

CS-489

Personal interaction studio

Huang Jeffrey

Cursus	Sem.	Type
Computer science	MA2	Opt.
SC master EPFL	MA2, MA4	Opt.

Language of teaching	English
Credits	6
Session	Summer
Semester	Spring
Exam	During the semester
Workload	180h
Weeks	14
Hours	6 weekly
Courses	2 weekly
Project	4 weekly
Number of positions	

Summary

As we move towards a design economy, the success of new products, systems and services depend increasingly on the excellence of personal experience. This course introduces students to the notion and practice of experience and interaction design following a hands-on, studio-based approach.

Content**STUDIO BRIEF : THE FUTURE OF MAPS**

The map itself has emerged as one of the most ubiquitous interactive objects of our digital mobile age. It plays a significant role in our contemporary understanding of information (abstract data and physical spaces). This term, the studio aims to reinterpret the map as a digital, live, interactive artifact. The goal is to create meaningful interactive datadriven maps as both a digital visualization interface, as well as, in the form of a physically sited exhibition.

CONTENT

The course consists of a non-linear/iterative process of 'hackathon-like' and 'creative-coding' workflow. The course will contain a series of iterative design props – 'problem maps', 'value maps', 'data maps' and 'future maps' – as an apparatus to construct a network of understandings, and create meaningful user experiences for a final design proposal/product.

I. Problem Maps

1. Precedents survey and analysis
2. Intuitive approach to problematizing design
3. Generating opportunities for design interventions

II. Value Maps

1. Identifying and mapping values (economic/social/cultural) to design interventions
2. Analysis of identified value hierarchies with targeted market personas

III. Data Maps

1. Data source availability (proprietary/non-proprietary)
2. Data service availability
3. Data mining and logging methods

IV. Future Maps

1. Vision Proposal
2. Concept Design
3. Schematic Design of components/architectures
4. Rapid Prototyping with creative coding tools and workflows
5. Design Optioneering with evaluation and testing
6. Design Marketing with scenarios and storyboards
7. Scaling for different forms of realization (esp. physically sited exhibition)

Keywords

User Experience (UX) Design, Design Thinking, Creative Coding, Hackathon, Open Source, Optioneering, Iterative Prototyping

Learning Prerequisites

Required courses

Bachelor in Computer Science or equivalent

Learning Outcomes

By the end of the course, the student must be able to:

- Identify issues of experience design in relation to an actual design project
- Perform rigorous analysis of the problem space and map the design opportunities (problem seeking, value proposition and data inventories)
- Develop alternative design concepts for future artifacts (in 2016: live maps)
- Translate design concepts into meaningful experiences through iterative prototyping at appropriate scales and levels of granularity (creative coding)
- Create convincing arguments for the design propositions and persuasive visual and tangible evidence

Teaching methods

Hackathon, Creative coding, Lectures, Design reviews, Presentations, Group projects

Expected student activities

Hackathon, Group discussion, Case studies, Design Reviews, Pin-Up, Desk Crits

Assessment methods

Grading will be based upon the quality of the projects in the preliminary stages (10% problem maps, 10% value maps, 10% data maps), intermediary reviews (20% future maps) and in the final review (50%). Final projects will be reviewed and assessed based on their conceptual strength, the coherence of their translation into prototypes, their narrative clarity and experiential power, and the persuasiveness of their communication, both orally and through the presented artifacts.

Supervision

Office hours	Yes
Assistants	No

Resources

Bibliography

To be made available during the course