

# Course project

**Human Computer Interaction**

Fulvio Corno, Luigi De Russis

Academic Year 2019/2020

# 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)

# 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/>

