelity Prototype" section, point d) and how they cover the three tasks.

- e. Report how you followed the standards and constraints of the target device, and the adopted visual design.
- f. Comment on the hard-coded part, the pre-stored data, and any limitations that your prototype still has.

#### 8. Usability testing

- a. Preparation and run
  - Describe the evaluation you conducted: participants, team members role, where/how the evaluation was conducted, the refined set of tasks, motivation behind the any methodology, chosen metrics/questionaries, etc.
  - ii. Add the link to the PDF document that represents the usability testing protocol and any consent forms and questionaries you used.

#### b. Results

- Summarize the results and findings, together with any relevant pain points and/or successful tasks. Report both quantitative and qualitative results, according to the choices you made in the test planning. Include the photos you took with suitable captions.
- ii. Discuss what you discovered and learned about your prototype.
- iii. Write a non-trivial list of potential changes that your team would like to implement to fix the main issues emerged from the usability test. Justify each change by explaining which piece of feedback generates it.

#### 9. Conclusions

- a. What were your main learnings from this semester about the overall process followed in the course, your lab theme, and your own project?
- b. Group feedback: how did you split the work within the group, any positive aspects and any problems you experienced as a group.