

Supervision 1 - Interaction Design 2025

1. Requirements

Suggest some key requirements for each category (functional, and non-functional: data, environmental, user characteristics, usability goals, and user experience goals) for each of the following situations:

- (a) A taxi booking app for use in a city like Cambridge
- (b) An air traffic control system for scheduling takeoffs and landings in a large airport

2. User research

For each of the user research methods below, give two concrete examples: first, of a software project where the respective method would be suitable to use and would generate meaningful and useful data (briefly describe at which stage of the iterative process you would be using the method, how the data gathering would take place and what kind of data you'll be collecting); second, a software project where they would not be very suitable to use (briefly describe why that is the case).

- Questionnaires
- Interviews
- Ethnography
- Lab-based observation
- Focus groups
- Card sorting

3. Participatory Design approaches

The course takes a User-Centred Design approach to Interaction Design. Another approach is Participatory Design (or co-design), where one or more users join the design team and are actively involved in the design (sometimes described as the product being designed *with* the users, rather than *for* the users).

- (a) Would you expect that the design methods will need to change? If so, how?
- (b) What might be some of the benefits of having users participating in the design process?
- (c) What might be some challenges that arise from such a setup? How would you go about addressing them?