UT-AUSTIN ISCHOOL SYLLABUS
INF385T RAPID PROTOTYPING & LEAN UX METHODOLOGY
FALL 2022 DRAFT OF SEPTEMBER 23, 2022

DETAILS

Important note: The information presented in this syllabus is subject to expansion, contraction, change, or stasis during the semester. In case of conflict between versions, the copy on Canvas takes precedence.

Course Number. 28555

Prerequisites. SECOND YEAR STANDING

Time. TH 1530–1830

Place. UTA-1.208

Dates. 22 AUG 2022–5 DEC 2022

Final Exam. Take-home, due 11 DEC, 11:59PM

Instructor. Mick McQuaid

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Office. 1616 Guadalupe St, Room 5.402

Office Hours. 1300–1500 hrs, WED & FRI or by appointment

DESCRIPTION

With the success of software delivery methods such as Agile, design teams have had to adapt how they work within software delivery teams as the traditional design cycles are not well suited for rapid iteration. With the popularity over the last few years around Lean UX continuing to build as well as other variations (Design Sprints, Rapid Customer Feedback, MVP, etc.) it is advantageous for designers to get up-to-speed on these methodologies to further enable their skillsets.

The class will cover three major areas:

1. introduction to basic design concepts such as composition, color theory, interactions
2. the Lean UX methodology, history, predecessor, pros/-cons, and adaptations on Lean UX and case studies from companies such as Google
3. the application of rapid prototyping using the latest design tools and methods

MATERIALS

No single textbook will suffice for such a rapidly changing subject. Instead, many sources must be consulted with the guidance of the instructor. These include Baker (2017), Buxton (2007), Cockton et al. (2016), Cooper et al. (2014), Goodman, Kuniavsky, and Moed (2012), Holtzblatt, Wendell, and Wood (2005), Holtzblatt and Beyer (2016), Lazar, Feng, and Hochheiser (2017), Matsudaira (2019), Patton (2014), Rubin and Chisnell (2008), Shneiderman (2017), Spiekermann (2014), and Wixon (2003). Students will need to make extensive use of Google and Wikipedia, as well as popular design websites such as A List Apart, Behance, and dribbble, in addition to readings provided on Canvas.

LEARNING OUTCOMES

The student successfully completing this class will:

- understand the benefits, drawback, history, and application of lean methodologies
- have experience implementing multipile projects using the techniques learned

- gain real-world experience with outside 'clients' to help build their confidence and portfolio with actual industry experience

CLASS FORMAT

This is a hands-on, project focused course, so attendance and participation in class are critical to individual success in this course and to the success of the course. You need to come to class prepared to participate in small group and full class discussions and project work, to complete all required readings prior to class, and to submit assignments on time.

Prior to most class meetings, you will submit a weekly design challenge in Canvas based on that week's topic. We will start each class with a group feedback of the designs for that week pulling from your submissions.

This semester will focus on one project for the semester that will result in a complete portfolio piece.

SCHEDULE

Week 1 (25 Aug)

Design Thinking Exercise — Introductions — Syllabus — Canvas — Design Principles — Design Challenge 1

Week 2 (1 Sep)

Story Mapping — Patton (2014) — Scenarios — Design Challenge 2

Week 3 (8 Sep)

Mood boards — Design Inspiration — Sketching — Crazy Eights — Design Challenge 3

Week 4 (15 Sep)

Working with clients — Greever (2020) — Design Challenge 4

Week 5 (22 Sep)

Agile Development — Design Challenge 5

Week 6 (29 Sep)

Prototyping elements — Color — Typography — Layout — Animation

Week 7 (6 Oct)

How Might We (HMW) statements — Ideation — Diverging & Converging — Prototyping Levels — System diagramming — Becker (2020) (Ch 7) — Prototyping definitions — Buxton (2007) — Individual course project assigned — Design Challenge 6 (theme: high fidelity)

Week 8 (13 Oct)

Accessibility — Guest Speaker from ExxonMobil

Week 9 (20 Oct)

