

Major project



Defining your project

To begin, you must define the area that you want to work in. The *Touch Design Briefs* offer a starting point. So begin by reading these:

www.nearfield.org/2007/05/touch-design-briefs

You may choose to define the project in other ways, or to add further constraints to the above briefs. You should consider problems, issues, context, users, scope, background, technology, methods, etc. that you find personally important.

The most important part of defining your project is to state where it takes its inspiration from. Use the course literature (*and beyond*) to relate to existing research, projects and background. Define what you believe to be the *state of the art* in your chosen area.

Process

We want you to start investigating ideas for your project, and to quickly move into research, concepts, investigations, sketches, models and proto-

types. The emphasis of this course is *design through making* and we expect a hands-on approach to all aspects of your process.

Overall we expect you to progress from ideas, through research, concept and prototyping quickly and to *iterate*. We hope to see you working efficiently and *prototyping early* so that you get the chance to evaluate and re-design.

Some processes we think you should consider include:

- Expert interviews
- Observation/intervention
- Probing
- Idea generation techniques
- Workshops (with peers, users and experts)
- Functional analysis
- Paper prototyping
- Sketching in hardware
- Material explorations
- Wizard of Oz enactments
- Evidencing

We will run a series of short workshops exploring various aspects of electronics and physical computing. Here

you can ‘sketch’ with electronics: to use physical prototyping as a method to generate new ideas.

We have a week-long physical computing workshop with Tom Igoe on week 11. You will get the chance to thoroughly explore prototyping in electronics hardware. This workshop is high-level, so we recommend learning as much as possible beforehand.

Groups

This project is ambitious, and requires different specialisms, so we require that you work in groups of 2. However, your final papers must be created individually.

Deliverables

The overall deliverables for this project include research, concept, prototype, a presentation, poster and a short written paper. See *page 5* of your course plan for more details.

Iteration one



Within the next two weeks you should run the first iteration of your project. This is in order to create an initial set of tangible things that can be evaluated; it's not important to have a solid idea or excellent concept at this stage.

Post your ongoing process to your weblogs. On Friday 22 February you should present the following as a visual presentation:

Initial problem definition

What needs, wants and desires are you working with? How do you define them within relevant issues, contexts, people, technologies, business, trends, behaviours and interactions?

State of the art

This is a review of contemporary research and practice (could also be called a literature, project or competitor review). Present projects, products and research papers. Use Google and your new-found vocabulary to research effectively.

Observation

Using inspiration from ethnographic methods (see reading on methods) observe people, places, activities and artefacts that are relevant for your project. Document these as text, images and video on your weblog.

Sketch

Visually represent behaviours, contexts, people, interactions, etc. as a series of sketches. For example sketch a scenario of people interacting with existing contexts.

Diagram

Visually represent your project as an abstract model. You could for example create a flow chart of existing processes.

Plan

Make a plan for the next iteration: what will you research next? How might you create interventions and probes that effectively interrogate the activities you have observed? What will you draw, build and prototype?

Week 6

Friday 13:00 **Begin major task**

Week 7

Monday 9:00 **Lecture: Martina Keitch from AHO on design research**

Monday 10:30 **Andrew Morrison from UIO on design research**

Monday 13:00 **Introduction to ubicomp research, products and projects part 2**

Monday 14:30 **Lab intro with Einar**

Wednesday 9:00 **Physical computing intro with Einar**

Friday 13:00 **Gaming session**

Week 8

Monday 9:00 **Tami Weiss from Opera Software on the 'Browser for Nintendo Wii'**

Monday 13:00 **Physical computing workshop with Einar**

Friday 9:00 **Presentations of problem definition, observations, sketches, state of the art, plan, etc.**