

DESIGN 371 – Interface Design– Winter 2020 | Mon + Wed 2:30–5:20pm

Prof. Alex Chang | aychang@uw.edu | Office Hours Mon 1:30–2:30pm, Rm 228 Art Bldg

Prof. Scott Ichikawa | scottsi@uw.edu | Office Hours by Appointment

	MON	WED
wk_1	1.06 Assign Proj 1: Simple App Redesign Assign Sketch Tutorials Read Required iOS+Android Guidelines In-class: Task Flows; Competitive & Heuristic Analysis	1.08 In-class: App Tear-down Workshop: Sketch + Figma Assign UI-Wireframes
wk_2	1.13 Critique: Review UI-Wireframes Shared Lecture: Micro Interactions, Modality Select direction to refine/finalize Workshop: Principle Assign: Micro Interactions	1.15 Critique: Initial App Screen Sketches Shared Lecture: Mental Models Be prepared for workday when not participating in group critique
wk_3	1.20 Martin Luther King Day – No Class	1.22 Assign Proj 2: Group App Redesign Shared Lecture: Motion for UI In-class: App Scope Design Brief/ Task Flow Assign: Friend @ 1/29 class
wk_4	1.27 Critique: Review App Prototype Shared Lecture: Prototyping & User Testing Guest Critics TBD	1.29 App Contacts visit Conduct User Testing with Friend(s) Groups finalize/submit Design Brief – Wed 2/5
wk_5	2.03 Final Critique: Project 1 Guest Critics TBD	2.05 Shared Lecture: UI Design & Design Systems In-class: Design Brief Review
wk_6	2.10 Project 2: Critique 1 UI-Wireframe: (option 1) Show Three (Annotated) Task Flows Guest Critics: TBD	2.12 Project 2: Critique 1 UI-Wireframes: (option 2) Show Three (Annotated) Task Flows Guest Critics: TBD
wk_7	2.17 Presidents Day – No Class	2.19 Proj 2: Development Critique Shared Lecture: App Video + Story Mid-Proj. Peer Review Assign: Friend for 2/24 or 2/26 class
wk_8	2.24 Project 2: User Testing of Semi-Final Design for Team 1-3 Team 4-6 meet with Alex or Scott	2.26 Project 2: User Testing of Semi-Final Design for Team 4-6 Team 1-3 meet with Alex or Scott
wk_9	3.02 Project 2: Final Critique Team 1-3 meet with Alex or Scott	3.04 Project 2: Final Critique Team 4-6 meet with Alex or Scott
wk_10	3.09 Workday	3.11 Workday

All work due at start of assigned final exam time: 2:30-4:20pm Tue Mar 17*No exceptions. Schedule Spring Break travel accordingly.*

Course Goals

The purpose of this class is to help students develop the skills necessary to design an effective user interface (UI)—the space and controls through which a user communicates with a tool/application/device. Specifically, students will:

- 1 Research, plan and design prototypes for two different mobile applications
- 2 Discuss, analyze and evaluate what makes a UI effective or ineffective, including:
 - logical information architecture / user task flows
 - feedback and microinteractions that guide user behavior
- 3 Conduct user testing and incorporate test results into a design prototype

Expectations

Be in class every day, on time, prepared with your work. Chronic lateness or insufficient preparation is seen as a lack of interest and lack of respect for myself and your colleagues. *Take notes by hand; do not use your laptop or phone during critiques.* Taking notes by hand improves recall and long-term comprehension, see: www.psychologicalscience.org/news/releases/take-notes-by-hand-for-better-long-term-comprehension.html and www.nytimes.com/2017/11/22/business/laptops-not-during-lecture-or-meeting.html

You are expected to remain in class for the entire studio session. If you must miss class (or leave early/arrive late), please notify me via e-mail as soon as possible. **You are responsible for all assignments and information covered in class, regardless of your attendance.**

Grading

Grading is based on:

- 1 The quality of the final projects—both visual and conceptual;
- 2 The design process—the extent of exploration and variation completed over the quarter;
- 3 Class participation—engagement and communication with others in your group(s), and with the entire class during critiques and in-class exercises.

