

INF385C : Human-Computer Interaction Syllabus – Fall 2017

Instructor: Dr. Jacek Gwizdka

Office: [UTA](#) 5.532

Office Hours: By appointment

Email: jacekg@ischool.utexas.edu (always include **INF385C** in the email's subject)

Note: direct email is by far the best way to contact your instructor and TA

Peer Mentor: Ms. Kathryn Golden

Email: kegolden@utexas.edu

(all course-related email should be sent to the TA and cc-ed to the course instructor)

Class meetings: Wednesdays 12pm-2:50pm, [UTA](#) 1.212

Canvas @ UT: <https://utexas.instructure.com/>

Course schedule: in a separate document on Canvas (look under Canvas Syllabus)

Course announcements and email list: through Canvas

COURSE DESCRIPTION

This course will introduce you to human-computer interaction theories and design processes. The emphasis will be on applied user experience (UX) design. However, the course will start by discussing fundamental aspects of human perception and cognition and linking them with design principles. The course will present an iterative evaluation-centered UX lifecycle and will introduce you to a broader notion of user experience, including usability, usefulness, and emotional impact. The lifecycle should be viewed as template intended to be instantiated in many different ways to match the constraints of a particular development project. The UX lifecycle activities we will cover include contextual inquiry and analysis, requirements extraction, design-informing models, design thinking, ideation, sketching, conceptual design, and formative evaluation.

It is a goal of this course to help students realize that UX design and engineering is an ongoing process throughout the full product life cycle, and developing the human-computer interface is not something to be done at the last minute, when the "rest of the system" is finished.

Class time will be split between content-based lectures, discussions and in-class project-related activities to demonstrate techniques and principles and to practice the skills being presented. The part of class time used for lectures will be devoted to highlighting course materials, questions, and discussion. The composition of individual class meetings will differ somewhat throughout the semester.

Outside of the classroom, students will acquire more in-depth hands-on experience in applying these skills and techniques in a semester-long team project. In this project, students will develop a usable interaction design for their own application system in a UX project for a "client".

OBJECTIVES

The objective of this course is for students to learn fundamentals of human perception and cognition, to learn how to conduct user research, how to design, prototype and evaluate user interfaces. Students will learn user interaction design principles through theory and practice. At the end of this course you will be able to:

- understand the main concepts in human computer interaction;
- understand the fundamentals of human perception and cognition and their implications for user experience and interaction design;
- conduct research to learn about user needs and human uses of technology;
- undertake iterative and inexpensive user-centered design methods;
- design and prototype user interfaces;
- understand and apply interaction design guidelines;
- identify the strengths and weaknesses of interfaces and provide suggestions of how to improve them;
- perform basic user interface evaluation and usability testing;
- undertake further training and research in this area.

UNIVERSALITY AND BREADTH OF APPLICABILITY

The process, principles, and guidelines are universal and applicable to any kind of design that involves interaction between humans and non-human systems in the broadest sense. The material of this course applies not just to GUIs and the Web but to all kinds of interaction styles and devices, including ATMs, refrigerators, elevator buttons, road signs, ubiquitous computing, embedded computing, and everyday things.

HANDS-ON, PRACTICAL APPROACH

This course takes a practical, applied, hands-on approach, based on the application of established best practices, principles, and proven methods to ensure a quality user experience.

My goal for you is to introduce you to the activities of the UX lifecycle process and to give you opportunity to gain some practical experience with them. You are exposed to each activity in several ways. First you read about it in the book, then the instructor will review the highlights in lectures. Then we will discuss topics in the class. Topics and discussions will be enriched by your short presentations in most of class meetings. Finally, you will apply your newly learned skills in a somewhat realistic hands-on situation through your semester-long team project assignments.

HUMAN PSYCHOLOGY FOUNDATIONS

HCI is rooted in human psychology. Good understanding of design principles and guidelines and their effective application requires knowledge of their scientific underpinnings. Therefore, the course will start with covering theoretical topics.

MY PERSONAL GOALS FOR YOU IN THE COURSE

In addition to content-specific objectives reflected by the topics in the course calendar, I have these personal goals for each student:

- to get you to think deeply and carefully about the subject,
- to help you to genuinely like the subject,
- to provide knowledge and skill useful to you in your career,
- to engender a deeper interest (perhaps in some of you) that can be pursued beyond this course,
- to make you proud of your achievements in this course, especially of your project work, and,
- hopefully, have a little fun in the process.

WARNING: Occasionally we get students with considerable experience in HCI/UX. You are still welcome to participate in this course, but be warned that this is not an advanced course in HCI/UX. Although this course gives thorough treatment to the HCI/UX process, it is an **introductory** course.

TEXTBOOK

The textbook for this course is *The UX Book: Process and Guidelines for Ensuring a Quality User Experience* by Hartson and Pyla, Morgan Kaufman, 2012. (Book website: <http://www.theuxbook.net/>). The book is available in UT bookstore and online at UT: <http://utxa.ebib.com.ezproxy.lib.utexas.edu/patron/FullRecord.aspx?p=842194>

OTHER REQUIRED BOOKS AND READINGS

JJ13: Johnson, J. (2013). *Designing with the Mind in Mind: Simple Guide to Understanding User Interface Design Guidelines*. Elsevier (2nd Edition). Available online at UT: <http://utxa.ebib.com.ezproxy.lib.utexas.edu/patron/FullRecord.aspx?p=1584420>

DN13: Norman, D. (2013). *Design of Everyday Things: Revised and Expanded*. New York: Basic Books. Available online at UT: <http://site.ebrary.com.ezproxy.lib.utexas.edu/lib/utexas/detail.action?docID=10778063>

CLASS LECTURE SLIDES AND OTHER HANDOUTS

For your reference, the PDF versions of class lecture slides will be posted on Canvas. You have my permission to print a copy for your personal use. Assignment and project descriptions are also posted on Canvas. The files posted on Canvas will be either linked to Canvas Syllabus/Calendar or available directly in the Files section.

HOMEWORK

The major work outside the classroom is the team project (see below). In addition, there will be one assignment. Due dates are in the course schedule/calendar. Even if the instructor doesn't announce each homework in class, it's your job to know when you should be working on one and when they are due. Ask when in doubt. One other type of homework will be the weekly reading assignments described below.

Submitting written homework and project assignments

You must prepare your assignments using a word processor and submit it by uploading to Canvas by the due date/time. Please always use appropriate three- or four-letter file extensions in submitted filename (e.g., .docx for Word files, .pdf for Adobe portable document format). Assignments usually may not be submitted via email to either the professor or a TA.

