

## INF350C: Advanced Topics In Human-Computer Interaction: Evaluation of Interactive Systems Syllabus – Spring 2019

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**Office Hours:** By appointment

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

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

**Class meetings:** Thursdays 12pm-2:50pm, [UTA](#) 1.502

**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

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### ***COURSE DESCRIPTION***

This is a project-based course designed to provide you with the knowledge and practical experience of interactive system evaluation, a.k.a. usability testing.

In this course, you will learn usability testing principles and strategies for planning and conducting a test in a usability lab. Once the basics are established through early class meetings and online discussion, you will focus your efforts on working with your team to plan, prepare, and conduct a usability test, then analyze and present the results in a written report, oral presentation, and highlights tape or embedded video clips.

This course centers on a “sponsored” project, which comes from a real organization with a real interactive system. You will be introduced to the sponsor and the project early in the semester. The important project deliverables will be directed to your sponsor *and* your instructor.

It is a goal of this course to help students realize that the importance of usability evaluation, and that it is an ongoing process throughout the product life cycle and 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 conduct multi-part usability evaluation of a “sponsored” system.

### **LEARNING OUTCOMES**

- Collaborate successfully as a team to plan a usability test
- Demonstrate the ability to conduct an effective usability test, based on a test plan
- Analyze the results accurately and coherently
- Present the results in effective oral and written forms

### **UNIVERSALITY AND BREADTH OF APPLICABILITY**

The process, principles, and guidelines are universal and applicable to any kind of system that involves human use, not only digital system. The material of this course applies not just to GUIs and the Web but to all kinds of interaction systems and devices, including ATMs, refrigerators, elevator buttons, ubiquitous computing, and everyday devices.

### **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 usability of an interactive product.

### **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.

### **TEXTBOOK**

Barnum, C.M. (2011). Usability Testing Essentials: Ready, Set ...Test! Morgan Kaufmann. Companion website at [www.mkp.com/testingessentials](http://www.mkp.com/testingessentials). The book is available in UT bookstore and online through UT libraries : <http://ebookcentral.proquest.com/lib/utxa/detail.action?docID=622174>

### **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 linked to Canvas Modules 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 a few small assignments. Due dates are on Canvas (in assignments area, also on the course schedule page and in 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 (such as Word) 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 team work, please also always include on the front page all team member names, your project team number, and your project short name (or title).

## **GRADING**

Class participation (includes in-class activities, participation in discussions, etc.)	15%
Homework (3 x 5%)	15%
Project assignments:	
Heuristic evaluation	10%
Personas (2) with a memo	10%
Test plan	10%
Oral presentation	15%
Final report, including appendices	25%
Project total	70%

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

## **GRADING SCALE**

- 94-100 (A)      90-93 (A-)
- 87-89 (B+)      84-86 (B)      80-83 (B-)
- 77-79 (C+)      74-76 (C)      70-73 (C-)
- 67-69 (D+)      64-66 (D)      60-63 (D-)
- 0-59 (F)

*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. All assigned readings are to be done before a class meeting (except our first meeting, of course). Assigned readings will be discussed in the classroom. Discussion questions will be posted on Canvas.

## **TEAM PROJECT**

The major effort (and the main part of course grade) component for the course is the team project. The team project involves:

1. Heuristic evaluation
2. Personas (two) + memo report
3. Project test plan
4. Project final report
5. Oral presentation of results

**Team meetings.** Your team will need to set up regular communication and regular meetings to plan and test the product. Effective, timely communication is essential to success with this project. We will set up a private discussion forum for your team on Canvas. Your team can request meetings with me or a TA at a mutually convenient time. I and the TA are available to help you succeed in your project in whatever way you find most appropriate. This includes reading early drafts of reports, sorting out differences of opinion about processes and approaches, and helping your team make sense of the findings.

### **Usability Testing Requirements and Options**

Ideally, everyone on the team should participate in all of the activities and tests. However, to provide the flexibility some of you may need, I have structured the course with one testing requirement and several other testing options:

- One whole-team test required: The team should schedule one test session in the usability lab with full team participation. This needs to be scheduled on your own. The pilot test—or walkthrough—does not count for satisfying this requirement.
- Flexible options for other tests: if needed, your team can do partial team testing in the usability lab—this might mean changing up roles, which is not the best situation, but can be done with proper coordination.

