Course Description
Design Project

Contents

The Big Idea

The module "Design" comprehends the optional courses "Interaction Design" and "Design Thinking". The "Project" refers to the acquired knowledge from these courses and applies it to a concrete case example in practice.

Only in such a project with its various facets of design, the importance of a holistic approach can be realised and implemented. The close relationship between creative and strategic as well as marketing-related objectives can be experienced within the work on the projects. Not to forget the associated challenges that the decision-makers have to meet in the different phases of the projects.

These projects should be handled as "close to reality"-scenarios. But it is especially important, that the students don't just orientate on existing implementations and confirm popular stereotypes. The goal is to find new, forward-looking approaches on the basis of their acquired knowledge.

In every phase and decision during the project, the focus is on the question: "How can design help to meet the defined target in the best possible way and which is the appropriate creative decision, that has to be made?" These decisions and their consequences must be analysed accurately before they can be executed in the right way.

Intended Learning Outcomes

Within the projects the students have to take different positions and make decisions from their respective point of view. Later on this experience enables them to put themselves in others positions in interdisciplinary teams.

Due to the work within a concrete project, the students find out how the different disciplines of design interact with each other and what impact will be experienced, if some parameters will be altered at some points.

The students learn which design related decisions have to be made at which point of time during the course of the project.

In a small, self contained project simulation, the significant strategic relevance of design is easily noticeable. Design will be handled as a an economical factor of success, from the the first conceptual approaches, to human-machine interface design, up to marketing and promotion of the finished concept.

Students are become acquainted with the method of "Design Thinking" (after Terry Winograd, Larry Leifer and David Kelley), which bases on the assumption, that interdisciplinary teams are able to solve complex problems and gain new insights.

The participants will need to plan their project and execute it according to the agreed timetable.

Structure of the Course

The students work in groups of two on each project.

A principal subject will be announced for all projects. Within this scope the students are choosing their own topic for their group work.

As a result each group should present their idea for a web-based or mobile application in concept, design and communication strategies.

As the focus within the projects is on "design" in a holistic meaning each project has to take care of the following steps:

Step 1 – Research

Everyone has to know his competitors and his market. Depending on the chosen topic each team has to gain an overview about the direct and indirect competitors on the market. Which products or solutions are already available within the field? What are their strengths and weaknesses? What target groups are focused and in which way?

Each group should end up with a collection of relevant material for a cenceptual deduction.

Please consider the patterns about Orientation and Deep Understanding in my reader: https://th-koeln.sciebo.de/s/qlRxOnsnQ3ftnBt

Step 2 – Positioning in the market

Upon the basis of the done research, each team has to develop an unique idea for a web-based or mobile application that meets the demand of the specified target group. This product should be innovative and surprisingly different to the existing solutions. The realisation is not a

mandatory requirement for the projects. The focus is on concepts and their strategic development.

Step 3 – Design

This is the essential step of the project. The product itself has to be designed, as trained in the course "Designing for the Web". The HCI (Human-Computer-Interaction) within each project has to be designed, as trained in the course "Interaction Design" and an overall Corporate Design has to be developed for the solution, as trained in the course "Corporate Design".

Step 4 – Marketing

Finally we assume that the projects are launched in the market. Each group has to develop different marketing measures to promote their product. Of course the ideas for these promotional work should be as creative as the products.

Didactic Concept, Schedule and Assignments

The Scope has change for the semester winter 2016. Please look for further details the individual semester page.

Introductory Workshop On Site

As a start, the project procedure and the organisational framework will be presented. In a next step the students are going to build groups of two for each project. Afterwards the general topic for the principal theme of the term will be introduced on which the single projects are based upon with their individual concepts.

The principal theme will be presented in the form of a lecture with the help of some successful examples.

Subsequently the general topic will be discussed in a first round amongst all students. Open questions will be answered, so all groups will be able to search their individual conceptual formulation within the next weeks parallel to the first two course sessions.

The introductory workshops ends with defining concrete tasks for the group work until the project planning session.

Project-Planning Session

Wrap-Up Session On Site

Each group is presenting the final status of their project to the other students and the lecturers, followed by a question and answer session.

Examination

The final grade is determined by the presentation and the colloquium during the wrap up session as well as a project report in written form. This report should document the continuos development of the project, the results of the research, the strategic and theoretical considerations and finally how the assignment has been split between the two partners of the group.

(The following text has been updated on Jan 18, 2018):

Team work: 5-10 minutes presentation of results and project organization at 2nd on-site weekend and written description of the project concept as well as work results. Each team reports about the project organization, steps taken and how the team worked together. For example: Did team members focus on different perspectives? Did you use the diversity of your work contexts (e.g., interdisciplinary approach)?

The grade will be based on:
- Group presentation at 2nd on-site weekend (50%). Please present the concept, design decisions and results (e.g., mock-ups, prototypes, written concepts). 5-10 minutes presentation.
- Written project report of the group: Please describe your domain and market research, concept development, design decisions, concept and work results (mock-ups, prototypes, example implementations if appropriate). 10-15 pages. (50%). Deadline: February 28th

Note: if you combine the presentation for design thinking and design project, please consider:
- You should combine the two presentations into one. Total presentation time: 15-20 minutes.
- The written outlines for design thinking and the design project report must be 2 different documents; each is graded separately.
- Design Thinking focusses on: how did you apply the methods in this project? How can you use them in other contexts? Main theme: how did you apply the theory?
- Design Project focusses on: description of your design challenge, domain and market research, concept and design, design decisions, presentation of results (sketches, mock-ups, prototypes, proof of concepts, example implementation). Main theme: what are the results of your practical work in the project and how did you get there?

The following questions may support the writing of your project report:
- What is the design challenge?
- Why is it important?
- Which research resources did you use?
- What is the result of the research?
- What are the aggregated findings about the domain?
- Which problems did you identify?
- Which assumptions, rules, stakeholders, and behavior did you identify?
- How did you come up with new solutions for this domain?
- What is the unique selling point? What makes your idea better than existing solutions?
- What is the core concept of your solution?

- How does it solve the identified problems?
- How did you refine the solution?
- How does the solution look like (sketches, mock-ups, etc.)?
- What are the strengths, weaknesses, opportunities and threats (SWOT analysis)?
- How would you pitch your solution to potential investors?
- What would be the next steps to implement the design?
- What are the prerequisites for a successful implementation?
- What is the best/middle/wort case scenario?

You don't have to address all questions! The questions are only examples. Also use 5W1H: Ask What, When, Where, Why, Who and How? For example, why is your solution important? Why is it needed? How does it work? How can you achieve the solution? etc.

A good project report…
- Describes contexts, problems and proposed solution
- Describes the current market situations (existing solutions, challenges, needs)
- Provides the big picture and illustrates solution details by examples
- Names alternative design options and explains design decisions
- Reflects about the pros&cons of the whole solution and solution parts (tip: use SWOT or Six Thinking Hats)
- Illustrates the solution with sketches, story boards, mock-ups (screens, photos, …)
- Reflects about the achievements: lessons learnt, outcomes, future work

27.02.2019