The University of British Columbia
Behavioural Research Ethics Board
Office of Research Services
Suite 110, Gerald McGavin Building
2386 East Mall, Vancouver, B.C. V6T 1Z3
Phone: (604) 827-5112, Fax: (604) 827-5117

REB File Number	Date Received	Initials

APPLICATION FOR BEHAVIOURAL ETHICAL REVIEW

Please read the BREB Guidance Notes before completing the application form.
All information requested on this form must be typewritten in the space provided. ***Incomplete submissions will not be reviewed by the BREB.***
The Principal Investigator must have a UBC Faculty Appointment or a staff appointment at an affiliated institution.

1. Principal Investigator / Faculty Advisor
Surname: **McGrenere** Given Name(s): **Joanna**
Academic Rank: **AssistantProfessor**
UBC Faculty / Department: **Computer Science**
UBC Division (If applicable):
Hospital Department (if applicable):
Hospital Division (if applicable):
Phone Number: **827-5201** Fax Number: **822-5485**
E-mail Address: joanna@cs.ubc.ca

2. After reviewing Guidance Note #2, please indicate whether your proposal falls under the "minimal risk" criteria and can be considered for Expedited Review. ☐ Yes ☒ No

3. Is this research being done under a contract from a for-profit sponsor? ☐ Yes ☒ No
If yes, see guidance note #3 and complete Appendix #3.

4. Provide details of the institutions where the research will be carried out. (See Guidance Note #4)
☒ UBC Campus, ☐ VGH, ☐ UBCH, ☐ C&W, ☐ PHC, ☐ BCCA, ☐ AC, ☐ Other:

5. Title of Research Proposal (see Guidance Note #5): Human-Computer Interaction Course Projects (CPSC 444/544)

Additional Titles: Included in item #45? ☐ Yes ☒ No Proposed Project Period: From: **01 September 2003** To: **31 August 2004**

Is this proposal closely linked to any other proposal previously/simultaneously submitted to the BREB? (See Guidance Note #5) ☐ Yes ☒ No
If Yes, describe relationship of this proposal to this primary study:
REB File Number of primary study:

6 List all documents submitted with the Application for Ethical Review. Assign a version number or date to attached documents. **Incomplete submissions will not be reviewed**. (See Guidance note #6)

Original copy + 19 copies of the following documents *	**✓ if applicable**	Version number or Date
Application form	☒ Yes	
Advertisement to recruit subjects	☐ Yes	
Letter of initial contact	☐ Yes	
Subject consent form	☒ Yes	Ver_Vid 1.00, Ver_NoVid 1.00, Ver_Oues
Normal/Control subject consent form	☐ Yes	
Parent / Guardian consent form	☐ Yes	
Assent form	☐ Yes	
Other consent forms	☐ Yes	
Questionnaires, tests, interview scripts,		Ver 1.00
Cover letter for the questionnaire	☐ Yes	
Telephone contact form (Appendix 4)	☐ Yes	
Deception form and written or verbal debriefing (Appendix 5)	☐ Yes	
Fee for Service form (Appendix 6)	☐ Yes	
Research proposal description	☐ Yes	
Agency approval of other institutions	☐ Yes	

*** If submitted for Expedited Review (w[illegible] "Yes" has been checked, under Question #2), submit the original plus TWO copies.**

7. Principal Investigator / Faculty Advisor: ***I agree to abide by the Tri-Council Policy for Ethical Conduct for Research Involving Human Subjects.***

Signature Date (y/m/d)

Department Head / Dean: ***I confirm that the Principal Investigator has the qualifications, experience, and facilities to carry out this research.***

Signature Date (y/m/d)

Printed Name

8. Provide the name of ONE contact person for ALL correspondence. The original Certificate of Approval will be mailed to the address given here. (see Guidance Note #8)
Name: **Joanna McGrenere**
Title: **Assistant Professor**
Address: **201 - 2366 Main Mall**
Dept of Computer Science
Vancouver, BC
V6T 1Z4
Phone Number: **827-5201**
Fax Number: **822-5485**
E-mail Address: **joanna@cs.ubc.ca**

9. Co-Investigators and Students: Use box 45 if additional space is needed.

9.a. Complete 9.a. if this is research for a graduate degree:

