School: Sammy Ofer School of Communications M.A.

Seminar: Mobile UX Research Methods

Lecturer:

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Course No.:	Course Type :	Weekly Hours :	Credit:
27303	Seminar	6	6

Course Requirements :	Group Code :	Language:
Final Paper	242273030	English

◎ Course Description

This intensive seminar will provide both theoretical overview and hand-on experience of Mobile HCI, the academic discipline that studies interaction with mobile devices. In addition, this seminar will cover UX and Product methodologies, including user research, need finding, competitive analysis, concept design, customer journey mapping, iterative prototyping using Figma and Framer, intensive and iterative user testing including A/B testing in academic standards, data collection, data analysis, and insights definition. Topics include academic literature review, market research and competitive analysis, qualitative user research techniques (interview, journey, observations), need definition and need validation, research question definition with special focus on mobile interaction technique, iterative design of a mobile prototype using Figma, Framer, or custom JS/React, pilot studies to justify design decisions, experimental design for full evaluation of the mobile

UX/interaction assumptions, data collection and data analysis, and writing of an academic report about the design process and user study. Students will read and analyze recent Mobile HCI papers related to mobile interaction techniques.

Semester B topics (4 credits, weekly in-class session):

- Extensive user research on a target user, including qualitative research methodologies (interviews and observations), data analysis using thematic coding, theme definition and analysis until a prioritized list of user needs is defined. Completion of a user research report.

- Competitive analysis on apps and services that address the top need, qualitative user testing of the competition, identification of top product requirements, top mobile interaction techniques used, and main pitfalls.

- User journey research and analysis, identification of main positive and negative experiences, focused definition of opportunities. Completion of requirements document.

- Conceptual design process based on design guidelines, implementation of inspiring mobile interaction techniques from the competitive analysis.

- Iterative design process of the mobile prototype + integrated analytics using the Figma authoring tool or native code.

- Preparation of user testing protocol and beginning of a user testing cycle, using both qualitative and quantitative research methods.

- Continued testing and data analysis, both on general public and on targeted audiences (multiple experiences).

- Based on qualitative and quantitative data analysis from the user testing, generate insights and define design recommendations for improvements of the mobile prototype. Suggest several sets of A/B tests, with clearly defined research questions and measurements.

Summer semester topics (2 credits, personal mentoring):

- Prepare the full evaluation study, define a focused research question, the experimental group and control group, the measures and how they relate to the research question, the target audience, and the full experiment procedure.

- Perform the user study according to the protocol

- Perform data analysis on the user study results

- Generate insights from study findings, define the design recommendation based on results, and define a next experiment that will further test the mobile experience.

- Write two reports:

- ◦ an academic-level short paper about the design process, implementation, testing, and results.

- ◦ an industry-focused presentation (to be submitted as a video presentation) and a short written report.

Course Goals

- learn how to conduct user research to identify needs from various stakeholders, and translate those to product requirements

- Research modern mobile user interfaces and experiences through exploration of popular and leading applications. Brainstorm and bring up new concepts and ideas for new user experiences for existing common tasks.

- Translate the product requirements to mobile UX design, implementing the new concept to an interactive mobile experience, using the students prototyping ability (Figma or native code). All prototypes will include an analytics components to collect data from users.

- Learn how to test the mobile experience with real users and generate meaningful insights for product teams, using a systematic critical thinking process.

- Learn data, think data, gather data, analyse data. Generate data-informed decisions for product teams.

- Learn how write to document and present your work, both as an academic-level short paper and an industry-level report about the whole process and insights.

Grading

Grade Composition:

- On-going assignments: 60%

- Final assignment: 40%

On-going assignments:

- Assignment 1: submit user research report

- Assignment 2: submit competitive analysis report (competition on the need)

- Assignment 3: submit requirements document

- Assignment 4: submit conceptual design, including research on similar/inspiring mobile UX and flow

- Assignment 5: develop and submit the iterative prototype + integrated analytics

- Assignment 6: submit user testing protocol

- Assignment 7: test the prototype and submit user testing report, once to general public and multiple experiences to targeted audiences

- Assignment 8: submit data analysis and recommendations for changes or additional A/B tests, including the updated prototype

- Assignment 9: submit evaluation plan

- Assignment 10: perform full user study and data analysis

Final assignment: submit full report

💬 Reading List

Mobile user experience research: challenges, methods & tools. By Nakhimovsky, Y., Eckles, D., & Riegelsberger, J. (2009). In CHI'09 Extended Abstracts on Human Factors in Computing Systems (pp. 4795-4798).

Quantitative User-Research Methodologies:

https://www.nngroup.com/articles/quantitative-user-research-methods/

How to Listen to Customers. by Ken Norton: https://www.kennorton.com/essays/how-to-listen-to-customers.html

Thematic Analysis of User Interviews, by Ditte Hvas Mortensen. https://www.interaction-design.org/literature/article/how-to-do-a-thematic-analysis-of-user-interviews

Concierge vs. Wizard of Oz Test, by Grasshopper Herder: https://kromatic.com/blog/concierge-vs-wizard-of-oz-test/

The Mom Test, by Rob Fitzpatrick. http://momtestbook.com/

Customer Journey Maps. By Kate Kaplan. https://www.nngroup.com/articles/customer-journey-mapping/

Material design by Google. https://material.io/

Human interface guidelines by Apple. https://developer.apple.com/design/human-interface-guidelines/ios/overview/themes/

Mobile UX Design Principles. https://thenextscoop.com/mobile-app-ux-design-principles/

Usability Test Script, by Steve Krug. http://sensible.com/downloads/test-script.pdf

Quantitative vs. Qualitative Usability Testing, By Raluca Budiu. https://www.nngroup.com/articles/quant-vs-qual/?lm=quantitative-user-research-methods&pt=article

Talking with Participants During a Usability Test. By By Kara Pernice. https://www.nngroup.com/articles/talking-to-users/

The One Metric That Matters by Croll & Yoskovitz. http://leananalyticsbook.com/one-metric-that-matters/

How to Choose the RIght UX Metrics, by Telepathy,GV & Kerry Rodden. https://www.dtelepathy.com/ux-metrics/#metrics

Metrics that Matter by Richard Holmes. https://www.departmentofproduct.com/blog/metrics-matter-product-managers/

A Beginner's Guide Product Metrics, By Mona Lebied. https://www.datapine.com/blog/product-metrics-examples/