All documents that you are submitting should include on the front page of your submission your name (spelled in the same way as in the course roster), course number/name, instructor's name, semester and the date of submission. For group work, please also always include on the front page all group member names, your project group number, and your project short name (or title).

GRADING

IN CLASS	Class participation (includes in-class activities, participation in discussions, etc.)	5%
IN CLASS	Discussion Leading (DL), Design Critique (DC) or Online Article Presentation (OAP)	10%
AT HOME	Reading assignments (including questions posted by you on Canvas)	5%
AT HOME	Assignment (Design Critique)	10%
AT HOME*	Project (teamwork, unless otherwise noted)	70%
	Project 0: Topic idea	0%
	Project 1: Topic selection and product concept statement	0%
	Project 2: Contextual inquiry and analysis	15%
	Project 3: Requirements and modeling	10%
	Project 4: Design	10%
	Project 5: Prototype	15%
	Project 6: UX evaluation and reporting	5%
	Project 7: Final project report and presentation (+ individual section 7i)	10% + 5%

* most project activities will take place outside classroom; some will take place in class.

GRADING SCALE

- 96 or above (A superior)
- 90-95 (A- distinguished)
- 87-89 (B+ good)
- 84-86 (B satisfactory)
- 80-83 (B- barely satisfactory)
- unsatisfactory: 77-79 (C+), 74-76 (C), 70-73 (C-).

Note: Final grading does not happen just by calculations. I take into account many factors, and so your "Canvas points/%" are only a rough indication of the final grade. Ask when in doubt.

READING ASSIGNMENTS

You are responsible for keeping up with readings in the book per the schedule given in the course schedule/calendar. All assigned readings are to be done before a class meeting (except our first meeting, of course). Before class meetings during weeks 2-4 and 11, you are required to **post one discussion question** relevant to each assigned topic on the designated Canvas discussion area (note there may be more than one topic per week) and **respond to at least one question** posted by another student. Your questions should be in depth and sufficiently detailed to demonstrate that you read the assigned material (and not just skimmed it). This is particularly

important for the more theoretical readings during weeks 2-4. Since your questions will drive class discussion, you should ask about things you actually want us to discuss. Questions should not be too short (e.g., <10 words) or too long (e.g., > 200 words; these numbers are just rough guidelines). Questions should show you critical analysis of each reading and should not be superficial. Any student, TA or an instructor may post responses to online questions. **The deadline for posting questions is Sunday 11pm.** Bring your discussion questions with you to class each week (electronic or paper) and be prepared to discuss them in detail. During weeks when readings are more theoretical (2-4, and 11), two or three students will be assigned as discussion leaders (see below). During all other weeks, you are still required to read assigned reading, but there will be no online discussion on Canvas.

IN-CLASS PRESENTATIONS

During weeks on theoretical topics (roughly weeks 2-4, 11) two to three students will be assigned to lead discussion on the weekly readings. While during weeks on more applied topics (roughly weeks 5-14), one to three students will be assigned to prepare at home and present in class one of two types of presentations (short design critique or online article presentation – see below).

Discussion Leading (weeks 2-4, 11)

The discussants are required to come prepared to take a leading role in-class discussion. The discussants should be familiar with related questions posted by classmates on Canvas and be able to summarize them and possibly try to answer some of them. Discussion leading should be supported by slides (**submitted to Canvas 37 hours before the class by Monday at 11pm**). More information is posted on Canvas under Assignments.

Design Critique (weeks 5, 6, 8, 9, 12)

Starting with week 5, most weeks one or two students will be asked to present a short design critique of a human-machine interface (you should be able to show the device or its images). Presentation **slides are due 37 hours before the class** (i.e., by Monday at 11pm). More information is posted on Canvas under Assignments.

Article Presentation (weeks 5, 6, 8, 9, 12)

Starting with week 5, most weeks one or two students will be asked to present an online article on a topic closely related with weekly class topic. The article could be selected as an example of a UX technique or tool, or an example of an alternative approach. Presentation **slides are due 37 hours before the class** (i.e., by Monday at 11pm). More information is posted on Canvas under Assignments.

TEAM PROJECT

The major work (and the major part of course grade) component for the course is the semester team-oriented development project. It involves defining, analyzing, specifying, designing, prototyping, and evaluating an interaction design for a realistic problem area that you select. The purpose of the project is to give you exposure to all steps involved in developing a significant user interaction design. The project will include seven phases listed above in the grading table. The project assignments are described in detail separately.

This is a team project (except part #6 - evaluation, which you will perform individually). I will assign students to teams, trying to balance knowledge, skills, and backgrounds, based on a demographic survey given the first day/week of class. All development activities, including writing the deliverables, are team activities. All team members are to participate in all project activities. Do **not** go too far in the direction of dividing the overall process among the team members. Even though this might seem like a more efficient way to proceed, this leads to a kind of specialization that poses a barrier to each person learning the overall process.

The project grading process

The TA and the instructor typically work together in grading your submissions. Teams will be operating under somewhat varying conditions, reflecting various real-world development situations. Therefore, expectations for different teams will vary, as will the bases for grading project deliverables, so this is not about comparing the final products or deliverables across teams. The emphasis in this class is on learning the process and your project deliverables will be graded with that perspective.

The objective part. The first thing we assess objectively is whether all requirements are met. Mechanical aspects such as formatting, labeling, grammar, spelling, following instructions, etc. are easy to grade because they are objective. Since these mechanical aspects are just expected, we don't give positive points for those, but we may *deduct* points if they are wrong or missing.

The subjective part. The hard part in grading is the subjective part, which is about quality of content. Your submissions will be sorted in an approximate order of overall quality. We then take a second look and discuss relative merits of your work. In this process we calibrate our judgments. There are two components to this subjective evaluation: how well requirements are met (how well you did the job) and how well you reported it. Our evaluation of these components is based on our own knowledge and experience and is necessarily somewhat relative among the project teams of the class. The "how well you met requirements" part is based on our perception of how much you put into it, how completely you pursued the assignment, and how well you understood, interpreted, and applied the material covered in class to your project. We will try to write comments about these qualitative parts, so you know what aspects of your work and writing are possible issues.

Teamwork

Each member of the team is expected to contribute equally to each part of the project. It is possible that one of the most difficult parts of the project assignments is working well together in a group. It is understood that the effort each of you put into project phases may fluctuate given your skillset. Be aware of possible group problems and be ready to solve them. Don't make the mistake of taking this aspect for granted or waiting for it to fix itself; you have too much at stake. Sometimes, despite our best efforts, some team members end up not pulling their fair share of the weight. If you encounter such problems please contact your as early as possible. The instructor will work with a group to help you solve problems.

