

# About the Course Project

**Human Computer Interaction**

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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 (if 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
  - 4 persons
  - Name, ID (matricola), GitHub username, e-mail
  - Project title
  - Project idea (with some details)
- Submission link (Google Form):
  - <https://forms.gle/Dcnb3ve1uXcHYRdSA>

**Deadline:**  
October 8, 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...



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