



Human Ethics Application

Application ID : 0000029386
Application Title : Software usability testing for ENGR301, 303, SWEN301, 303, 325, COMP313, SWEN422, ENGR440, 441, 489, COMP489, AIML489
Date of Submission : 15/04/2021
Primary Investigator : Dr Simon McCallum; Principal Investigator
Other Personnel : Dr Stuart Marshall; Head of School (or delegate)
Dr Stuart Marshall; Associate Investigator
Dr Jennifer Ferreira; Associate Investigator
Dr Craig Anslow; Associate Investigator

Research Form

Application Details

Teaching Application Details

1. Application ID

0000029386

2. Course Code and Title *

Software usability testing for ENGR301, 303, SWEN301, 303, 325, COMP313, SWEN422, ENGR440, 441, 489, COMP489, AIML489

3. What is your school?*

Engineering and Computer Science

4. The following questions will help the committee assess whether your application is categorised as a Category A (more than low risk) or Category B (low risk).

Please check all of the boxes that apply. You will be asked for more information about some of these questions later in the application.

Check the box if your study:

4a Is health research*

Yes No

4b Is an intervention study*

Yes No

4c Involves the use, collection or storage of human tissue*

Yes No

4d Involves processes that use EEG, ECG, MRI, TMS, FMRI, EMG, radiation, invasive or surface recordings*

Yes No

4e Involves collection of information about illegal behaviour, or information that has been obtained illegally*

Yes No

4f Involves people who are not giving consent to be part of the study (other than observational research in a public place)*

Yes No

4g Involves participants under the age of 16*

Yes No

4g (i) Will a parent/guardian be asked to give consent for the child/young person to participate in research?*

Yes No N/A

4g (ii) Will more than one meeting will be held with the child/young people without others present? *

Yes No N/A

4h Involves participants whose ability to consent freely is compromised due to context (e.g. people in prison), or a limited capability to make independent rational decisions (e.g. those with a serious intellectual disability)*

Yes No

4i Involves the use of concealment or covert observations, including those conducted online or conducted in social media*

Yes No

4j Involves the use of previously collected personal information, other data, or biological samples for the collection of which there was no explicit consent for use in research*

Yes No

4k Involves deception of the participants, including concealment of the true purpose of the research*

Yes No

4l Involves the use of highly sensitive information (see policy for definition)*

Yes No

4m Involves a focus on, has particular importance for, or impacts on Māori*

Yes No

4n Involves any other group (for example cultural or religious), other than Māori, and has the potential to cause discomfort or disruption to members of that group*

Yes No

4o Involves any direct financial interest in the outcome of the research by any member of the research team or external sponsor*

Yes No

4p Involve a conflict of interest or the appearance of a conflict of interest for the researcher (for example, where the researcher is also the lecturer/teacher/treatment provider/colleague/manager or employer of the participants)*

Yes No

4q Involve any situation which may put the researcher at risk of harm (e.g. overseas in politically unstable countries)*

Yes No

4r Involve a reasonable expectation that participants may experience (at a greater level than in everyday life) physical discomfort, emotional discomfort, or psychological or spiritual harm (e.g. asking participants to recall upsetting events)*

Yes No

Teaching Personnel

Course Coordinator (the default setting for this role is primary 'Principal Investigator')

(Click the ? icon for more info)*

1	Given Name	Simon
	Surname	McCallum
	Full Name	Dr Simon McCallum
	AOU	Engineering and Computer Science
	Position	Principal Investigator
	Primary?	Yes
2	Given Name	Stuart
	Surname	Marshall
	Full Name	Dr Stuart Marshall
	AOU	Engineering and Computer Science
	Position	Associate Investigator
	Primary?	No
3	Given Name	Jennifer
	Surname	Ferreira
	Full Name	Dr Jennifer Ferreira
	AOU	Engineering and Computer Science
	Position	Associate Investigator
	Primary?	No
4	Given Name	Craig
	Surname	Anslow
	Full Name	Dr Craig Anslow
	AOU	Engineering and Computer Science
	Position	Associate Investigator
	Primary?	No

Teaching Activity Details

Key Dates

If approved, this application will cover this teaching activity from the date of approval for up to 3 years.

5. What is the start date of the period for which approval is sought?*

03/05/2021

6. What is the end date of the period for which ethics is sought? If no end date is entered, approval will be given for a three-year period.

This question is not answered.

Teaching Activity Details

7. Describe the aims and objectives of the teaching activity.*

These courses involve students (individuals or groups) developing prototype software applications, including designing user interfaces that are supposed to be used by people other than the developers. The objective is to get feedback about the interface so students can improve their ability to design interfaces.

8. Describe the benefits of the teaching activity.*

The benefit of the teaching activity is that students will learn how to conduct evaluations of the usability of the software they have designed. Students will also learn how usable (or un-usable) the interfaces they have designed are, what works well, what doesn't work so well, and how they can improve their designs.

9. Outline the nature of the teaching activity.*

The teaching activity will be software usability studies.
Participants - generally other students in the course or year cohort who have not worked on the particular design under test - will attempt to carry out a series of tasks using the software designed by the students or other publicly available software or systems. The students playing the role of designers will observe how the students playing the role of users actually interact with the software under test: determining what works well and what does not.