3.8–4.0 is given to a student who has exhibited the highest possible performance in all aspects of the course—final projects, the design process and participation are excellent. This student independently seeks out additional information on design and is highly committed/passionate about their work.

3.4–3.7 is given to a student who exhibits superior performance in all aspects of the course—the final projects, design process, and participation are uniformly of high quality. This student has a thorough understanding of all concepts presented, and is motivated to improve and succeed.

2.9–3.3 is given to a student who has good performance in most aspects of the course. This student follows a thorough design process, has good design work, and consistent participation that reflects a clear understanding of almost all concepts being presented.

2.5–2.8 is given to a student who has fair performance in the course. The final work is adequate, with a design process that reflects the minimum effort needed to complete assignments. Participation and motivation are moderate.

0–2.4 is given to a student with poor performance in the course. Projects are incorrectly prepared, incomplete or missing. This student does not understand the majority of concepts presented and rarely participates in class. This student is not prepared for subsequent courses in design.

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Point-Level Grading Rubric // TOTAL POSSIBLE PTS: 215 pts

After calculation of all point totals, we will apply a grading curve.

Project 1: Individual App Re-Design = 80 pts

10 pts = Grade for Wireframe Critique

10 pts = Grade for Initial App Sketches

10 pts = Grade for App Prototype #1

10 pts = Grade for Final App Critique

40 pts = Final App Documentation, Prototype and two Movies, due at Final Exam

Project 2: Group App Re-Design = 120 pts

10 pts = Grade for Design Brief

10 pts = Grade for Critique Presentation #1

10 pts = Grade for Development Critique

10 pts = Grade for Final Critique

10 pts = Peer Eval (six categories each worth 5 pts—we will average together all scores x 2)

10 pts = Your Individual Contribution, documented according to guidelines

60 pts = Final App Documentation/Prototype/Movie, due at Final Exam

Participation in Class = 15 pts

10 pts = Average of your class attendance (each day = one pt, late or early leaving is a deduction -.5 pt)

up to +5 pts if you have been actively engaged during critique—

i.e., providing helpful critical feedback to people within and outside your group

(this is subjective judgement on our part, you can ask at any time how you are doing)

up to -5 pts if you have been particularly disengaged during critique—

i.e., taking excessively long classroom breaks, whispering with others, on your phone/laptop, etc.

(this is subjective judgement on our part, you can ask at any time how you are doing)

Plagiarism

Plagiarism is defined as using in your own work the creations, ideas, words, inventions, or work of someone else without formally acknowledging them through the use of quotation marks, footnotes, bibliography, or other reference. Please check with me if you have questions about what constitutes plagiarism. This guide may also be helpful:

<https://depts.washington.edu/pswrite/plag.html>.

Instances of plagiarism will be referred to the Vice Provost/Special Asst. to the President for Student Relations and may lead to disciplinary action.

Access and Accommodations

UW Disability Resources for Students (<http://depts.washington.edu/uwdrs>) offers resources and coordinates reasonable accommodations for students with disabilities. If you have already established accommodations with DRS, please communicate your approved accommodations to me at your earliest convenience so we can discuss your needs in this course. If you have not yet established services through DRS, but have a temporary or permanent disability that requires accommodations (this can include but not limited to; mental health, attention-related, learning, vision, hearing, physical or health impacts), you are welcome to contact DRS at 206-543-8924 or uwdrs@uw.edu or disability.uw.edu. When you contact the DRS office, their staff will work to establish reasonable accommodations for you through an interactive process between myself, you, and their office.