CLASS PARTICIPATION

Class participation includes presentation of assigned materials in the classroom, active role in in-class activities as well as active participation in classroom discussions.

CLASS POLICIES

Due dates and times for handing in homework and project assignments

All homework and project assignments must be turned in at the beginning of class on the due date. You should think of all due dates for assignments, especially project assignments, as firm. The tight schedule of deliverables throughout the whole semester makes it nearly impossible to extend due dates. Any assignment that you do not hand in on time may be penalized in grading. If you are not able to complete an assignment by the due date, it would be best for you to hand in as much of it as you have done. It will help if you notify us about special circumstances that will adversely affect completion of an assignment.

Attendance

You will not be graded directly on attendance. You are adults in a graduate-level course and are *expected* to attend every class. Beyond the occasional need to be absent from class for a good reason, please consider that much of the learning for the course occurs in class. You cannot participate in this learning if you are not present.

If you have to miss class for an extended period due to a protracted illness or similar reason, we will treat your needs as a special case and I will do everything I can to help you survive.

Computer use in the classroom

You can use your laptops and other computing devices (e.g., tablets, smartphones) in the classroom. However, their use during class time is *restricted* to the course-related activities. Students who use their devices for non-class related activities will be excused from the class and may have participation points deducted.

Academic Honor Code

You are encouraged to discuss assignments with classmates, but anything submitted must reflect your own, original work. If in doubt, ask the instructor. Plagiarism and similar conduct represents a serious violation of UT's Honor Code and standards of conduct:

- http://deanofstudents.utexas.edu/sjs/scholdis_plagiarism.php
- <http://deanofstudents.utexas.edu/sjs/conduct.php>

<http://deanofstudents.utexas.edu/sjs/conduct.php>

Students who violate University rules on academic dishonesty are subject to severe disciplinary penalties, such as automatically failing the course and potentially being dismissed from the University. **PLEASE do not take the risk.** We are REQUIRED to automatically

report any suspected case to central administration for investigation and disciplinary hearings. Honor code violations ultimately harm yourself as well as other students, and the integrity of the University, academic honesty is strictly enforced. For more information, see the Student Judicial Services site: <http://deanofstudents.utexas.edu/sjs>.

Notice about students with disabilities

The University of Texas at Austin provides appropriate accommodations for qualified students with disabilities. To determine if you qualify, please contact the Dean of Students at 512-471-6529 or UT Services for Students with Disabilities. If they certify your needs, we will work with you to make appropriate arrangements. UT SSD Website: <http://www.utexas.edu/diversity/ddce/ssd>

Coping with stress and personal hardships

The [Counseling and Mental Health Center](#) offers a variety of services for students, including both individual counselling and [groups and classes](#), to provide support and assistance for anyone coping with difficult issues in their personal lives. As mentioned above, life brings unexpected surprises to all of us. If you are facing any personal difficulties in coping with challenges facing you, definitely consider the various services offered and do not be shy to take advantage of them if they might help. These services exist to be used.

Notice about missed work due to religious holy days

A student who misses an examination, work assignment, or other project due to the observance of a religious holy day will be given an opportunity to complete the work missed within a reasonable time after the absence, provided that he or she has properly notified the instructor. It is the policy of the University of Texas at Austin that the student must notify the instructor at least fourteen days prior to the classes scheduled on dates he or she will be absent to observe a religious holy day. For religious holy days that fall within the first two weeks of the semester, the notice should be given on the first day of the semester. The student will not be penalized for these excused absences, but the instructor may appropriately respond if the student fails to complete satisfactorily the missed assignment or examination within a reasonable time after the excused absence.

Weather contingencies

If the university is closed (for any reason) on an assignment due date, the assignment will be due at the beginning of the next class.

E-mail Notification Policy

In this course e-mail will be used as the main means of communication with students. You will be responsible for checking your e-mail regularly for class work and announcements. If you are an employee of the University, your e-mail address in Canvas is your employee address.

Please make sure that your email is configured in such a way as to show your name in the same way as it appears on the official course roster. This most likely means that it should be spelled using Latin alphabet characters only.

All email messages you send concerning the class should be addressed to the TA with a copy to the instructor. We will sort out which of us should act on the message and will make every effort to answer your email in a timely fashion. However, you should not necessarily always expect to get an immediate reply. In particular, don't expect to get answers to questions about a homework or project assignment within the last few hours before that assignment is due. **Please put INF385C as part of the subject line of your email; that will help us identify your emails more quickly.**

The University has an official e-mail student notification policy. It is the student's responsibility to keep the University informed as to changes in his or her e-mail address. Students are expected to check e-mail on a frequent and regular basis in order to stay current with University-related communications, recognizing that certain communications may be time-critical. Read the policy: <http://www.utexas.edu/its/policies/emailnotify.html>.

You can find and change your official email address of record at https://utdirect.utexas.edu/apps/utd/all_my_addresses

INF385C : Human-Computer Interaction – Instructor: Dr. Jacek Gwizdka
Course Schedule (subject to change)– Fall 2017

#	Date	Topic	Reading Assignment (unless marked otherwise, readings are <i>before</i> class)	In class activity	Assignments (due at beginning of a class, unless indicated otherwise on Canvas)
1	Aug 30	Introductions. What is HCI/UX? Design lifecycle.	UX 1, 2. DN13: 1 <i>for next week</i>	introductions	HCI Background Questionnaire (Thu)
2	Sept 6	Perception	JJ13: Intro, 1-5	2xDL	
3	Sept 13	Cognition; Design concepts: Affordances, IxAction Cycle	JJ13: 6-9; DN13: 2, 3; UX 20, 21	3xDL	P0. Teams and initial topic ideas.
4	Sept 20*	Higher Cognition, HCI “laws”; Human Error	JJ13 10-14; DN13: 4, 5	2xDL	Homework Assignment 1. P1. Topics
5	Sept 27	Contextual inquiry & analysis (CI & A)	UX 3, 4	1xDC, 2xAP	
6	Oct 4	Requirements and modeling	UX 5, 6	1xDC, 2xAP P: CI & A	P2. CI & A (Fri)
7	Oct 11*	Guest speaker – Prof. Dania Bilal		P: req's & modeling	P3. Requirements & modeling (Fri)
8	Oct 18	Design thinking - conceptual design	UX 7, 8; DN13: 6	1xDC, 2xAP P: design – ideation/ sketching	
9	Oct 25	Design production – prototyping	UX 11, 9	1xDC, 2xAP P: short informal presentations	P4. Design
10	Nov 1*	Guest speaker – Eric Norquist (Prototyping)	Sketch/Invision	P: prototyping activities	
11	Nov 8	UX Guidelines (review)	UX 22	3xDL	
12	Nov 15	Evaluation - Rapid evaluation	UX 12, 13	1xDC, 2xAP	P5. Prototypes
13	Nov 23	<i>No classes - Thanksgiving Holidays</i>			
14	Nov 29	Project: prototype evaluations		P: swap prototypes to evaluate	P6. Evaluation (Thu)
15	Dec 6	Project presentations			P7. Presentation

