



User-Centred Design

Task 7.2 User Evaluation Protocol

ILO	Apply evidence-based approach to requirements elicitation, specification and evaluation.
Purpose:	Learn how write a plan for a formal usability evaluation. A good plan will help everything will run smoothly on the day.
Group Task:	Prepare a plan for your usability study.
Resources:	<ul style="list-style-type: none"> ■ <i>Lecture Notes:</i> Topic 12 User Evaluation Method ■ <i>Textbook:</i> Hartson & Pyla Chapter 12, 14 and 15 or Stone et al. Chapter 22 ■ <i>Template:</i> UCD Informed Consent ■ <i>Handouts:</i> UCD User Evaluation Moderation, Swinburne Usability Laboratory Guide ■ Usability Evaluation FAQ (Blackboard/Frequently Asked Questions/Usability Testing in the Swinburne Usability Laboratory FAQ)
Deliverables	<p>Research plan consisting of:</p> <ul style="list-style-type: none"> ■ Participant selection and recruitment ■ Materials, including reference to informed consent, tasks, questionnaires and prototype. Also include location of study, test facilities and equipment, ■ Procedure includes running sheet and guidelines for responding to participants, method of recording data <p>Informed consent and general instructions</p>
Marking Criteria	<p>A study protocol that contains:</p> <ul style="list-style-type: none"> ■ a realistic plan for recruiting representative users ■ list of materials and reference to relevant pass tasks containing materials ■ description of prototype environment (i.e., paper/electronic, slide show/clickable pdf, any software used to build it) ■ location of the study, test facilities and equipment ■ a running sheet for the evaluation ■ protocol for think aloud and provision of assistance <p>Informed consent information sheet contains:</p> <ul style="list-style-type: none"> ■ names of group members conducting the study ■ customised to describe actual project and tasks to be done in evaluation <p>General instructions</p> <p>All required changes made (i.e., red text and boxes removed)</p>

Instructions

In this task you will write a plan for conducting your usability evaluation. As for Pass Task 2.1, you will need to describe how you are going to get participants, what materials you will be using and what procedure you will follow.

Participants

1. Review your persona (Task 3.3). Make a list of the key differences between your users and non-users. What criteria does a person need to meet in order to be a participant in your usability evaluation (i.e., university student, owns a smartphone, has purchased something over the internet etc)? (NOTE: You will need this information for Task 7.3). How are you going to find people that match your user group and get them to come to the Swinburne Usability Laboratory at the required time (i.e., a time during your tutorial time in Week 9 or 10)?

Tip 1: The Swinburne Usability Laboratory is hard to find (see map in **UCD Week 8 Laboratory Tour.pdf**). Make sure your participants know where it is, or arrange to meet them somewhere familiar before your testing time starts.

Tip 2: Participants have been known to 'forget' to come to testing sessions. Make sure you remind them regularly, and if possible, have a backup participant lined up in case of emergency.

Note 1: Due to resource issues (e.g., time) you will only be able to test a small number of participants during your allocated testing session. You should aim to test one participant per group member (i.e., group of 4 will need to recruit 4 participants). However, the industry accepted number for a semi-formal study like ours would be 5-6. For greater confidence in the results at least 12 should be tested.

Note 2: We encourage you to recruit your family and friends. However, you should consider the pros and cons of getting your family and friends to participate in your study. You should try to test people who have not seen your interface before (i.e., not people from your tutorial, and where possible, try to avoid students familiar with the project (i.e., UCD students)).

Materials

2. To conduct the evaluation and collect the data you will need to prepare a number of different tools that you will submit as part as other Tasks according to the following list (see also templates provided):
 - 2.1. informed consent and general instructions (template: **UCD Evaluation Informed Consent.docx**)
 - 2.2. demographic and satisfaction questionnaires (Task 7.3 - templates: **UCD Demographic Questionnaire.docx** and **UCD Satisfaction Questionnaire.docx**)

- 2.3. tasks and usability requirements (Task 7.4 - template: **UCD Usability Evaluation Tasks**)
3. Go through the templates and update as required for Tasks 7.3-7.4. Some parts will need to be updated for your particular study, others you should leave as they are.
4. You will need to submit the Informed Consent and General Information (**UCD Evaluation Informed Consent.docx**) with this task.
5. You will also need to review the equipment used in the Swinburne Usability Laboratory (see Blackboard/Week 7/**Swinburne Usability Laboratory Guide**) as well as details about your prototype implementation (i.e., paper, PowerPoint, clickable pdf etc)

Tip: You may have noticed that the task template has an observation sheet at the end. The observation sheet is to help you take hand written notes during the evaluation. Taking notes by hand is an important back up strategy. While you should finish the test with a Windows Media File recording of the testing, sometimes the recording is not available (i.e., was not selected at start up, or not saved properly at the end). If you don't have notes then this will be a disaster! Also professional usability evaluators tend to rely more on notes taken during the evaluation than recordings. Reviewing recordings is time consuming and is usually only done to clarify particular observations identified in the hand written notes. If you are very fast typist it may be feasible to type your observation notes.

Procedure

6. Write a step-by-step plan for your study. Create a running sheet that specifies what everyone is responsible for and estimates how much time things will take. Remember, you will need to test 3-4 participants (one per group member).

Note 1: The role allocations (see below) will help you plan your evaluation. However, these are not intended to be restrictions on what different group members can do. For example, during testing, the Product Expert and Evaluator should help out with taking notes on what the participant is doing. Also make sure the Facilitator gets to watch people in the lab.

Note 2: Include guidelines about using think aloud and how you will deal with participants requesting help.

Hint 1: Typical roles in a usability evaluation are:

Facilitator,
Observer, Evaluator,
Product Expert,
Participant

Hint 2: When planning your running sheet it might be helpful to consider the evaluation as consisting of three phases:

Phase 1: Preparation
Phase 2: Setting up the lab
Phase 3: Conducting the evaluation
Phase 4: Wrapping up evaluation