REQUIRED READING

Android Guidelines: developer.android.com/design/patterns/index.html

iOS: developer.apple.com/ios/human-interface-guidelines/overview/design-principles

Microinteractions, Dan Saffer, 2013; www.odannyboy.com

Designing Interface Animation: Meaningful Motion for User Experiences, Val Head, 2016;
<http://valhead.com/>

Additional/Suggested Readings

Tapworthy: Designing Great iPhone Apps, Josh Clark, 2010

Designing for Interaction, Dan Saffer, 2009 (second edition)

Don't Make Me Think, Revisited Steve Krug, 2014 (third edition); www.sensible.com

The Design of Everyday Things, Don Norman, 2013 (revised/expanded edition); www.jnd.org

Interaction Design: Beyond Human-Computer Interaction, Jenny Preece, 2013 (fourth edition)
www.id-book.com

Mobile Design“Inspiration” Websites

iospirations.com

lovelyui.com

mobile-patterns.com

pttrns.com

ui.theultralinx.com

REQUIRED SKETCH SOFTWARE READINGS/TUTORIALS

designcode.io/sketch

medium.com/shyp-design/design-at-1x-its-a-fact-249c5b896536

learnsketch.com/tutorials/what-is-sketch

SAFETY NOTICES

After-Hours Access to the Art Building

For after-hours access to the Art Building, please bring your Husky Card to the SOAAHD Advising Office (Room 104 Art Building, open M-F, 8am-4pm). Student cards will be swiped, and you will receive an access sticker for your Husky Card. Access is instant after swiping. Access will be removed at the end of the year.

Violence Awareness/Prevention

- Always call 911 if you or others may be in danger.
- Call 206-685-SAFE (7233) to report non-urgent threats of violence and for referrals to UW counseling (www.washington.edu/counseling) and/or safety resources (www.washington.edu/safety).
- Don't walk alone. Campus safety guards can walk with you on campus after dark. Call Husky NightWalk @206-685-WALK (9255) or the shuttle/NightRide program: facilities.uw.edu/services/tags/Shuttles
- Stay connected in an emergency with UW Alert by registering your mobile number at www.washington.edu/alert to receive instant notification of campus emergencies via text. For more information, visit the SafeCampus website at www.washington.edu/safecampus.
- Proper student conduct is important for maintaining a healthy environment at UW. Please familiarize yourself with the UW Student Code of Conduct: <http://app.leg.wa.gov/WAC/default.aspx?cite=478-120>

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PROJECT 1: INDIVIDUAL APP REDESIGN

Improve the user interface and visual design of your assigned app:

Dark Sky Weather (iOS) and Dark Sky Hyperlocal Weather (Android)

Helps users manage their time by assigning tasks to specific blocks of time.

iPhone: itunes.apple.com/us/app/dark-sky-weather/id517329357?mt=8

Android: play.google.com/store/apps/details?id=net.darksky.darksy&hl=en_US

Elk (iOS) and XE Currency Converter (Android)

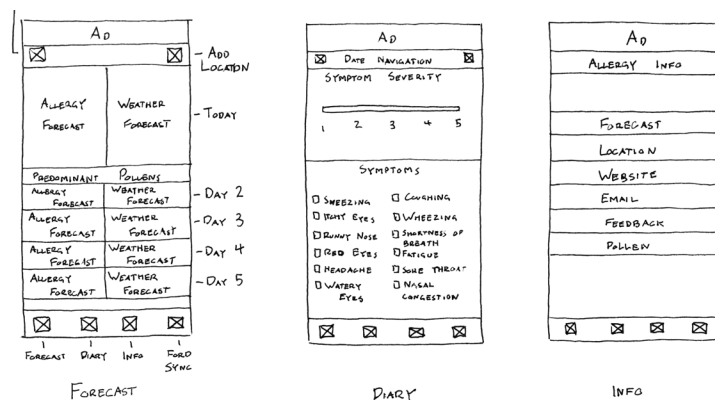
Calculate, convert, and compare currencies by using the up-to-date conversion rate.

iPhone: itunes.apple.com/us/app/elk-travel-currency-converter/id1189748820?mt=8

Android: play.google.com/store/apps/details?id=com.xe.currency&hl=en_US

Week 1: Existing Organization and User Flows

Today (Jan 4) in-class you will sketch wireframes for the entire existing app. For example:



After making your wireframes, identify each task that a user can do in the app.