Surname (ALL CAPS): Given Name(s): UBC Faculty / Department: UBC Division (If applicable): Type of degree program: ☐ Masters ☐ Doctorate **I agree to abide by the Tri-Council Policy for Ethical Conduct for Research Involving Human Subjects** _____ _____ Signature Date _____ Printed Name	Surname (ALL CAPS): Given Name(s): UBC Faculty / Department: UBC Division (If applicable): Type of degree program: ☐ Masters ☐ Doctorate **I agree to abide by the Tri-Council Policy for Ethical Conduct for Research Involving Human Subjects** _____ _____ Signature Date _____ Printed Name

9.b. Other Co-Investigators

Surname (ALL CAPS): **FISHER** Given Name(s): **Brian** Academic Rank: **Adjunct Professor** UBC Faculty / Department: **Computer Science** UBC Division (If applicable): Hospital Department (If applicable): Hospital Division (If applicable):	Surname (ALL CAPS): **MACLEAN** Given Name(s): **Karon** Academic Rank: **Assistant Professor** UBC Faculty / Department: **Computer Science** UBC Division (If applicable): Hospital Department (If applicable): Hospital Division (If applicable):
Surname (ALL CAPS): **BOOTH** Given Name(s): **Kellogg** Academic Rank: **Professor** UBC Faculty / Department: **Computer Science** UBC Division (If applicable): Hospital Department (If applicable): Hospital Division (If applicable):	Surname (ALL CAPS): Given Name(s): Academic Rank: UBC Faculty / Department: UBC Division (If applicable): Hospital Department (If applicable): Hospital Division (If applicable):

9.c. Investigators qualifications

Who will actually conduct the study and what are their qualifications to conduct this kind of research? (For example, describe relevant training, experience, degrees, and/or courses).

Undergraduate students enrolled in the 4th year course CPSC 444 and graduate students enrolled in the graduate course CPSC 544 will conduct studies for their course projects. Most of these students will have little or no prior experience running studies with human subjects. Among other things, CPSC 444 and CPSC 544 are designed to provide the students with that experience.

10. Give the name of the funding source: ➔

Classify the type of funding: ☐ For-profit sponsor, ☐ Grant, ☐ Grant-in-aid, ☐ UBC internal, ☒ No funding, ☐ Other

Status of funding: ☐ Awarded, ☐ Pending

11. Has this research proposal received any independent methodological peer review? (See Guidance Note #11) ☐ Yes ☒ No

If Yes, provide a copy of the research proposal and the name of the committees or funding agency involved in the review. State whether the peer review process is ongoing or completed.

12. External approvals:
Provide written proof of agency approval for projects carried out at other institutions. (See Guidance Note #12)

☐ Yes Name of agency: Date of approval:

☐ No

☐ Request for Approval has been submitted. **(Send a copy to the Behavioural Research Ethics Office when approval is obtained.)**

13. Summarize the purpose and objectives of the project and state the hypothesis. (See Guidance Note #13)

CPSC 444 and CPSC 544 are undergraduate and graduate courses in Human-Computer Interaction (HCI). HCI is a growing field which broadly encompasses the design, implementation, and evaluation of interactive technology. Interactive technology includes applications that run on a standard desktop or laptop computer, such as a word processor, web browser, and email, as well as applications on handheld technology, such as the datebook on the Pocket PC, and also applications on more novel platforms such a SmartBoard (electronic whiteboard) or a Diamond Touch tabletop display.

There are many different methodologies for designing and evaluating interactive technology, one of which is to work with actual users (or intended users) of the technology. This is known as user-centered design (UCD). CPSC 444 and CPSC 544 aim to teach students the UCD process. UCD involves the researcher (in this case student) performing a number of steps:

(1) Gathering information from users about their requirements for some particular iteractive technology. This may take the form of informal meetings with users, structured interviews, questionnaires, and in the case of re-design, watching users interact with an existing technology in order to identify any problems.

(2) Creating low-fidelity prototypes. Based on Step One, the students will generate new interface designs for the targeted interactive technology. Rather than implementing them right away (i.e., writing computer programs), the students will create prototypes that mock up the interface using materials such as paper, glue, foam, and plastic. These low fidelity prototypes will then be evaluated with users. Users will be asked to interact with the prototypes to the extent that is is possible in order to give the researcher an idea of the quality of the interface deisgn. Questionnaires and interviews may be used at this stage as well.