Note! that these tests evaluate the design of the software, not the performance of the test participants.

continue outline teaching activities (use if required)

This question is not answered.

10. Explain any ethical issues your teaching activity raises for students, yourself as the teacher, or participants from outside the course, and how you will address these. This is an opportunity to present what you think the key risks are for your activity and show how you have taken them into account.*

* Students will be involved in evaluating the usability of the designs of other students in the same course (or the same cohort), or publicly available software or systems.
- these evaluations will be purely formative, aiming to provide feedback on designs, or perhaps to measure the efficiency or usability of the designs. The "results" of the usability evaluations themselves - either the performance of the student designer, or of the students as users - will not directly contribute to the assessment of either student (other than fulfilling mandatory requirements). The tests may have an indirect effect on the student designers' grades, as they can help students improve their designs by interacting with people who have not been part of the design process.

* Designs represent IP produced by students in the course
- Students retain IP to all their designs in undergraduate courses.
- In 400 level courses and above, IP is governed by an individual agreement between the student and the University.

11. Is any professional code of ethics to be followed?*

- Yes
 No

11a. Name the professional code(s) of ethics*

NZ Institute of IT Professionals Code of Ethics
Association of Computing Machinery Code of Ethics

Data Collection and Recruitment

Participants and Recruitment (Teaching only)

12. Does the teaching activity involve students enrolled in the course acting as research participants?*

- Yes
 No

12a. How many approximately, and what are the characteristics of this group of students?*

Each of these courses is around 100 students, either in the BSc (COMP) or BE (SWEN). These students are studying to become professional software developers or chartered software engineers. In most of these courses, students work in groups of 4-6 to produce software designs and implementations.

12b. How will the students be recruited to the research?

Make sure to include any copies of recruitment material in your documentation section, for instance announcements on Blackboard.*

Students will be required to conduct usability tests as part of course assigned work and to fulfill mandatory requirements. In courses that are *not* mandatory for any degree, students may be required to act as participants in usability evaluations. Generally, this will be straightforward:
"Your group should conduct a usability evaluation of your design, as described in the lectures and assigned readings. You should recruit participants for your evaluation from other members of the course/ program/ tutorial/ laboratory group. Evaluations will be carried out within the scheduled labs at DATE and TIME in ROOM. Mandatory requirements for *non-mandatory* courses only: "To pass this course you must act as a participant in N software usability evaluations of systems constructed by other students in this course / in this programme."

No course which is mandatory for any degree or major will have a mandatory requirement of involvement as a participant in usability testing.

13. Does the teaching activity involve participants other than students enrolled on the course?*

- Yes
 No

13d. (i) Provide details of consultation you have undertaken or are planning.*

We have discussed user testing in all of the courses listed above. Students are aware of the importance of conducting ethical research and ensuring that testers are informed of the objectives of the research. We have discussed the use of students within the cohort specifically within SWEN303 and ENGR301.

Informed Consent and Minimisation of Harm (Teaching only)

14. How will informed consent be obtained from participants? (tick all that apply to the activity you are describing in this application)*

- Informed consent will be implied through voluntary participation (anonymous research only)
 Informed consent will be obtained through a signed consent form
 Informed consent will be obtained through some other method

14a. Please give details*

Informed consent will be implied through participation in the course and software usability evaluations. If participation is voluntary, consent will be implied through participation, and there will be no penalty for non-participation. If participation is a mandatory requirement for the course, consent will be implied through enrolment in the course and participation.

No course required for any major will have a mandatory requirement of involvement as a participant in usability testing.

15. Is it possible that students or participants may experience any physical discomfort as a result of the activity?*

- Yes
 No

16. Is it possible that students or participants may experience any emotional or psychological discomfort as a result of the activity? (E.g. asking students or participants to recall upsetting events, viewing disturbing imagery.)*

- Yes
 No

17. Will students or participants experience any deception as a result of the research?*

- Yes
 No

18. Is any third party likely to experience any special hazard/risk including breach of privacy or release of commercially sensitive information? This may occur in the instance students or participants are asked to discuss identifiable third parties as part of the teaching activity.*

- Yes
 No

19. Does the teaching activity involve members of a vulnerable population?

This includes children under the age of 16, people with significant mental illness, people with serious intellectual disability, prisoners, people whose health, employment, citizenship or housing status is compromised, and people with English as a second language where the study is conducted in English.*

- Yes
 No

Data Management

Data Storage and Management (Teaching only)

20. During the teaching activity will data be collected from students in the course?*

- Yes
 No

20a. Which of the following best describes the form in which this data will be stored during the course? (See help text for info on these terms)*

- Identifiable
- Potentially Identifiable
- Partially de-identified
- De-identified
- Anonymous
- Other

21. During the teaching activity will data be collected from people other than students in the course?*

- Yes
- No

21c. Proposed date for destruction of identifiable data (i.e. the date when data will be de-identified and personal information on participants destroyed)*

06/12/2021

21d. Proposed date for destruction of de-identified research data, including anonymous data*

06/12/2021

22. Who will have access to identifiable, de-identified or anonymous data, both during and at the conclusion of the research?*

- Access restricted to course coordinator only
- Access restricted to course coordinator and co-investigator
- Access restricted to course coordinator and individual student
- Access restricted to course coordinator and all students in the course
- Other

22a. Other: please state*

Access restricted to course coordinator, lecturers, tutors, and groups of students whose interfaces are being evaluated.