**Project Assignments.** You will be producing work associated with planning, testing, and reporting on the results of a usability study for a sponsor/client. The sponsor will introduce the project to the class and will be available to answer questions throughout the project. All assignment descriptions are posted to the course website. Canvas contains samples for each assignment.

## **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 generally *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/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 **INF350C** 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](https://utdirect.utexas.edu/apps/utd/all_my_addresses)

## QUESTIONS FOR DISCUSSION AND EXERCISES – *IN-CLASS*

### Week 2 – after reading Chapter 1. Establishing the essentials

#### Questions for discussion in class

1. Think of a product you own or use that was difficult to learn to use. What made it difficult? Who do you think the intended user of the product is? If you are the intended user, what would you recommend to the designers to make the product more usable for you to use?
2. Think of a product you own or use that you really like. What makes you like it? How would you describe the usability of the product, using the dimensions of Quesenberry's 5Es? Or using Morville's User Experience Honeycomb? Which of the dimensions or facets are most important to you when you think of the product's usability?
3. What do we mean when we speak of "discount" usability testing? What are the requirements of a discount usability test? How has this approach made usability testing much more practical as part of a user-centered design process?
4. When would you choose to do a small usability study? When would you choose to do a large study?

### Week 3 – after reading Chapter 2. Testing here, there, everywhere

#### Questions for discussion in class

1. What are some of the benefits of testing in a lab? What are some of the drawbacks of testing in a lab?
2. If you don't have a lab, how would you set up a usability test? What are some of the benefits of testing in a non-lab situation? What are some of the drawbacks?
3. What is field testing? What are some of the benefits of field testing? What are some of the drawbacks of field testing?
4. When would you choose remote testing over in-person testing? What are some of the benefits and drawbacks of remote testing?

## Week 4 – after reading Chapter 3. Big U and little u usability

### Questions for discussion in class

5. If you could pick one tool—in addition to usability testing—from the UCD toolkit, what would you pick and why? How would this tool work together with usability testing to provide insights into user experience?
6. What do you think are some of the reasons that heuristic evaluation (or expert review) is such a popular tool?
7. List some of the advantages of using heuristic evaluation. List some of the disadvantages of using heuristic evaluation.
8. If you needed to make a case for using one or more tools in your toolkit, what points would you want to present? In other words, how would you cost-justify using one or more of these tools? You should consider both the benefits of using the tools, as well as the risks of not using any of the UCD tools to conduct user research.

## Week 5 – after reading Chapter 4. Understanding users and their goals

### Questions for discussion in class

9. Review textbook Figure 4-3 (The Activity Grid) and focus on your generation. Think about the ways in which you use the Internet and come up with a list of your top 5 uses. Compare and contrast your top-5 list with the research findings reported in the Pew Internet study. Be prepared to discuss your Internet usage priorities in class.
10. How do you conduct research, using your university's library and other resources? If you are a member of the Google Generation, how well do you feel that the results from the British Library study match your research patterns and how are they different? If you are from a different generation, how do your research skills differ from the Google Generation? Be prepared to discuss your research strategies in class.
11. What expectations do you bring to a website that shape how you want the site to work? List 3 or 4 things you look for right away. List 3 or 4 issues that would drive you away from the site. Be prepared to discuss your expectations and frustrations in class.
12. What strategies would you use to learn about your users and their preferences?

## Week 7 – after reading Chapter 5. Planning for usability testing

### Questions for discussion in class

13. Describe several options for setting up a usability test. Consider the availability of space, the number and type of users, the placement of the moderator or team in relation to the participants, and other decisions required to plan the test. Compare the advantages and disadvantages of each option.
14. Describe the reasons why you would want to use some of the faster, chapter testing techniques discussed in this chapter. Describe the advantages and disadvantages of using one of these techniques.
15. What are the reasons to write a test plan? Who should receive the test plan? What elements would you include in the test plan?

### Exercise – in class

1. Working in groups, think of a particular product that could be the basis for a small usability test. How would you determine which group of users you want to select for this test? Describe some of the approaches you would use to select the subgroup within this group. Once you have agreed on a subgroup, create a list of criteria for that subgroup.
2. Then list several of the criteria you would use to establish tasks you want to test.
3. What types of data do you want to collect, based on the tasks you have selected? Think of both quantitative and qualitative data.