Readings from the main textbook (Hartson & Pyla, (2012). *The UX Book*) are marked **UX**; Other readings are marked as:
JJ13 are from Johnson, J. (2013). *Designing with the Mind in Mind: Simple Guide to Understanding User Interface Design Guidelines*. 2nd Edition. Elsevier;
DN13 are from Norman, D. (2013). *The Design of Everyday Things. Revised and Expanded Edition*. Basic Books.
DC – Design Critique | DL – Discussion Leading | AP –Article Presentation | P - Project-related
Intro Theory Applied topics Project presentations
* Dr. Gwizdka away at an academic conference.

INF385C: Human-Computer Interaction

Discussion Leading in Class (ongoing)

Instructor: Dr. Jacek Gwizdka

Presentation slides are due 37 hours before the class (i.e., by Monday at 11pm). Assigned to: Please see the sign-up [page](#) for the list of student names and dates.

The discussants are required to come prepared to take a **leading** role in class discussions. You should become familiar with the questions posted by your classmates. Then paraphrase and **summarize** the questions and/or select the **most important question themes**, organizing them according to the book topics. Be prepared to answer some questions. If needed, you should be prepared to provide a synthesis of more important aspects of each reading. Discussion leading should be supported by slides.

Let me emphasize again, you are expected to paraphrase, summarize and group the questions and, particularly for longer questions, not just read them verbatim as they were posted by your classmates.

Please remember that, occasionally, there may be more than one discussion area in a given week.

Please upload slides that you have prepared for the discussion 37 hours before the class.

INF385C: Human-Computer Interaction

Article Presentation in Class (ongoing)

Instructor: Dr. Jacek Gwizdka

Presentation slides are due 37 hours before the class (i.e., by Monday at 11pm). Assigned to: Please see the sign-up [page](#) for the list of student names and dates.

Starting with week 5, most weeks one or two students will be asked to present an online article on a topic **closely** related with weekly class topic. You should be closely familiar with the weekly readings to select and present a related article. The article could be selected as an example of a UX technique or tool, or an example of an alternative approach. If two students are presenting, they should coordinate their article selection so that there is no overlap. If in doubt, please consult your article's topic with the course instructor.

Sources of articles include professional blogs or portals, for example [UIE articles](#)[Links to an external site.](#), [Norman/Nielsen group articles](#)[Links to an external site.](#), [Bruce Tognazzini's AskTog](#)[Links to an external site.](#), papers from an academic conference (e.g., ACM CHI [conference proceedings](#) [Links to an external site.](#))[Links to an external site.](#)) or from a professional magazine (e.g., UXPA: User Experience Magazine).

More links are posted on Canvas wiki [page](#).

You are required to upload your presentation **to Canvas 37 hours before the class (i.e., by Monday at 11pm)**. In the class, you will do a short presentation of the selected article (7-10min + Q&A). Time limit will be enforced.

INF385C: Human-Computer Interaction

Design Critique in Class (ongoing)

Instructor: Dr. Jacek Gwizdka

Presentation slides are due 37 hours before the class (i.e., by Monday at 11pm). Assigned to: Please see the sign-up [page](#) for the list of student names and dates.

Starting with week 5, most weeks one or two students will be asked to present a **short design critique** of a human-machine interface (you should be able to show the device or its images). Your critique should contain the following elements:

- Selection of a computer/device interface as an example of a good **or** bad design. Due to a limited time for your presentation it is a good idea that you focus either on the good or on the bad side of this interface. Include a visual of the presented interface (an image, video etc.).
- **Support your critique** - use design guidelines/principles, heuristics, Gestalt principles, etc. The idea is to analyze the design from different perspectives as you learn about them in this course. It is understood that in initial design critiques you will need to rely more on your "design intuition" rather than on design principles. Later in the semester, you will be able to use more design principles, guidelines, etc.
- Short discussion of the design tradeoffs, alternative solutions, etc.;
- Suggestions for improvements (if you can think of some).
- Prepare slides to present your critique and submit to Canvas
- Note: Each of you should critique a different interface / device. And you should not repeat the critique you submitted in the first homework.

You are required to upload your design critique slides **to Canvas 37 hours before the class (i.e., by Monday at 11pm)**. In the class, you will do a short presentation of your design critique (7-10 min + Q&A). Time limit will be enforced.

INF385C: HCI

Assignment 1

Instructor: Dr. Jacek Gwizdka

Note: this is the first at-home assignment. Please do not confuse it with short in-class design critique presentations.

Identify one example of a **well designed** and one example of a **poorly designed user interface**. Critique the two designs using your intuition and your knowledge gained from the recent readings, class lectures and discussions. For the well designed interface: state what is good about the website's design and why you find it well designed. For poorly designed interface: state what the problem is and why you find it to be a problem. Please support your arguments by using **at least three design concepts for each interface**. For example, the concepts could include: visibility, feedback, consistence, affordance, Gestalt principles, use of color, conceptual model, Norman's stages-of-action model (two gulfs), and/or Interaction Cycle / User Action Framework.

Submission: about 500 words per interface; be sure to include images of interfaces you are critiquing (if you are critiquing web page(s), please insert also their URLs). Your document should be single spaced.

Project part 1: Topic selection and concept statement

Overview

In this project assignment you get started by establishing your project topic in the context of a real or potential “client”. You will write a short system concept statement and a somewhat longer and more detailed summary.

What To Do

1. Establish a project topic and a “client” for your project.
2. Establish a product or application system for which you will develop the user interaction design.
3. Write and refine (several times) a system concept statement for your target system.
4. Write a descriptive summary.
5. Submit to Canvas.

The Importance of Making These Choices

Although we list choosing the topic and the “client” first, you will really be choosing the topic, “client” and “product” or “system” together. We urge you to choose carefully, since you will be living with your decision for the whole semester. Your choices for a product or system can range from an information system to a Web site to a commercial product such as a new kind of personal device. You can even design a new system with gestural interaction on a wall-size display.

Please consider a choice that will involve lots of *creative design*, as that is one of the important emphases in this course.