(3) Medium and hi-fidelity prototypes. Based on what the students have learned in Step Two, medium and hi-fidelity prototypes will be created. These prototypes are actually implmented in software and hardware. Students are once again required to evaluate these prototypes with real users. The evaluation at this stage is often more formal, in that users will be asked to complete a series of tasks (such as completing some transaction on an e-commerce website) and the students will be assessing dependent measures (such as time on task and errors). In some cases, there will be an experimental control such that some users may be evaluted with a competing existing interactive system so that the two systems can be compared.

Videotaping and analysis of experiments is optional in 444 and required in 544.

Note that these course projects are designed to teach students how to work with real users and create usable and useful technology based on the needs and abilities of users. These are not courses in experimental design. So students generally only work with 5 to 10 different users per project. Although some statistical analysis may be done on the data collected, students are not expected to achieve statistically significant results.

Projects can be done individually or are done in groups of 2 to 5 people.

Example student projects include: a system to support the edit/review cycle of collaborative document creation, interactive tour guide of UBC campus on a handheld computer, interactive software debugger, grocery store kiosk to support efficient shopping, interactive memory aid, device for locating temporarily lost personal items (e.g., keys), comparison of Travelocity and Aircanada.ca for flight bookings.

Human Subjects

14. How many subjects, including controls, will be enrolled in the entire study? **at most 30 per project**
How many control subjects will be enrolled in the study? **usually 0 and at most 5**

15. Describe who is being selected, and the criteria for their inclusion. (See Guidance Note #15)

Students will ask their friends, family members, acquaintances, and fellow classmates to participate. Among these categories of people, ideally the students will choose individuals who are, or who would be, actual or potential users of the technology. But this may not be the case. All subjects will be 18 years or older and legally able to provide informed consent.

16. Describe who will be excluded from participation. (See Guidance Note #16)

People who do not fit the criteria above.

17. Describe how, and by whom, the potential subjects will be approached. Attach copies of initial letters of contact and any other recruitment documents. Note that UBC BREB policy does not allow initial contact by telephone. However, surveys, which use random digit dialling, may be allowed. If your study involves initial contact by random digit dialling, please complete the 'Telephone Contact' form, Appendix #4. (See Guidance Note #17)

Subjects will be recruited informally by a student directly asking his/her friends, family members, acquaintances, or fellow classmates to participate. Students will contact the potential subjects over the phone, via email, or in a face-to-face encounter. Students will explicitly descibe the following parameters of the study to each potential subject: that there will be no monetary compensation, the location where the evaluation will take place, the general type of activity that the subject will engage in during the evaluation session, the maximum amount of time the evaluation will take, and that a participant is free to withdraw at any time. These same parameters will be included in the formal consent form. There will be no formal letters of contact or recruitment documents.

See Item 45 for continuation.

18. Describe the selection and/or recruitment procedures for control subjects, if these differ from the above. Attach copies of initial letters of contact and any other recruitment documents.

N/A

Description of Procedures (Must be written in the space provided)

19. Which of the following procedures or methodologies are involved in this study? **Check all that apply. (See Guidance Note #19).**

☐ Action Research	☒ Expert Interviews	☐ Secondary Use of Data
☐ Autobiography	☒ Focus Groups	☐ Subject pools
☐ Deception	☒ Naturalistic Observation	☐ Use of medical records
☐ Ethnographic Fieldwork	☐ Random digit dialling	☒ Videotaping

20. Summary of Procedures: Describe any specific tests, interviews, questionnaires, or experimental procedures. If the study involves an experimental approach to curriculum or treatment, specify how the procedures differ from normal practice. If Deception is involved, please complete the 'Deception Form', Appendix #5. (See Guidance Note #20)

Subjects may be asked to perform specified tasks with low, medium, and hi-fidelity prototypes of the interactive technology. These prototypes will be evaluated in different sessions, possibly with different subjects. Both qualitative data (e.g., user quotes) and quantitative peformance data (e.g., errors, time on task) may be collected.

