CSCI 420 Human Computer Interface Design
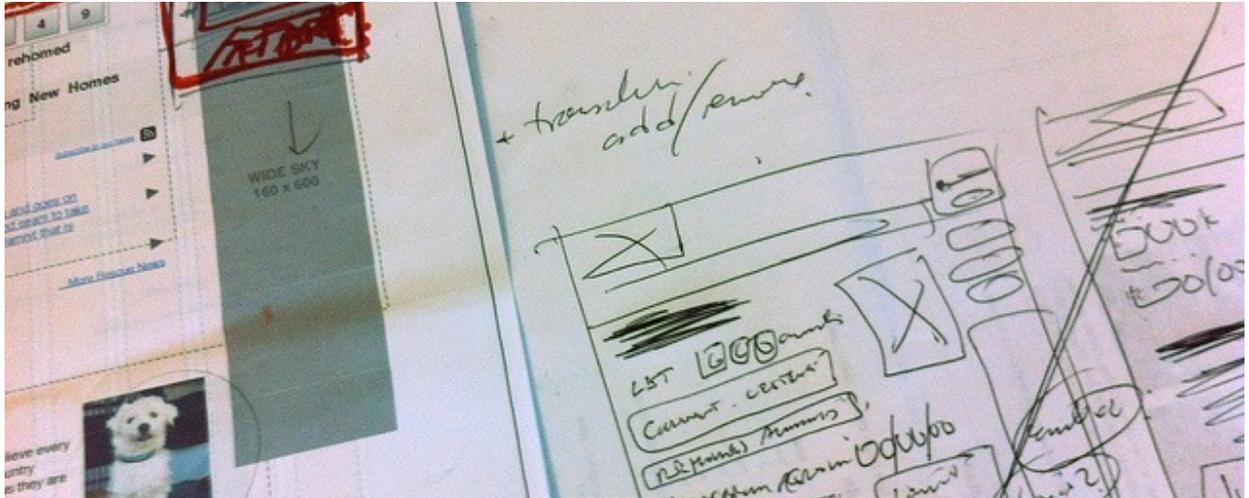

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CSCI 420 Human Computer Interface Design

3 Credits, Prerequisite: CSCI 301

Designing a human computer interface, or a user experience (UX), is an area in software engineering that naturally connects to a variety of other disciplines as it has to account for how humans feel, behave, work, how businesses work, and what the available hardware/ software architecture is able to support. In this class, we will explore design principles and patterns, try out different techniques for UX design, and create a number of typical artifacts that are common outcomes of the UX design part in a software development process. The class will also cover to some extent event driven programming and user interface testing.

Students will work on a particular UX design project throughout the course in a team as well as on individual assignments. Topics for projects will be developed together in class.

Instructor

Peter Kemper
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Grader: Bin Nie (bnie@email.wm.edu), Yongsen Ma (yma05@email.wm.edu)

Where and When

Class: 2.00-3.20 pm,   MW,   McGlothlin Street Hall 020

Office hours: 3.30-5.30 pm,   MW,   and other hours by appointment

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Required book

There is no particular book that you are required to buy.

Recommended reading

The class is based on material covered in the following list of eBooks which are all accessible free of charge via SWEM. Allen & Chudley's book is ridiculously overpriced if you consider buying it, please go with the free SWEM library access. This should be sufficient.

Jennifer Tidwell: Designing interfaces, 2nd ed, O'Reilly 2011

Jaime Levy: UX strategy: how to device innovative digital products that people want, O'Reilly, 2015

William Lidwell: Universal principles of design, 125 ways to enhance usability, influence perception, increase appeal, make better design decisions, and teach through design, 2010

Jesmond Allen, James James Chudley, Smashing UX Design: Foundations for Designing Online User Experiences, Wiley 2012.

Required work and grading

In-class and individual assignments (20%)

Team project (30%): The team project will be a UX design for an innovative product. Students will develop possible topics though the first week of class and then form teams of 3-4 students to work a particular project. The pedagogical goal of the UX design project is to allow students to try out different techniques for UX design discussed in class.

Tests, midterm and final exam (50%): There will a series of tests, a midterm and a final exam which will give 50% in total for the final grade.

Active class attendance: This is a course that requires you to be present and to actively participate.

Late work policy

All assignments come with a hard deadline. An assignment that you hand in after the deadline will NOT be considered and NOT graded. In order to accommodate for unusual circumstance that may occasionally happen in life, each student will be granted one exception to this rule. So it is highly recommended to plan ahead and work with personal deadlines that include a little safety buffer for your own sanity. Deadlines will be set well in advance.

Attendance

It is expected that students attend all classes.

Students who need accommodation

Please see me after class or send email to set up a brief meeting.

Information Dissemination

I will maintain a blackboard course in support of the course. Piazza will be used as a communication platform for questions and answers in addition to the regular office hours.