Leading a prototyping workshop — Robert Stackowiak (2020) Chapter 2 — Design Challenge 8 (theme: accessibility)

Week 10 (27 Oct)

Formative & Summative Testing

Week 11 (3 Nov)

User testing processes — Design Challenge 9 (theme: testing)

Week 12 (10 Nov)

User testing tools — OBS — Mr Tappy — Eye trackers

Week 13 (17 Nov)

Summary — Design Challenge 10 (theme: multiple choice)

Week 14 (24 Nov)

Thanksgiving Break

Week 15 (1 Dec)

Presentations of individual work

GRADING

I plan to grade assignments within two weeks of their due date except where circumstances interfere. The grading scale

used along with the grade components follow.

- A >= 90.0%
- B >= 80.0% & < 90%
- C >= 70.0% & < 80.0%
- D >= 60.0% & < 70.0%
- F < 60.0%

Class Attendance and Participation (20%). Your attendance and class participation grade will be calculated by multiplying the numerical assessment of your class participation by the percentage of classes that you attend (with exceptions made for documented, university recognized absences as noted above). Regular attendance and active participation in each class session are critical for receiving a good grade in this cour se. For example, if you actively participate in each class meeting, you will receive a full letter grade higher than if you were to skip half of the classes or to be half-awake for all of the classes.

Design Challenges (40%). Most weeks, you will submit a design challenge in Canvas.

You will form groups. Each group will be assigned a week to formulate the design challenge for that week and present the design problem to the class. You should draw on problems you experienced during your internships, at work, or an issue you've seen in your daily interactions with artifacts in the world. You will not be required to submit your own designs for the week where you are the creator of the challenge. Instead you will evaluate the designs of the other groups.

Your weekly design challenges will be completed using the design tool of your choosing. To receive full credit, your weekly submission must answer the design challenge as presented. The deliverables will vary from week to week but may be a prototype or a tool used in prototyping. Your solutions

are due by Monday at 9pm via Canvas, preferably in both a video of you talking through your solution as well as the solution document. For most weeks, that document can be a link to a Figma prototype or a Figjam page, but the formulating group may require a different kind of document. Only one person from each group will submit your files or links. For files, please name them using *only* your initials. For example, if I submit a video, I call it `mjm.mp4` with no other characters or spaces. Canvas will supply the design challenge number and your group number.

That week's formulating group will then review the submissions and come to class prepared to present a ranked top 3 list that they find the most compelling.

The week's formulating group will provide two documents, (1) the slideshow presentation (in pdf format) of the top three submissions, and (2) a feedback document of each of the seven submissions. The feedback document(s) may be produced in any form but should be delivered as a pdf, like the presentation. If the feedback document is provided as a single document, each group's feedback should start on a separate page, so that the individual feedbacks can be shared with just the relevant group. It would be preferable to submit separate files, named `designChallengeNNgroupMMfeedback.pdf`.

I'll keep score over the course of the semester and the person or group with the most top three appearances will get …something :)

Individual Course Project (40%). Grade components are:

- 30 percent: choice of solution, did you solve the right problem?
- 40 percent: thoughtfulness of solution, is your solution a good one?

- 30 percent: craft of solution, did you apply your design skills well?

REFERENCES

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Cooper, Alan, Robert Reimann, David Cronin, and Christopher Noessel. 2014. *About Face 4.0: The Essentials of Interaction Design*. Indianapolis, IN: Wiley.

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Holtzblatt, Karen, and Hugh Beyer. 2016. *Contextual Design, Second Edition: Design for Life*. San Francisco, CA: Morgan Kaufmann.

Holtzblatt, Karen, Jessamyn Burns Wendell, and Shelley Wood. 2005. *Rapid Contextual Design: A How-to Guide to Key Techniques for User-Centered Design*. San Francisco, CA:

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Spiekermann, Erik. 2014. *Stop Stealing Sheep, 3rd Edition*. San Jose, CA: Adobe Press.

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