How To Do It

1. Choose a project topic

Select a “client”, that is someone or some organization who needs a new interactive system or a revision of an existing system and who will provide the setting for a hypothetical system your team will design in subsequent project phases. It is fine to use connections you already have (e.g., places you have worked, places where friends work). Your instructor may provide some suggestions. The client and/or potential users will play a role throughout the project, so you need to find someone who will be available enough and willing to meet with you occasionally.

In some cases, where your product or application system is for the general public and/or for students, you can be your own client. You would then use people **outside** your project team, such as other students, friends, or family, as representative users. In those cases, though, make sure you have contacts with the kinds of people you will need to represent all your different user classes.

It is acceptable to choose a client who is the employer of one of your team members. However, that team member cannot act as a client representative in

this project. That person must assume a role on *your* team and cannot be a significant source of client information, especially for client interviews. You must still visit the client and talk with other people there. Otherwise, it is a conflict of interest.

2. Choose an interactive product or application system.

First, be sure the system is the right size. Very large and complex systems are not good choices as vehicles for learning the interaction design process. On the other hand, be careful not to select a system that is too small or too simple. The criterion for selection here is that you will need to identify about a **half dozen somewhat different kinds of user tasks** (it could be less, if the tasks are very complex). That usually means, for example, that a Web site used only for query-based information seeking is not a good candidate, because information seeking would be only a single type of task and there will be a limited user interaction with the system. You should also try to choose a system that has more than one class of users.

Would an extension to or redesign of an existing system be an acceptable choice? The answer is: yes. You will still do the analysis and design for the new part of the existing system you will be working on. Your work should lead to a new design for this part of the system.

Can a real project be used? Can you leverage what you learn and do in this course and apply to produce a useful product? We recommend *against* using this project to develop a system or interaction design that might, for example, apply to part of your job or to something like an independent study or thesis. It is better to use this course to learn the process and then apply it to a real system. The reason is that real projects have constraints and requirements that usually compete or interfere with the goal of learning the process for developing interaction designs. Some rare exceptions can be made, if you can convince me that you are truly willing to relinquish control and allow the design to go where the team and the course requirements take it. Pedagogical goals outweigh all other possible goals for this project. Whenever other needs and constraints conflict with the use of this project as a vehicle for learning the usability process in this course, the course has to take precedence. You can follow up in any way you want, of course, after this class is over.

In any case, you must keep it simple. More of the time spent can be for learning, it will be less workload, and it will be more fun and easier to carry out all the development steps.

3. Write a system concept statement (100 to 150 words), per the description in the book (section 3.2, pp. 96-97)
4. Write a more detailed (half page, up to one page, single spaced) descriptive summary of your target application system. Here, you can further motivate usefulness and capabilities in terms of what the tasks

users will be able to perform. Make it clear if the system exists or not. The audience for this part is me (your boss, the project manager). This writeup should be a little bit larger and it should be somewhat more technical and more complete than the system concept statement above—about 1/2 a page to a page, compared to the limit of 100 to 150 words for the system concept statement.

Deliverables

Upload your **Project part 1 report**, consisting of the concept statement and the descriptive summary, to Canvas.

Grading

Read what you write, because someone else will! Work on writing as a team. This is the time to really get the spirit of this project and nail this assignment! Beyond trying to assess objectively whether all requirements of each project assignment are met, we try to assess subjectively *how well* requirements are met. This is based on our own knowledge and can sometimes be somewhat relative among the projects of the class.

Iteration

Because of the importance of the system concept statement to each successive project deliverable, it is essential that you work together, as needed, to get it just right. If we (your instructor and the TA) think that your system concept statement falls short, we may ask you to rewrite it and hand it in, again.

Audience for All Reports

The purpose for all your project reports is to document all work done on the project, and the audience (except the system concept statement in this deliverable) is your *imaginary* technical manager, who is not involved in the day-to-day development activities and is not highly knowledgeable about the usability engineering process, but wants to be kept up to date on all the technical details of what you are doing. Use clear, plain English. Don't use esoteric, domain-dependent terminology, jargon, or acronyms.

Project 2: Contextual inquiry and analysis

Overview

In this project assignment you perform (mini) contextual inquiry and analysis, starting with a *field** visit to understand the existing customer, client, or user work (or play) practice, the activities people undertake to accomplish goals in the work or play domain and the work context. Given the temporal constraints of a semester, this will be contextual inquiry and analysis of a limited scope.

**Note* – *field* is understood here quite broadly and it will vary between team projects. And so, when we refer to field visits below, it could be a managers/workers office, it could be an organization’s building (e.g., a museum), or, most generally, it could be any environment in which your interactive application could be used (a computer lab, street, etc.).

Caution

Even if you have two or more separate parts to your project (e.g., separate different interfaces and/or separate platforms, such as the Web and mobile, for different user classes), we prefer that you work together as a single team and not divide up into separate teams with essentially separate projects. The more integrated approach will afford you more communication about problems and solutions, more coherence to your overall project. However, we should also note that most often it works out better if you focus on one platform for your projects.

Tailoring of Scope and Process

There is great variability among the projects with respect to the type of interactive product or system being developed, the nature of the users, and the kind of work/play context. Therefore, these project assignments cannot be “one size fits all” descriptions of the assignment.

So, part of your assignment is the real world requirement to decide for yourself how the UX processes in general and this specific project activity best fits your particular project. You need to make the assignment fit the characteristics of your own project in a way that makes it a suitable project step, a substantial learning activity, and an appropriate assignment for this course.

If you have doubts or questions, please ask the TA or instructor.

What To Do (Suggested directions)

1. Contextual inquiry
 - a. Do your pre-visit preparation and your field visits as described in Chapter 3 of the book.
 - b. Decide how many and which people will carry out which parts of this work and how many visits you will make.
 - c. Meet your “client” contacts and build a working relationship.
 - d. Work with the appropriate people to interview and observe users as they work.

- e. Collect task data.
 - f. Collect work artifacts.
 - g. Take photos (if appropriate).
 - h. Make sketches of work flow and the physical work space, if applicable.
2. Contextual analysis
 - a. Do your post-visit data analysis as described in Chapter 4 of the book.
 - b. Synthesize and paraphrase work activity notes from the raw data.
 - c. Build a work activity affinity diagram (WAAD) from work activity notes.
 - d. Identify the major work roles and machine roles (e.g., central database) in the work domain.
 - e. Make an initial flow model, a “big picture” diagram of work domain. Show interconnections among components of the work domain. Show work flow and information flow among the components.