## Week 8 – after reading Chapter 6. Preparing for usability testing

### Questions for discussion in class

1. List the information you would want to include in a screening questionnaire. What questions would you want to ask early so that you can tell whether someone qualifies for a study? Be prepared to discuss your list in class or in your group.
2. In thinking of post-task and post-test questions, how would you prepare these so as to avoid bias? Draft several questions that demonstrate your understanding of questions with a neutral, unbiased approach.
3. List the various roles your team will need to assume. Describe the responsibilities of each team member. If you are working alone, how will you handle the various roles required in testing?
4. Describe the purpose of the walkthrough and the type of participant you should recruit for this phase of preparation. What is the difference between the walkthrough and the pilot?

## Week 9 – after reading Chapter 7. Conducting a usability test

### Questions for discussion in class

1. Discuss the role and relationship of the moderator with the participant. Make a list of tips for the moderator to use to avoid influencing the participant.
2. Describe a situation where the moderator might need to intervene. Discuss how the moderator should do this effectively.
3. Discuss the implications of the research by Reeves and Nass on the ways in which participants respond to questions.

## Week 13 – after reading Chapter 8. Analyzing the findings

### Questions for discussion in class

1. Define *triangulation* and explain its relevance to analyzing the results of usability testing. List some of the types of data that you can use for triangulating your findings.
2. Discuss the difference between *local* and *global* findings. Give some examples of each type from your usability study.
3. Describe how you would use a *severity scale* to rate the findings from your usability study. How many levels do you think you would want to report, based on the number of findings you are likely to have?
4. Describe how you will take the findings and make recommendations from these. Discuss the level of detail you feel comfortable with in terms of making recommendations. Consider whether you can make specific recommendations or general ones. If you can make specific recommendations, what strategy will you use to make these recommendations?

## Week 14 – after reading Chapter 9. Reporting the findings

### Questions for discussion in class

1. Identify the audience for the report you will write to present your study results. Determine the level of formality required.
2. Based on the level of formality and your audience for the report, describe the essential parts of the report you will write.
3. If you are also planning to give an oral presentation, describe the similarities and differences in the format for an oral report compared to a written report.
4. If you are planning to include video highlights, discuss the approach you would use to choose clips, based on clip duration, number of users, and so forth. Discuss the advantages and disadvantages of using this approach.

## EXERCISES – AT HOME

### Week 2

#### Exercise

1. Bring in the instructions for a product you have found difficult to use. Be prepared to lead a discussion, either in a small group or for the class, about the usability issues you faced in trying to follow the instructions.
2. From these usability issues or problems with the instructions, create a list of solutions to make this set of instructions usable. If you're working in a small group, the group should select a set of instructions for this exercise.
3. From this list of solutions, create a list of usability guidelines for any set of instructions.

### Week 3

#### Exercise

1. Take a look at one of the “quick and cheap” web-based tools available for web testing, such as UserTesting.com for the PC or Silverback 2.0 for the Mac. Explore the way this type of tool works. What are your impressions of this approach to testing? How do you think you might use a tool like this? What are the limitations of using such a tool?
2. Take a look at one of the “quick and cheap” web-based tools available for analysis of information architecture, website look and feel, and early design issues. Optimal Workshop has two that you might want to start with: Chalkmark and Treejack. Choose one of these, or another similar tool that you locate, and explore the way in which it works. What are your impressions of this approach to getting feedback about early product designs? What are the limitations of using such a tool?

### Week 4

#### Exercise

1. Take a look at one of the online card sorting tools, such as OptimalSort or WebSort. What are your impressions of how this tool works? How would you use this tool in early user research?
2. Go to the website of another university and explore the navigation path to find information about a degree similar to the one you are pursuing. Conduct an informal expert review of the information architecture and design of the website. Be prepared to discuss your analysis.

# Usability Team Project Overview

This course is designed to give you hands-on experience as a team to plan, develop, and conduct a usability test for a sponsored project from a real organization/company. The graded project deliverables are as follows:

1. Heuristic evaluation
2. Personas (two) + memo report
3. Project test plan
4. Project final report
5. Oral presentation of results

## ***Working as a Team***

Teamwork will be essential to your success. Your team will be assigned its own discussion area in Canvas to facilitate conversation and information sharing during the project.

Your team will need to assign roles for team members for all phases of the project. You also need a team manager to coordinate team activities and keep everyone on schedule.

## ***Working with the Sponsor***

Your sponsor will meet with the class and present the project. You will have access to your sponsor throughout the semester. All project deliverables will be submitted to Canvas for your instructor's review and will be shared with the Sponsor.