For each task, create a flowchart that shows the user's path through the app—this is the “user-flow” or “task-flow” diagram (see sample at right).

In making your user/task flows, you probably observed “pain points”—bumps and frustrations in the process that prevented users from easily completing the desired task (refer to this article on task flows and user flows: <https://uxdesign.cc/when-to-use-user-flows-guide-8b26ca9aa36a>) **Mark these pain points on your task flow diagrams.**

Next, each student assigned the same app should examine two competitor apps.

Complete this Google spreadsheet: <https://docs.google.com/spreadsheets/d/1UBVE2gc73SMypMfo80z5rOJ8LkPOWNXgeQ6FAwPsCU/edit?usp=sharing>

The spreadsheet requires you to analyze your app according to the Nielsen Usability Heuristics. Please read: www.nngroup.com/articles/ten-usability-heuristics

After your group's spreadsheet is complete, get in a group and discuss what might make a re-designed version of the app compelling and unique. Come up with three or more different, viable visions for a revised app.

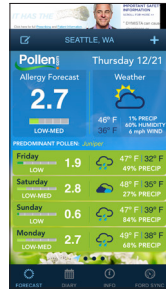


Sample Task Flow Diagram

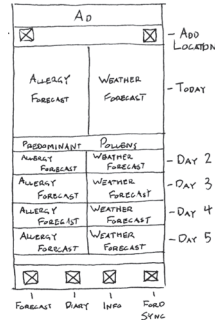
Week 2: Wireframe for Revised Design (Paper Wall Critique)

Based on three different visions for your app, create wireframes that propose three different redesign concepts. Use Sketch to create wireframes to the fidelity level shown below at the far right:

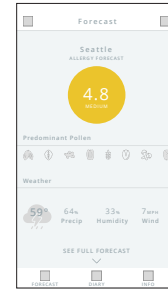
Original Pollen App



Drawn Wireframe, Jan 7



Wireframe, Proposed Design



Each redesign proposal should be shown on tabloid (11x17") sheets.

Follow iOS or Android guidelines as outlined in the required readings online.

State your overarching vision for each proposal in a single sentence at the top of the tabloid sheet. Be prepared to present your wireframes for critique on Mon 1/13.

Week 3: Visual Design and MicroInteractions (Paper Wall Critique)

Based on the feedback from the last critique, develop the visual design of your revised app. You should work to refine both the flow of the UI and the visual execution.

Indicate two or more microinteractions that provide pleasure and improved functionality. Additionally, create at least two visual variations for critique on Wed 1/15.

Visual design proposals should be shown on tabloid (11x17") sheets.

Microinteraction drafts should be presented as drawn storyboards on paper.

Week 4: App Development (Critique via Digital Projection)

Based on the feedback from the previous critique, create a refined click-through of your app using InVision. For this click-through, microinteractions should be animated on-screen.

The prototype is high-fidelity, showing exactly what the actual app would look like at 100% scale on the phone of your choice.

Using the classroom digital projector, present your click-through for critique on Mon 1/27. Prepare variations as necessary—keep the presentation organized).

Week 5: Final Critique

For our final critique on Mon 2/3, address any issues identified at the last critique, and refine visual design, microinteractions and overall UX/UI.

As before, you should be prepared to demonstrate this final app design as a click-through using the classroom digital projector.

This is our last critique on this project, but you have until the end of the quarter to submit the final design for grading.

You must submit a printout that shows the visual design of your screens, a click-through of the final app, as well as two movies that show microinteractions.

Specific guidelines for the printout, movies and click-through will be given in class.