How To Do It (Suggested directions)

1. As with Project Part 1, this deliverable will probably have a broader view of the system than you will actually develop in subsequent stages of the project. You will begin here with an understanding of the entire work or play practice and probably reduce the scope in subsequent project assignments.
2. Use Chapter 3 of the book as a general guide to the process for contextual inquiry. Note that an interview/observation of your client’s site is *required* for this deliverable. Your interaction with client/potential users should not be limited to phone or email interview. Be a detective! Dig out what you need. You may need more than one meeting with your client to do all this.
3. Use Chapter 4 as a general guide for contextual analysis. Tailor the scope of these activities as you deem appropriate for your own project. You will justify your approach in the write up.

Deliverables (Suggested)

Contents of Project 2 section:

- Table of Contents for this particular deliverable.
 - Please number and label your items per this list:
1. To make this report a stand-alone document, repeat the latest version of your system concept statement, as a synopsis of your project.
 2. Describe how you made decisions to tailor the scope of this assignment for your own project and give justification where appropriate.
 3. Describe the process of preparation for interviewing and observation in your contextual inquiry.
 4. How many client representatives and/or users did you interview in total and how did you decide that? List their participant ids (not actual names), job titles, responsibilities, and anything else that would help describe their role in the enterprise.
 5. Include a copy here of the initial questions you prepared for the interviews.
 6. Describe briefly how the meeting went with your initial contacts.
 7. Describe how you collected raw contextual data and what kind you collected.
 8. Show photos or scans/screen shots of any work artifacts you collected.
 9. Show a representative selection of photos you took.

10. Show scans of any sketches you made in the field.
11. Give samples of task data and other data you collected.
12. Show samples (a dozen or so) of your raw data notes and the corresponding work activity notes you extracted.
13. Describe your process of building the WAAD.
14. Include a few photos of your team at work, if appropriate.
15. Include a few photos of your WAAD.
16. List and describe each of the major work roles, sub-roles, and machine roles.
17. Show your initial flow model diagram. This should be described from a broad view, not just the flow addressed by your system.
18. Show major work roles and machine roles as nodes.
19. Show information and work flow as labeled arrows (arcs).
20. Include information flow outside your system (e.g., direct conversations, telephone, etc.) and, where appropriate, label with the channel used (e.g., phone) for each flow.

Project 3: Requirements and modeling

Overview

In this project assignment you extract some interaction design requirements from your work activity notes and work activity affinity diagram and write them in somewhat formal requirements statements. You will also construct some design-informing models.

Tailoring of Scope and Process

There is great variability among the projects with respect to the type of product or system being developed, the nature of the users, and the kind of work context. Therefore, this cannot be a “one size fits all” description of the assignment. This is especially true for the construction of design-informing models, as the choice of suitable models depends a great deal on your project context.

So, part of your assignment is the real world requirement to decide for yourself how the process in general and this specific project activity best fits your particular project. You need to make the assignment fit the characteristics of your own project in a way that makes it a suitable project step, a substantial learning activity, and an appropriate assignment for this course.

If you have doubts or questions, please ask the TA or instructor.

What To Do

1. Extract some representative interaction design requirements from your work activity notes and work activity affinity diagram.
2. Construct some design-informing models.

How To Do It (Suggested)

1. To extract interaction design requirements, do a walkthrough of your work activity affinity diagram and any additional work activity notes.
2. Select about a dozen different representative work activity notes (in the WAAD or not).
3. Use deductive reasoning to determine what requirements are implied in each selected work activity note.
4. Use the generic structure of the requirement statement given in the book to document each extracted requirement.
5. About a dozen such requirements should be sufficient to gain a little experience with this activity.
6. To construct design-informing models, begin by carrying out the instructions in the *Tailoring of Scope and Process* section above. To do this for modeling, the most important step is to decide which models are suitable for the kind of project you are doing. The following is a guide. The bottom line is to make the models that fit your project and be prepared to justify your choices.
 - **User models**
 - **Work roles** (expected for all projects)
 - **Sub-roles** (expected for all projects)
 - (optional) Mediated work roles, if you have them

- The user classes for each role, define their characteristics (expected for all projects); see details below
 - (optional) Social models, if usage involves multiple people working together
 - **Usage models**
 - Flow model (expected for all projects)
 - **Task structure models**
 - Hierarchical task inventory (expected for all projects); see details below
 - **Task interaction models** (choose the types of interaction models that make sense in your project and **do 2 or 3 of each of those, for a total of about half a dozen**)
 - Usage scenarios
 - Step-by-step task interaction model
 - Essential use case task interaction model
 - (optional) *Working environment models* (if applicable)
 - Physical model, if usage occurs in a particular workspace that influences the work practice
7. Use any data bins you might have created in contextual inquiry and analysis to get you started on the corresponding models.
 8. Especially look for and document information needs and barriers to usage in each model, as appropriate. Create a brief barrier summary, as shown in the book.
 9. Define/describe all your target user classes as associated with work roles. We would like to **see two or three different user classes** for each work role. Identify user classes with specific work context roles—for example, user classes for the manager or sales clerk role, not something vague like "frequent user," "new user," etc.. As part of each user class definition, give a brief "bottom line" statement, such as "Users are walk-up-and-use users from the general public, with a broad range of computer skills and background" or "These are highly trained and experienced power users". If you truly do not have two or three user classes for a role, explain and justify here.
 10. For the hierarchical task inventory, **draw a hierarchical task analysis diagram, including as many user tasks as you can identify, at least five and up to a couple of dozen tasks at 2-3 levels for the overall system**. If there are no five reasonable user tasks, the system and your project scope are probably too small at this stage and we should discuss it. Does your first-level breakdown of tasks correspond to the work roles? Discuss briefly.

Deliverables

Contents of Project 3:

- Table of Contents for this particular deliverable.
 - Follow with these items; please number and label your items per this list:
1. To make this report a stand-alone document, repeat the latest version of your system concept statement, as a synopsis of your project.
 2. Describe how you made decisions to tailor the scope of this assignment for your own project and give justification where appropriate.
 3. Show about a dozen interaction design requirements that you extracted from your work activity notes and work activity affinity diagram.

4. Briefly (one short paragraph) describe the requirements extraction process and how it worked for you.
5. List the models you decided to construct for your project.
6. Justify why you picked these and why you did not make the others.
7. Show each of your models. Label each with a sub-heading so we know what we are looking at.

Grading

This assignment could be very labor intensive for you, but we do not want it to be so. We want you to do just enough work to learn. So we will be looking for a balance in your effort. For example, a social model is complex and time-consuming. Thus, if you make a social model, you can go light on the others. Work smart and plan accordingly. Get it done, but don't kill yourselves and do learn in the process.

