



Course project

Human Computer Interaction

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**POLITECNICO
DI TORINO**



The exam

- Written test [40%: 13 points, minimum 7]
 - Design methods, design processes, design and analysis instruments, ...
 - No coding
- Evaluation of the projects (by group) [60%: 20 points]
 - Deliverables
 - 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 web application
 - that also adopts 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 for the exam
 - Feedback from teachers
- Final presentation
 - Code, 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
- Teams cannot be changed during the semester
- Each team will work on their own GitHub repository(-ies)

Topic of the project

- A **prototype** web application (choose your own!)
- Must include a “beyond-Wimp” interaction technique
 - In 2019/2029: **voice-based interaction**
 - Projects must provide a voice-based interaction modality for the main features, but without constraining the interaction exclusively to voice
- Constraints
 - Free to choose the target user population and one or more target devices (smartphone, tablet, computer, smartwatch, and/or...)
 - You **cannot** choose a “taboo topic”
 - 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

Taboo topics (this year)

- To-do list apps
- Calendar-based or event-finding apps
- Parking or ridesharing apps
- Dating apps
- Chat/messaging apps
- Discussion forums or discussion apps
- Near-direct clone of popular apps

Note: you may include some of these ideas (e.g., a calendar) as components, but your project cannot be centered around these topics

Completion level

- The realized web application *_must not_* be a **final "product"**, but is expected to be an **"advanced" interactive prototype**.
- Therefore, the web 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 (PHP, nodejs, ...) 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, and students may ask for 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)
 - Discussion time on the following week

Milestones and Deliverables

- Milestone 1: Week 4
 - Project description and Needfinding
- Milestone 2: Week 7
 - Prototyping and Heuristics
- Milestone 3: Week 9
 - Skeleton and plan
- Milestone 4: Week 14
 - User evaluation

The first step... by the end of Week 2

- Submit group composition (Google Form)
 - 4 persons
 - Name, ID (matricola), GitHub username, e-mail
 - Project title
 - Description of **project idea**
 - <https://forms.gle/W7i41beURZFwx2Rc7>

Deadline:
October 10, 2019

Project idea

- In the first step, we still don't know the actual user needs... that's why *needfinding* is required.
- The project idea should be described in terms of:
 - What is the application domain of the project?
 - Which target population is selected?
 - In which context do we want to 'help' ? (broad initial hypothesis)
 - Which devices/technologies will be used?
- Do not write the specific needs, nor functionalities, nor tasks, ...
 - (they will be for Milestone 1 in Week 4)

Example

- Title: Cooking at home
- Description:
 - 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 ...
 - Devices: smartphone and/or tablet, primarily (not exclusively)



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