Your sponsor will help you understand the product, the target users, the users' typical goals and tasks, how the task can be completed using the product, and the goals for the usability study. Your sponsor will also provide incentives for the participants that you recruit for the usability testing in the lab.

# Project 1 - Heuristic Evaluation.

Heuristic evaluation (HE), also called Expert Review or Inspection, is a commonly used tool in a practitioner's UCD toolkit. It is discussed in Chapter 3 of the textbook.

You will conduct a heuristic evaluation to uncover issues you can use to plan your usability test.

Following the guidance of the textbook, each person on your team should *independently* evaluate the product for your project, using the following process to guide your evaluation:

- Agree on the type of user your team will be thinking about as you step into the shoes of that user to conduct your review. Later, this user will very likely be developed as one of your personas (the next project assignment).
- Agree on a scenario of use and follow the path of your user to accomplish the tasks associated with the scenario.
- Agree on the set of heuristics your team will use. These could be based on Nielsen's 10 heuristics, or Quesenberry's 5 Es, or some other set of heuristics.

When you have completed your independent evaluation, your team *needs to meet* (in person or online) to discuss its findings. The result of this meeting should be a combined set of findings, ranked by severity.

Review the reports in the Reports files folder on Canvas.

## Heuristics Report

The deliverable for this assignment is a team report that presents the findings, with associated rankings by priority for the issues presented.

The report should include the following:

- The heuristics used (if not from textbook, please list them and motivate their use)
- The evaluation process used by the team
- The user type used
- The scenario used
- The ranking/priority system used
- The findings with associated priority rankings (include *screenshots* to illustrate them)
- The way in which this report will be used in preparation for testing

Upload to Canvas.

## Project 2 - Personas

Personas are realistic, representative descriptions of your users, based on a compilation of data gathered from various sources. Personas allow you to think of your users as real people with real needs associated with your product. In planning for testing, they help you focus on the needs of the specific subgroups of users you will include in testing.

Chapter 4—Understanding Users and their Goals—gives you the background to plan for this assignment. You will find sample personas in the Reports folder on Canvas.

### ***Creating personas***

To be effective, personas must be based on real data. How to gather this data? Start with what you know about your users from your sponsor. Use whatever information the sponsor can provide from internal or external company research. Add to this information by conducting interviews with a few target users for your product. Teams can divide up the research responsibilities for this assignment to suit the strengths of the team.

As you gather information about your users and begin the process of identifying user profiles for creating personas your project, narrow your user information to two types of users. These will become your two main personas. Develop a task list for your product. Discuss possible tasks that your two personas would want to perform with your product. Choose several of these tasks to begin the process of developing scenarios. Consider ways in which these scenarios might be different for your two personas. Create separate scenarios, as needed, for each persona.

### ***Assignment***

Your team will create *two* distinct personas to represent different user groups for your product. You will then use one of these personas as the basis for the participant profile for your usability study.

Each persona should include characteristics that have direct potential application to your product. See the Canvas Files sections for samples of personas.

You will also write a memo to me that describes the research process and any sources you used to compile the two personas. If you use a photograph from an external source, be sure to cite your source.

### ***Deliverables***

- Two personas with a picture and description of each one
- A typical scenario for each persona
- Informal memo report to the instructor that describes the sources of the information for each persona

Upload to Canvas.

# Project 3 - Usability Test Plan

A clear and effective test plan is the key to a successful project. With the test plan in hand, your team knows how to progress and your sponsor knows what to expect.

It takes a concerted effort to put everything in place for the test plan. However, the hard work invested in this effort will pay off in having a plan you can follow and in knowing what the process entails.

Chapter 5 describes the test plan. Chapter 6 continues the discussion of information you will need to develop for usability testing. Your team should create the following elements:

- goals for the test
- scope of the project/number of users/length of sessions
- the user profile (based on one of your personas)
- the screening questionnaire
- tasks/scenarios (with approximate times for each scenario)
- pre-test questionnaire
- post-task and post-test questionnaires or other feedback mechanisms
- consent/video release form
- your project timeline
- responsibilities of team members, including checklists

Here are some steps that will help you complete these elements. First, use the agenda shown in textbook's Figure 5.1 to help you plan for your planning meeting. Merge team members' ideas into a single agenda you can use for your planning meeting. Schedule your planning meeting on the basis of the agenda, and set aside enough time to move through the agenda items. Any items you cannot complete in a single meeting should be assigned to specific team members for completion. Set a date for completion of these items. Then:

1. Create the screening questionnaire you will use to recruit participants. Meet with your team to finalize this important document.
2. Determine the team roles and responsibilities, including a project manager to coordinate activities.
3. Once roles are assigned, each person should make a checklist for his/her role.
4. Also create a script for the moderator or help the moderator create one.
5. If the team is observing in the same room with the participant, create an observer form.
6. Create or obtain a consent form for participants to sign giving permission to be videotaped. Include information on how you will use the video and how you will identify them (participant code only, not the real name).
7. Create the pre-test and post-task questionnaires you will use in the usability study.
8. Create or decide on a post-test questionnaire. As well, decide on any other post-test feedback mechanisms you will use. Prepare the materials need to use these feedback methods.
9. Set a delivery date for all test materials.
10. Schedule the walkthrough using the test materials.

## **Resources**

Examples of test plans are on Canvas.

**Report Format**

Your report should be formal, following the guidelines for a formal report in Chapter 5.

**Deliverables**

Your first deliverable is a draft of your test plan for our review. Please upload it to Canvas. Make this as complete as you can so that you can benefit from the feedback I provide.

After I review your test plan, you should revise it, as needed, then upload it again to Canvas and send it to your sponsor for feedback.

After receiving my comments with the grade for this assignment, as well as any feedback you receive from your sponsor, you will want to make further changes to the test plan, as needed, to finalize it.

# Project 4 - Guidelines for Project Test Report

A project test report is a common outcome of usability testing. It is typically used for either or both of the following reasons:

1. to reach a broader audience than those who participate in or observe testing
2. to document the test process and results

Your primary audience is your sponsor (not your instructor).

## Report Elements

Some of these elements can (and should) be written before testing is completed.

Your formal report should contain the following elements:

- cover page
- title page
- table of contents
- executive summary—brief synopsis of study, findings, and recommendations
- Introduction—background on the project (why, how, etc.) as well as description of report structure, including information contained in appendices
- description of test plan and procedures (which should include your goals for the study)
- description of your users
- description of scenarios
- top findings (positive and negative) with examples (e.g., screen captures)
- severity codes assigned to findings
- analysis from the post-task and post-test questionnaires (quantitative and qualitative)
- recommendations for short-term and longer term changes/improvements
- urge to action for more testing (as part of being a usability advocate)
- Appendices (labeled/tabbed for easy access) which include:
  - heuristic evaluation
  - personas
  - test plan
  - screening questionnaire completed for each participant
  - post-task and post-test questionnaires completed for each participant
  - moderator script
  - logs from sessions
  - and any other material used for the test sessions

Test reports can be created in Word (or Open Office / Libre Office editor or similar). For more information on writing the formal test report, review Chapter 9.

Your report will be delivered in two ways:

- a hard copy in a binder with your cover, tabs, etc., delivered to the sponsor and the instructor
- a digital copy uploaded to the project assignment on Canvas, so that it can be graded.

## Grading Guidelines

Your report should reflect excellent document design principles and should be written in a clear and engaging style. Grades will be based as much on your ability to communicate well as on your ability to perform good work on the project. The report should be proofread and well edited.

The next page contains some helpful points to follow before, during, and after conducting usability tests.

### Before conducting walkthrough/pilot test

1. If your team is using more than one moderator in your study, discuss the plan you will use to coordinate the activities of both moderators.
2. If your team is using a logger with logging software, review the process the logger will use. If your team is using a logging form, review the roles each team member will have in making notes on observations, including someone assigned to time tasks, if appropriate.

### Before conducting usability test

1. After the walkthrough and/or pilot, review the roles of all team members (or your own role if you are working solo), along with the test materials. Make changes, as needed.
2. Review the logging process from the walkthrough and pilot and make any changes or adjustments needed to the process before continuing with testing.
3. Study the video recording to give feedback to the team, particularly the moderator on the process.
4. Conduct a findings meeting as soon as possible after the first testing session(s), to capture the findings while they are still fresh and to get comfortable with the process of collating the findings.

### After conducting usability test

1. In your team, do a quick, top-level review of everyone's top positive and top-negative finding. See how much you have in common with others before you start your analysis.
2. Schedule a findings meeting and go through the process of review by using these 3 stages:
  - a. What did we see?
  - b. What does it mean?
  - c. What should we do about it?
3. Discuss the scope of your findings and organize them into local and global findings.
4. Assign severity ratings to the findings.
5. Determine how far down the list of findings you will document findings in your report.
6. Determine the type of recommendations you will make, including the level of detail based on team expertise.

