

**Basic
Interaction Design
05-650**

M / W 1:30 – 4:30 pm
GHC 4301

T / Th 9:00 – 12:00 am
GHC 4301

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A2: Mobile Life

Working in groups, students will explore the issues and design challenges around mobile information systems. Teams will design interfaces that allow users to navigate information in the completion of *one of the following tasks*:

- community building
- employment finding
- travel

While these tasks have been left intentionally broad, teams must develop and work with specific examples. Teams will “cheat” the user research process by choosing from the user groups listed below to create a fictional persona to drive the design process. This persona must document a person with a strong need for accessing the specific information in a mobile context. The design needs to motivate why this information is needed in a mobile format instead of being delivered over some other channel. Your target user must be developed from *one of the following groups*:

- small business owner
- recent immigrant
- recent retiree

This is an information retrieval focused project. Teams should design mobile systems that easily provide the information based on the intent the persona brings to the design situation. The persona should have an obvious need for information from a context sensitive mobile device.

The presentation of the information provided should consider the context of use. Sensors in the mobile device and RFID tags embedded in a physical location can provide information regarding the context where the mobile device is being used. For example, a GPS sensor can determine the speed at which a device is moving; accelerometers can determine the cadence of a person walking or running; a microphone can be used to infer the ambient noise level in the surrounding context.

During the design process, teams will produce (1) wire frames of screens documenting two scenarios of use, (2) a navigational map of the system, and (3) an interactive semi-functional prototype demonstration of the interactive experience of the scenarios.

All teams will formulate their designs based on the Apple iPhone 4 form factor, interface design language, and guidelines. However, you may envision new capabilities beyond the current iPhone 4 model.

Design issues

Students should focus on:

- Opportunistic need for information in a mobile context
- Display of information on a small screen
- Touchscreen navigation with appropriate feedback and feedforward
- Mapping of information hierarchy to user intent and persona
- Influence of context on interaction
- Appropriate use of context sensors

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Critique and Grading

A2 Critique: 16/17 February

Deliverable: A2 demonstration of interactive prototype interface and presentation of process

Problem selection

- Has the design team identified and articulated an interesting problem situated in a real context that a mobile information system could address?
- Have they developed a detailed persona that umbrellas a large set of users?

Design solution

- Can the user quickly, accurately, and appropriately retrieve the information they desire?
- Does the design effectively use affordances, feedforward, and feedback to address information navigation?
- Does the design use the small screen effectively?
- Does the interface design derive from the user intent?
- Does the solution meet the needs of the articulated persona?

Craft

- Visual appeal of the demo
- Visual appeal of presentation
- Visual appeal of the uploaded materials
- Ability of the scenario to highlight the features of the product design
- Preparation and participation in interim critiques (i.e., persona, wireframes)
- Final presentation experience

At the end of the project, students will complete an assessment of their team members' performance. This assessment has the potential to move an individual student's grade by 10% (5% up or down).