Project 4: Design

Overview

In this project assignment you do design thinking, ideation, sketching, conceptual design, and some initial design production. If appropriate, you may develop a design persona. Finally, you will create storyboards. At this stage, you will (typically) do **all** of this on paper.

What To Do

1. Develop one persona to drive/inspire your designs.
2. Do ideation and sketching to explore early design ideas for your project.
3. Make one or more physical mockups, if appropriate.
4. Create a description of the designer's mental model at a high level for your design.
5. Create a conceptual design as a mapping to help users acquire a mental model to match the designer's mental model.
6. Create overall interaction flow for the whole product/application/system.
7. Make sketches of features of your conceptual design in each of the three perspectives, as shown in the book.
8. Describe any metaphors you used in your design.
9. Develop **storyboards** from the interaction perspective for **two (or more)** of your existing usage or design scenarios or write new design scenarios for this now. Include frame(s) to explain the state change between adjacent frames.

How To Do It

1. Design is an activity that we emphasize in the lifecycle, the book, and this course. We urge you to make this project assignment as creative as you can.
2. To develop the persona, start with several candidates and winnow it down to one, per the process described in the book.
3. Do the ideation and sketching per the description in the book. Use your contextual data, especially the design-informing models, to guide your design ideas.
4. Same for the mental models, conceptual design, storyboards. The task models, including hierarchical task inventory, scenarios, and storyboard models, will help you keep track of the tasks that must be supported in the design.
5. As you work with your designs, consider the three perspectives: ecological, interaction, and emotional. *Not all* will be applicable to every project.
6. *Note:* Also as you work with your designs, you will see we use the term "screen". We intend that to be used in the broadest sense, including a touchscreen, for example, in a mobile device. If your product or system does not have a screen in the traditional sense, explain, substitute your own medium for interaction, and adjust the assignment accordingly.

Deliverables

Contents of Project 4 section:

- Table of Contents for this particular deliverable (not the whole folder).

Then follow with these items; please number and label your items per this list:

1. To make this report a stand-alone document, repeat the latest version of your system concept statement, as a synopsis of your project.
2. Describe how you decided to tailor this activity to your own project and justify it.
3. Describe your design persona and the process you used to establish it.
4. Describe your ideation and sketching process and how these two activities fit together.
5. Describe your workspace and the materials you used.
6. If appropriate, show photos of your team at work.
7. Show scans of selected sketches.
8. Describe any physical mockups you made (include photos).
9. Describe your designer's mental model, the conceptual design, and how the conceptual design acts as a mapping from designer to user.
10. Show your storyboards (probably as scans), and explain the process very briefly. Explain the frame that shows the transition from one adjacent frame to another.

Project 5: Prototype

Overview

In this project assignment you are to build and *pilot* test a medium-fidelity (non-functional) **interactive** prototype using wireframes. You most likely do it using a software platform dedicated to prototyping (for example, you may start in Balsamiq, then use Axure).

Tailoring of Scope and Process

As previously noted, there is great variability among the projects with respect to the type of product or system being developed, the nature of the users, and the kind of work context. Therefore, this cannot be a “one size fits all” description of the assignment.

So, part of your assignment is the real world requirement to decide for yourself how the process in general and this specific project activity best fits your particular project. You need to make the assignment fit the characteristics of your own project in a way that makes it a suitable project step, a substantial learning activity, and an appropriate assignment for this course.

If you have doubts or questions, please ask the TA or instructor.

What To Do

1. Decide how much of your design you can represent in a wireframe prototype.
2. Build an interactive wireframe prototype of your design. This should represent an intermediate design and include links between wireframes and some user interface objects and “canned” data elements. The interactions should support some key level workflows.
3. If your project is product oriented, you may want to construct one or more physical mockups as part of the prototyping process. In such cases, you still may need to make wireframes to prototype the *interaction* part of the design. If you are unsure about how best to make a prototype for your product or system, please ask.
4. Pilot test your prototype.

How To Do It

1. Since wireframes should be easy to make, we hope you will make a prototype representing a reasonable portion of your design. However, building a wireframe prototype for any serious design is a large undertaking and requires much time and effort. Therefore, we want you to find a way to limit the scope so that it is not an overwhelming task. Remember that the goal is to learn the process, not to build a real product or system.
2. Follow the discussion in the book about wireframes, and a class presentation about wireframing/prototyping on how to make them.
3. In preparation for pilot testing, write up a set of key user tasks for each work role. State them in imperative sentences, telling what to do but not anything about how to do it.
4. The goal of pilot testing is to be sure your prototype is complete and bug-free enough to support **at least four key user tasks (workflows)**. Get at least one person outside your team to serve as a user surrogate. It's OK to use people from other teams. Have this participant go through the key tasks using your

- design at whatever level of interaction your prototype supports. The expected **level of interaction** is to have links between wireframes (e.g., linking the prototyped **interface elements** on one wireframe to another wireframe) and to include some user interface objects and “canned” data elements.
5. Fix just enough to make the interactive prototype viable for further UX evaluation in the next project assignment. Save the other UX problems found to put in the list you get during that subsequent UX evaluation.

Deliverables

Upload your report to Canvas.

Contents of Project 5 section:

- As always: Table of Contents for this particular deliverable .
1. Repeat the latest version of your system concept statement, as a synopsis of your project.
 2. Describe how you decided how much to include in your prototype.
 3. Describe the process of building your prototype.
 4. The major deliverable is the prototype itself (this could be an Axure file). Show your wireframes: include some screen shots, but also include a link to your interactive wireframes online or upload exported wireframes (e.g., exported as HTML from Axure). Give a narration (walkthrough) that explains and connects the wireframes so we can understand it as one integrated prototype. We will grade your prototype more on how well you did the process than on the quality of the design itself.
 5. Describe how you conducted your pilot test, the results, what you learned, and what (if anything) it led you to change in your prototype.

Project 6: UX Evaluation and reporting

Overview

In this project assignment you will operate as an evaluator both individually and with your team and evaluate another team's prototype using a walkthrough and an inspection. You will then write a team evaluation report for that design team.

Audience for Evaluation Report

The audience for your UX evaluation report is the design team who created the design you evaluated.

What To Do

1. Perform a qualitative UX evaluation of interaction design using a combination of practical UX methods – cognitive walkthrough and heuristic evaluation.
2. Write an evaluation report.