23. Are there any plans to reuse either identifiable, de-identified or anonymous data?*

- Yes
- No

24. What procedures will be in place for the storage of, access to and disposal of data, both during and at the conclusion of the research?

See the Human Ethics webpage for assistance on appropriate data storage and destruction. *

- All hard copy material will be stored securely e.g. locked filing cabinet
- All electronic material will be held securely e.g. only on VUW servers, password protected files
- All hard copy material will be appropriately destroyed (e.g. shredded) on dates given
- All electronic material will be deleted on dates given (ITS should be consulted on proper method)

Teaching Dissemination

(Tchg) Dissemination

25. How will you provide feedback to participants?*

Since all participants are not only students in the course but will be conducting evaluations of their own software designs or publicly available software or systems, they will understand the testing protocols so will implicitly gain feedback by participating in evaluations. Course tutors and other staff may provide immediate feedback to both participants and testers when tests are conducted as part of timetabled staffed tutorials or labs. Course coordinators or lectures will provide overall feedback to the class based on assignments or reports written by the students conducting the tests.

Note that it is the software designs that are being evaluated, not the participants.

26. Will the results of your teaching activity be reported and published? Indicate which of the following are appropriate.*

- The data will be used for internal course purposes only
- The data may be used for external publication by students
- The data may be used for external publication by the course coordinator
- Other

27. If the activity will be published externally, indicate which of the following are appropriate. Your proposed form of publication should be indicated on any information sheets and consent forms.*

- Publication in academic or professional journals
- Dissemination at academic or professional conferences
- Availability of the research paper or thesis in the University Library and Institutional Repository
- Other
- N/A

Teaching Documents

(Tchg) Documents

28. Please upload any documents relating to this application. Sample documents are available on the [Human Ethics web page](#).

- Ensure that your files are small enough to upload easily, and in formats which reviewers can easily download and review.
- To upload a document click on the green arrow to the right of the named document. Follow the on screen instructions which will be displayed to upload a document.
- To replace a document, click the tick in the column to the right of the document you want to replace, and follow the screen instructions to continue.
- To add a new document click on 'New Document', at top right of the documents table. You **must** enter the document name in the box that appears. Click on 'OK'. Click on the green arrow which appears to the right of the file name to continue.
- Collate all your documents into one PDF or Word file, and upload as a new document. This should be labelled as 'Combined Documents'.

*

Description	Reference	Soft copy	Hard copy
Participant information sheet(s)	ECS course user testing information-sheet-and-consent-form-templates-for-individual-user-tests.docx;.docx	✓	
Participant consent form(s)	ECS course user testing information-sheet-and-consent-form-templates-for-individual-user-tests.docx;.docx	✓	

Checklist

Please check the information below and tick the box at the bottom of the page. Then follow the instructions to submit.

1. Have you read the Human Ethics Policy and Guidelines?
2. Have you read the Human Ethics webpage for any information related to your project?
3. Have you ensured that your documentation fits the requirements of the Human Ethics Policy and Guidelines, and any additional procedural advice available on the Human Ethics webpage?

I have gone through the checklist and completed all the relevant tasks. *

Yes

Teaching Sign Off

Application Feedback

Feedback

This page will be used to communicate committee requirements during the application review process.

Committee response to your application

Date

This question is not answered.

Comments

This question is not answered.

Documents

This question is not answered.

Date of response

This question is not answered.

Researcher response to requirements: please enter your comments below and then save.

This question is not answered.

If you have been asked to provide a response to the committee's comments in a document, please upload that document here and then **save**.

This question is not answered.

Further required changes

Date

This question is not answered.

Comments

This question is not answered.

Documents

This question is not answered.

Date of response

This question is not answered.

Researcher response to requirements: please enter your comments below and then save.

This question is not answered.

If you have been requested to respond to further feedback by uploading documentation here, please upload and then **save**.

This question is not answered.

Further required changes

Date

This question is not answered.

Comments

This question is not answered.

Documents

This question is not answered.

Date of response

This question is not answered.

Researcher response to requirements: please enter your comments below and then save.

This question is not answered.

If you have been requested to respond to further feedback by uploading documentation here, please upload and then **save**.

This question is not answered.

Final Review Outcome

Final Review Outcome

This question is not answered.

Formal Notice of Approval

This question is not answered.

Risk Category

Based on answers to the screening questions (Q4), your application will be assessed as either Category A (higher than low risk), or Category B (low risk). The risk category will be reviewed by the Research Office before it is processed by the committee.

The risk assessment for this application is currently:

Category B (LOW RISK)

Incident Report (admin only)