

COMMITTEE ON RESEARCH ETHICS

**Student Projects: Honours Year Computer Science Project (Comp390),
Honours Year Artificial Intelligence Project (Comp393),
Honours Year Electronic Commerce Computing Project (Comp394),
Honours Year Internet Computing Project (Comp395),
Final Year First Semester 15 credit Project (Comp391),
Final Year Second Semester 15 credit Project (Comp392),
MEng Group Project (Comp591), MEng Individual Project (Comp592),
MSc Project (Comp702)**

Computer Science Student project 3rd party Evaluation Procedure.

Background

The aim of the Honours year Comp390/3/4/5, Comp391/2, MEng individual Comp592 and group Comp591 projects, and MSc Comp702 student projects at the Department of Computer Science is to give the students an opportunity to demonstrate Information Technology professional skills they have acquired during the course of study. During the project, the students work in a guided but independent fashion in order to explore a substantial computing problem in depth either individually or in a group, making practical use of the learned principles, techniques and methodologies in order to complete the project.

The outcome of a student project is often software or a web-based application for performing some specific task(s), gathering experimental data, or testing a hypothesis of some sort. Among the learning outcomes of the projects is the students' ability to evaluate in a critical fashion the work they have done, and to place it in the context of related work.

For their projects, the students need to learn and be able to demonstrate their skills to plan and implement a number of standard testing and evaluation techniques existing in IT industry at different stages of an IT application development. For example,

- to plan and implement the final “beta-testing” of the new software which is conducted by testers other than its developers, or
- to plan and organize a 3rd party evaluation of the developed IT system. The 3rd party evaluation is usually done by real/potential or mock users and clients of the system in order to collect an independent judgment on if the software works according to the specification requirements, if it meets acceptable quality requirements, etc. It aims at determining whether the promises about the product by the developer and the needs of the customer are met on an acceptable level. To implement the 3rd party evaluation

of software, the students will write up and ask a 3rd party evaluator to complete an anonymous questionnaire about the software quality. The ultimate purposes of the 3rd party evaluation are to get outside opinion about the “ease of use” of the software, suggestions for possible improvements and/or critical evaluation of the software, and general comments about the system developed by the student during his/her project work. That is why the computer system 3rd party evaluation is among the main evaluation techniques in a Computing project, important for the students to demonstrate their project learning outcomes and skills.

Procedure

For a computer system 3rd party evaluation/testing, a student

1. collects feedback from their project client(s)/prospective user(s), and/or mock users which might include their friends and family (the people providing the feedback constitutes the “3rd party”).
2. Students recruit their computer systems 3rd party evaluators from those people they already know.
3. Neither vulnerable adults nor children will participate in the 3rd party computer systems evaluation.
4. No participants outside the UK will participate in the 3rd party computer systems evaluation.
5. This evaluation feedback is usually collected in a form of a questionnaire about the software system.
6. Students develop themselves 3rd party evaluation questionnaires tailored for the computer systems they developed for their projects.
7. A project client/prospective user/mock user will be told what feedback is being collected and how it will be used. The students will use and adopt for their projects approved CS Department templates for Student Project 3rd Party Evaluator Information Sheet and Participant Consent Form in order to ensure the University ethical guidelines.
8. Students might allow their computer systems 3rd party evaluators to have an access to the developed computer system in person on a machine the system was developed on, or send the 3rd party evaluators a link to the developed computer system in case the system is available online.
9. Students might ask their computer system 3rd party evaluators to fill in the system evaluation questionnaire either in their presence, or send it via e-mail.
10. The 3rd party evaluators might fill in the questionnaires at their own secure place or at a secure place arranged by the student.

11. The 3rd party evaluation feedback will be anonymised, so that no individual can be recognised, and all the feedback will be stored responsibly as part of the student project reports on the University's secure servers.
12. We note that legal, ethical, social, and professional issues around data protection and standards are discussed in the compulsory taught module Comp110 "Professional Skills in Computer Science" taken by all first-year students in all undergraduate programmes of study in the Computer Science Department. For MSc students, similar legal, ethical, social, and professional issues around data protection and ethical standards are included in the compulsory taught module Comp516 "Research Methods in Computer Science" taken by all MSc students in our MSc programmes of study in the Computer Science Department.
13. During the conduct of projects, students are to abide by the British Computing Society's Code of Conduct and Code of Good Practice. The British Computing Society is the professional body that accredits the programmes of study in Computer Science Departments in the United Kingdom, and the Code of Conduct and Code of Good Practice include portions that (among other things) address the legal, regulatory, and ethical issues surrounding data protection, and the importance of maintaining the confidentiality and anonymity of private data used in teaching and research.
14. Students will write up a project report, which is an essay to provide a complete record of all the work carried out in their projects. The report will not use the 3rd party evaluators as subjects, there will be only a collation of responses from the participants. Our students will not have access to sensitive information pertaining to the 3rd party evaluators, and will not solicit such information from the 3rd party evaluators; the only data recorded will be the feedback directly related to the 3rd party evaluation of the students' projects. In this report, students must specify how they have abided by the British Computing Society's Codes of Conduct and Good Practice mentioned previously, including addressing data protection and ethical treatment of any personal data gathered during the course of the project.
15. The student project reports will be assessed solely according to academic marking guidelines by the supervisor(s)/assessor(s) of the student project.
16. We note again that this application addresses the gathering of 3rd party evaluation data for student projects as mentioned previously. For any projects that involve the collection of private data beyond that, or the gathering of sensitive data of human participants, a separate and independent application for ethical approval will be required.
17. There will be no research outcomes for the 3rd party evaluation of the student projects.