

### CONTEXT

The next step in Information and Communication Technologies (ICT) is emerging, transcending the localised interfaces (such as speakers, displays, and other devices) towards ubiquitous accessibility, with the aim of enriching the user interface and yielding a positive responsive experience. In this line of thoughts, Ubiquitous Computing (UbiComp) and Ambient Intelligence (AmI) have emerged as some of the next directions for ICT. While Ubiquitous Computing is about providing universal and permanent access to information, AmI is about using this access to increase the quality of the experience that a service or content are providing. In general, an AmI system enhances the physical space through technology, media and services. A pervasive digital ecosystem (PDE) is a combination between the technical developments that resulted in UbiComp systems and the aesthetic motivation behind interactive and conceptual art installations. It is about designing a combination of personalised delivery, content, experience anytime, anywhere.

### KEY ISSUES

Early stages:

- Rely on the work done in the area of ubiquitous computing, pervasive computing, tangible interaction, and calm technology
- Approach the project with a clear statement of your vision for a PDE
- Set key features and specifications for your PDE
- Apply a user centric approach to your design relying on a series of iterations.
- Identify which user personae you are designing for.

After Interim presentation:

- Narrow the scope of your project to a set of key specifications that you can work on for the remainder of the time.
- Prepare a workplan to ensure a timely and completed delivery of the final presentation and of the prototype.
- Make sure your design is credible and convincing.

*Please check online resources!*

### Project Parameters

Group Value 20%

## ASSIGNMENT

The objective of this project is to design an artefact that acts as a gateway between your user and the digital world (or part thereof). The device scenario of use is up to you but need to be defined at early stages of the project. You need to emphasize the mechanical features of your product by mapping aspects of your product into mechanical functions. You should inspire yourself from classical SLR camera, where each of the camera's functions are clearly linked with a mechanism.

In essence this project is to give mechanical sense to the digital world. The key issue being mechanical translation, relying on the perception and meaning of movements and interaction between parts (e.g. a toggle switch).

You will develop a prototype that need to be fully functional mechanically and that also reflect your design style. The suitability of your design to your chosen personae is important.

You will need to demonstrate development in the following competencies:

Ideas & Originality: Concepts, Models, Presentation

Usability & Usefulness: Storyboard, Scenario

Business: Business Plan

Form & Aesthetic: Sketches, Models, Prototypes

Design Communication: Deliverables, Presentations

Design Method: Work Progress (what and why)

Design Practice: Work action & activities

Self Assessment: Self criticism of work & Progress

## WORK REQUIREMENTS

During the project you should adopt a design process that is methodical and well documented (i.e. sketches, models, renderings...). You must ensure that you deliver your project convincingly.

### Interim Presentation

1. Sketches (top, side, GA, 3D) and simple models (either cardboard or plastics) of 2 concepts communicating the same product rather than 2 different directions.
2. A storyboard describing how is one of the concepts used.
3. A clear explanation of your design choices.

### Final Presentation

1. A movie presenting your prototype explaining its benefits and how it works.
2. Visualisation of your product in 2 images and 1 advert-like poster.
3. Justification of your design in a A4 document.
4. For each group member a filled self assessment form.
5. Clear identification of each individual contribution to the project.

## Prototype Hand-in

### Assessment Criteria

Quality of work as response to this brief 4%

Design Process followed and how it is presented 4%

Design Content in terms of the competencies listed 4%

The conduction of the presentations and their relevance 4%

The originality and significance of your translation of digital things into mechanisms 4%

### Submission

Interim presentation  
22 OCT 2013

Final presentation  
05 NOV 2013

Dates are subject to agreement during module sessions.

1. Mechanically working prototype.(as movie)
2. 3 Pictures of your model.

**Formats:**

Posters A3,

Models no more than 20x20x20 cm<sup>3</sup> ,

Movie of 10 min maximum to be uploaded into YouTube

All deliverables, including models, should bear name of design team.

Pictures should have a resolution of min 150 dpi max 300 dpi and a size of A5 max

All deliverables on your Website/Blog

**RESTRICTIONS**

NO Powerpoint or powerpoint-like presentation. This implies that you can't rely on a slide show or similar, you need to rely on a movie, animation, acting or other style of presentation.

**General rules:**

All documents/posters in PDF 120dpi A4/A3 format, font min 11pts

All video via YouTube min resolution 480p, max duration 10 minutes

Penalties for late submission: 10% of mark per day or part thereof

Penalties for incomplete submission: discretionary

Penalties for project never seen and yet submitted: up to 25%

Deliverables accidentally damaged: up to 10%

Penalties for late arrival at presentation day: up to 25%

Individuals who do not contribute to project will have their mark downgraded accordingly

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