

About the Course Project

Human Computer Interaction

Luigi De Russis, Fulvio Corno

Academic Year 2020/2021

The Exam

- Written test [40%: 13 points, minimum 7]
 - Design methods, design processes, design and analysis instruments, ...
 - No coding
 - Four open questions, 1 hour
- Evaluation of the projects (by group) [60%: 20 points]
 - Deliverables
 - Prototype (source) code
- Both parts must be passed **in the same academic year**
 - In any order

The Group Project: Goals

- Semester-long group project
- Goals:
 - to give hands-on experience with a modern human-centered design process
 - building a prototype, using web technology
 - adopting a “beyond WIMP” technology
 - to serve a chosen target population
- Mostly carried on during the lab hours
- Projects will follow the human-centered design process described during the course
- Deliverables corresponding to the completion of some process steps

The Group Project: Instructions

- Groups of 4 students
- Topic proposed by the group
 - predefined goals and constraints
- Intermediate “deliverables”
 - evaluated at the exam
 - feedback from teachers
- Final presentation (during the exam)
 - demo, oral presentation, discussion
 - All students present, and presenting
- Evaluation criteria:
 - effort invested in the project activity
 - originality, complexity, and richness of the solution
 - methodological and technical correctness
 - completeness and communication quality of the deliverables
 - presentation and oral discussion
 - individual contribution

Team Composition

- Teams of 4
 - it is students' responsibility to form teams
 - teachers may help, but not automatically assign anyone
 - students can use Slack for shopping for teams/members
- Teams cannot be changed during the semester
- Each team will work on their own GitHub repository(-ies)

What Is a Project?

- A **prototype** application (choose your own!)
 - realized with Web technologies
- Must include a “beyond WIMP” interaction technique
 - in 2020/2021: **advanced mobile interactions**
 - projects must provide an interaction modality *stemming from the mobile sensors* for the main features
 - e.g., multi-touch, force touch, accelerometer, camera acquisition, microphone, or...
- Constraints
 - Free to choose the target user population and one or more target devices (as soon as they are mobile devices)
 - Project should be something suitable showing off to your extended family (PG-rated)
 - Project should either connect to some existing API or use a source of real-world data that you import into your database

Project Completion Level

- The realized (web) application *must* be a **high-fidelity interactive prototype**, not a final "product."
- Therefore, the application is not required to (fully) implement standard (yet important) features, such as sign-up, sign-in, search, ... Assume that your user is already registered and has already signed in.

Technologies

- Web technologies (front-end): HTML5, CSS, JS, ...
- Server-side: may connect to existing APIs (e.g., Firebase) and/or deploy your own server (e.g., node.js) and database
- Use the web development skills that you acquired in the past
- Follow the best practices of web development and software engineering

Milestones and Deliverables

- Milestones are intermediate check-points in the creation of your project
 - with *strict deadlines*
- Milestones will be evaluated as part of the exam
- Milestones will follow the lab contents
 - students may ask for preliminary feedback during the related lab hours
- Milestones will be Markdown documents (.md) in the group repository and they will follow a template provided by the teachers
- Evaluation and feedback
 - Feedback given on GitHub (as a GH issue), after each deadline
 - Discussion time on the following week

Milestones and Deliverables

- Milestone 1: Week 5
 - Project Description and Needfinding
- Milestone 2: Week 7
 - Storyboard and Paper Prototype
- Milestone 3: Week 9
 - Wireframe and Heuristic Evaluation
- Milestone 4: One Week before the Exam
 - User Evaluation

Introducing... the Milestone Zero

- Submit group composition (Google Form)
 - 4 persons
 - Name, ID (matricola), GitHub username, e-mail
 - Project title
 - Project topic
 - <https://forms.gle/Dcnb3ve1uXcHYRdSA>

Deadline:
October 7, 2020

Project Topic

- In the first step, we still do not know the actual user needs...
- ... that is why *needfinding* is required.
- Think about the project topic in terms of:
 - What is the domain of the project?
 - Which target population is selected?
 - In which context could we ‘help’? (broad initial hypotheses)
- Do not write the specific needs, nor functionalities, nor tasks, nor technologies, ...
 - they will be for the next Milestones
- Summarize the topic by following this structure:
 - *We would like to SUPPORT/HELP/ENHANCE/... <target population> TO/WHILE/IN/... <general activity/topic>*

Sample Project: Cooking at Home

- Application domain: at-my-home cooking services by uber-like cooks
- Target population: users that will go to other users' homes and cook for them
- Context: reservations and user-cook matching, AND/OR selecting recipes and procuring ingredients, AND/OR ...
- **NOT:**
 - an app for looking up recipes, a social network of cooks, an intelligent brewing machine for personalized coffee making, ...
 - selecting the grams needed for each ingredients, filtering recipes according to their costs, buying ingredients online, ...

Sample Project: Finalizing the Details

- Project Title: Cooking at home
- Project Idea:
 - We would like to support chefs that will cook at other people's homes to better manage and deal with people needs and expectations
- Target population: users that will go to other users' homes and cook for them, be they professional chefs or not
- General activity:
 - Improving at-my-home cooking services by uber-like cooks
 - Managing users' expectations and needs in different moments: reservations and user-cook matching, AND/OR recipes and ingredients selections, AND/OR...

License

- These slides are distributed under a Creative Commons license “**Attribution-NonCommercial-ShareAlike 4.0 International (CC BY-NC-SA 4.0)**”
- **You are free to:**
 - **Share** — copy and redistribute the material in any medium or format
 - **Adapt** — remix, transform, and build upon the material
 - The licensor cannot revoke these freedoms as long as you follow the license terms.
- **Under the following terms:**
 - **Attribution** — You must give [appropriate credit](#), provide a link to the license, and [indicate if changes were made](#). You may do so in any reasonable manner, but not in any way that suggests the licensor endorses you or your use.
 - **NonCommercial** — You may not use the material for [commercial purposes](#).
 - **ShareAlike** — If you remix, transform, or build upon the material, you must distribute your contributions under the [same license](#) as the original.
 - **No additional restrictions** — You may not apply legal terms or [technological measures](#) that legally restrict others from doing anything the license permits.
- <https://creativecommons.org/licenses/by-nc-sa/4.0/>