### After analysis, before writing the final report

1. With your team, map out the parts of the report you will need to write. Assign writing and editing task to team members.
2. Draft an outline of your assigned part(s) of the report (written and oral) including examples you will use from the usability study.
3. Get together with your team to draft the executive summary so that it covers the main findings and recommendations.
4. Schedule a team meeting to collate the drafts of parts of the report from the team members.
5. Schedule an editing workshop to review the collated draft and standardize the report elements.
6. Before the oral presentation, schedule at least one dry run. Time your presentation and make any adjustments needed so that it fits the time requirements.

# Project 5 - Oral Presentation of Usability Test Results

## **Rationale**

The oral presentation of the usability test results is your opportunity to show what you have learned. Although you are producing a written report of test results, which will be distributed to many of the same people who will attend your oral presentation, some may rely solely on what they learn in your oral presentation.

## **How to Prepare**

The presentation should be done by the whole team. You will need to decide team members roles for the presentation delivery. Include planning and presentation practice time in your schedule of activities. You will also need to create the PowerPoint slides.

See Chapter 9 for information on preparing your presentation. See Canvas for sample presentations.

## ***Presentation***

Structure your presentation as follows:

- Begin with an introduction that provides an overview of your talk, including the points you will cover, and that introduces the project team members.
- In the body of your presentation, explain the testing process, your goals and objectives, and your results (both positive and negative findings).
- Conclude with your recommendations. If you can make specific recommendations, including recommended design changes, include these in your presentation.
- Also remember the need to advocate for more usability testing, based on your recommendations.

## ***Total Presentation Time***

30 minutes (maybe adjusted depending on the number of teams in the class), not including questions. There will be time for questions following the presentation.

## ***Deliverables***

A hardcopy of the PowerPoint slides to both the sponsor and the instructor. Also, upload the PowerPoint slides to Canvas.

Wk	Date	Before class	Reading before class	Homework or Project deliverables <b>Due</b>	In class discussion	In class activities
1	Jan.24		Syllabus			Introductions
2	Jan.31		Chapter 1: Establishing the Essentials	Homework 1: usability of product instructions	Discussion questions. Discuss project deliverables/outcomes.	Lecture, Qs discussion, homework discussion. Sponsor presents project.
3	Feb.07		Chapter 2: Testing Here, There, Everywhere	Homework 2: review web-based usability tools	Discussion questions	Lecture, Qs discussion, homework discussion
4	Feb.14		Chapter 3: Big U and Little U Usability	Homework 3: card-sorting tools	Discussion questions	Lecture, Qs discussion, homework discussion
5	Feb.21	Work on HE, findings from HE. start report	Chapter 4: Understanding Users and their Goals	Project 1. HE report	Discussion questions	Lecture, Qs discussion, homework discussion
6	Feb.28	Gather information about users for personas from sponsor and by interviewing users				Lab orientation
7	Mar.07		Chapter 5: Planning for Usability Testing	Project 2. Personas and memo report due	Discussion questions	Lecture, Qs discussion
8	Mar 14*	Draft test plan for review	Chapter 6: Preparing for Usability Testing	Project 3. Draft Test plan due	Discussion questions	Lecture, Qs discussion, discuss usability testing
	Mar.21	Spring Break	Enjoy!		Spring Break	Spring Break
9	Mar.28		Chapter 7: Conducting a Usability Test	Project 3 final. Revised Test plan due	Discussion questions	Lecture, Qs discussion, discuss preparations for walkthrough
10	Apr.04	Teams work independently to conduct testing				Teams conduct walkthrough with "tolerant" user
11	Apr.11	Teams work independently to conduct testing			Meet in lab with instructor / TA	Teams conduct pilot test with instructor feedback. Revise test materials, as needed
12	Apr.18	Teams work independently to conduct testing			<b>In lab, no class meeting</b>	Conclude testing. Conduct findings meeting to collate data from tests.
13	Apr.25		Chapter 8: Analyzing the Findings		Discussion questions	Lecture, Qs discussion
14	May.02		Chapter 9: Reporting the Findings		Discussion questions	Lecture, Qs discussion
15	May.09			Project 4. Presentations Project 5. Final reports		Teams make oral presentations in class to sponsor