How To Do It

1. It is **not** recommended that interaction designers inspect their own designs. In fact, it is a conflict of interest, since the designers will have an agenda not compatible with what should be the goals of such an evaluation. So we are going to ask members of each team to inspect a different team's design.
2. Members of Team 1 will individually evaluate Team 2's design, Team 2 Team 3's design, and so on. Alternatively, depending on the logistics of a room, Team 1 may be paired up with Team 2, and Team 3 with Team 4, and so on.
3. Since the method you will use is a walkthrough and an inspection, you are going to need to understand the design you are evaluating. The design team (or its representative) will inform the evaluation team about the design to be evaluated:
 - The goals for the interactive product being evaluated
 - Who the target users are
 - What particular aspects of the design need special attention
 - A set of task descriptions (such as those used in your pilot testing).Each design team will provide the evaluators with their prototype(s).
4. Perform evaluation individually in two passes:
 - a. Cognitive Walkthrough (use the provided form to keep record of your findings)
 - b. Heuristic Evaluation (see textbook 13.4, starting on page 472; for each problem, use the structure provided).
5. Get together in your team and discuss, merge and prioritize your findings.
6. Write a team evaluation report addressed to the design team.
7. Give a copy of your UX evaluation report to the design team.

See details of points 4 and 5 below.

1st pass - Cognitive Walkthrough (4a)

Perform a cognitive walkthrough for one or more tasks provided by the design team (number of tasks will depend on how complex the design is). Your walkthrough will be guided by the three cognitive walkthrough questions (see slides and the form below). Record your findings in the form provided in this document (copy and paste as needed).

2nd pass - Heuristic Evaluation (4b)

Use the set of “standard” 10 heuristics (as listed in the book and in the slides). Each evaluator individually browses through each part of the interaction design, asking the heuristic questions about that part:

- assesses the compliance of each part of the design
- notes places where a heuristic is violated as candidate usability problems
- notes places where heuristics are supported (things done well)
- identifies the context of each instance noted previously, usually by capturing an image of the screen or part of the screen where the problem or good design feature occurs
- record your findings as you go.

After the two passes, you will:

- prioritize issues you discovered and select the most important ones to fix
- consider recommendations for the designers based on the most frequently visited screens, screens with the most usability problems, guidelines violated most often.
- record your priorities and recommendations (do modify them based on the group discussions in the next part).

Evaluators in each team get together and, as a team, they: (5)

- merge their problem lists from both passes
- prioritize issues and select the most important ones to fix
- brainstorm suggested solutions
- decide on recommendations for the designers based on the most frequently visited screens, screens with the most usability problems, guidelines violated most often
- each of you should record it to include it in your report later.

Then each of you will prepare to write an **team** report.\

Your evaluation report should: report on potential usability problems revealed by the walkthrough and inspection and be organized by part of the design—for each part, give specific examples of at which task step and at which walkthrough question the issue occurred **or** of heuristics violated. Include as many illustrative screen images or other visual examples as possible. In your report first include your own findings and recommendations, then include results from the team discussion. Comment on lessons learned from working individually in comparison to working as a team. Include the notes you took during the evaluation in appendix.

Form for Cognitive Walkthrough

What is being evaluated: Design team #: _____ Project title: _____

Task #: _____ Task Name: _____			
Step #	Will the correct action be sufficiently evident to the user? Will the user know what to do?	Will the user notice (visibility) that the correct action is available? Will the user see how to do it? (e.g. see the button and recognize its effect)	After the action is taken, will the user understand the feedback from the action correctly?
1	Yes/No (and why)	Yes/No (and why)	Yes/No (and why)
2			
3			
4			

(add *more* as needed)

***Suggested Heuristic Evaluation reporting format (for each identified problem):
You can adapt this format to reporting cognitive walkthrough results too.***

- Prototype screen, page, location of problem: On which screen and/or which location on a screen of the user interface was critical incident or problem located?
- Name of heuristic: Which of the 10 heuristics is being referenced? Enter the full name of the heuristic.
- Reason for reporting as negative or positive: Explain reasons why the interface violates or upholds this heuristic. Be sure to be clear about where in the screen you are referencing.
- Scope of problem: Describe the scope of the feedback or the problem; include whether the scope of the issue is throughout the product or within a specific screen or screens. If the problems are specific to a page, include the appropriate page numbers.
- Severity of problem (high/medium/low): Your assessment as to whether the implication of the feedback is high, medium, or low severity.
- Justification of severity rating: The reason why you gave it that rating.
- Suggestions to fix: Suggestion for the modifications that might be made to the interaction design to address the issue or issues.
- Possible trade-offs (why fix might not work): Mentioning trade-offs adds to your credibility.

Project 7: Project presentation and final report

Overview

This is the part of your project where you get to show off your design.

What To Do

1. Final Report

Put together final project report. Yes, the main task is to put together your partial project reports and add a little bit more.

Start with the latest version of your system concept statement. Then include reports for project parts 1 to 5 (of course, do not repeat system concept statement at the beginning of each part. Also, do not include part 6 with your evaluations of another team's prototype; those will be included by the other team – see below). Add three new short sections: a summary of findings from evaluations you've received from your classmates (up to 1 page); recommendations for further redesign (1-2 pages, not including images).

Include all appendices from partial reports together at the end of the report. Finally, include evaluations that you received from other team members in additional appendix. Selected elements of the report can become part of your UX design portfolio.

2. Presentation

Prepare a slide presentation showing off your design, overall process and highlighting your lessons learned. You will use in your slides material from the final project report. Feel free to draw as much of the content as you wish from the report (your selection of the most important points and illustrative images will be part of the grade). Remember to include lessons-learned from the overall experience. Your presentation should look professionally and be prepared with presentation software (e.g. PowerPoint). Use bullet points and **not** too much text. Graphics and visual elements are preferred over text.

Prepare a 15-18 min presentation (may be adjusted depending on the number of teams). You should be prepared to answer questions about your project work (3-5 min). Print out your presentations and bring them to the class on the day of your presentation. Give this printout to the instructor before you give your presentation.

Deliverables

1. Oral presentation of your project in class.
2. Your presentation slides and final report – please upload the files to Canvas. Note: if your prototype is best showcased while being interacted with, please consider taking photos and/or creating a short video and including it with your submission.

Project 7i: Reflections and Lessons Learned - Individual

Overview

This is the part of your project where you get to show off your design.

What To Do

1. Final Report

Reflect on the all part of the project process, now that you have completed it. What worked well and what did not work too well and why. What would you change in the process (not in the design) next time? What are your lessons-learned from the overall experience.

2. Presentation

Be ready to reflect on the project process and to talk about your lessons learned during group presentation.

Deliverables

1. A 2-4 page report.