Subjects may also be observed while interacting with existing technology in its natural environment or asked questions about their use and attitudes of existing technology. Here, the data collection will be predominantly qualitative.

Questionnaires may be applied before or after an evaluation session, or they may be used independently from any other evaluation. For example, questionnaires can be used to assess a subject's familiarity with computer technology, familiarity with tasks being performed, and subjective opinions of the interative technology being investigated.

Subjects may also be interviewed by one or more students to gain further information on the subject's experience with the interactive technology.

On occasion, video recordings may be made (with the explicit permission of each individual subject) to help interpret the collected data in a more qualitative manner. Participants who do not wish to be recorded during a session will either be excused from further participation, or will not have video data collected during their participation.

Our course projects will not involve an experimental approach to curriculum or treatment, nor will they involve any form of deception. All of the studies that take place will be entirely non-invasive in nature.

21. Where will the project be conducted (i.e. what premises, School, Hospital, Community Centre, etc)?

The evaluation sessions will take place in one of four places: UBC campus, the student's home, the subject's home, or the subject's place of business.

22a. How much time (i.e., how many minutes/hours over how many weeks/months) will a subject be asked to dedicate to the project?

Between 1 and 5 hours over a four-month academic term.

22b. How much time (i.e., how many minutes/hours over how many weeks/months) will a control volunteer (if any) be asked to dedicate to the project?

N/A

23. Describe what is known about any potential risks of the proposed research. (see Guidance Note #23)

There are no known medical or psychological risks associated with this research.

Participating in a session in an evaluation session is equivalent to viewing a TV program or playing a computer game.

24. Describe any potential benefits to the subject that could arise from his or her participation in the proposed research. (see Guidance Note #24)

Potential benefits to the subjects include increased practice and knowledge of the particular interactive technology that they are asked to use during the study. A long-term benefit may be interactive technology that is better designed to suit a wider range of individuals.

25. Describe any reimbursement for expenses or payments/gifts-in-kind (e.g. honoraria, gifts, prizes, credits) to be offered to the subjects. Provide full details of the amounts, payment schedules, and value of gifts-in-kind. (see Guidance Note #25)

There will be no reimbursement or compensation of any kind.

Data Analysis and Confidentiality

26. Confidentiality: How will the confidentiality of the data be maintained? (For example, study documents must be kept in a locked filing cabinet and computer files, password protected).

Our expected enrollment for each section of CPSC 444 is 60-80 students. It is therefore not realistic that we will be able to lock all of the data/documents from all of the course projects in the instructor's filing cabinet. Instead, students will be instructed to keep a password-protected electronic list of the names of all subjects who participate in their project. Each subject name will be associated with a subject number. See item 45 for continuation.

27. Who will have access to the data? (E.g. co-investigators, students). How will all of those who have access to data be made aware of their responsibilities concerning privacy and confidentiality issues?

The course instructor and the students assigned to each project will have access to the data collected for that project. In the case of CPSC 444, teaching assistants will also have access to the data collected. Students will be taught about responsibilities concerning privacy and confidentiality of data in CPSC 444 and CPSC 544.

28. Will any data that identifies individuals be available to persons or agencies outside of the University? ☐ Yes ☒ No
If Yes, describe in detail what identifiable information is released, to whom and what safeguards will be used to protect the identity of subjects and the privacy of their data. (see Guidance Note #28)

29. Give details of where and for how long the data or audio/video tapes will be stored. UBC policy requires that data be kept for at least 5 years. If you intend to destroy the data at the end of the storage period describe how this will be done to ensure confidentiality (i.e. tapes should be demagnetised, paper copies shredded). (See Guidance Note #29)

The data collected in CPSC 444 is not intended for publication and will thus not be revisited. The confidentiality of the data will be maintained by destroying the list of subject names. Students may keep copies of their own projects (including all the raw data), but their will be no requirement that they keep these copies for any length of time.

See item 45 for continuation.

30. Are there any plans for secondary use of either data or audio/video tapes? Give details. (See Guidance Note #30).

There are no plans for secondary use of any data collected in CPSC 444.

For the most part, there are no plans for secondary use of any data collected in CPSC 544, including videotapes. Three exceptions exist: (1) some video tapes may be used in future CPSC 444 and 544 classes as examples of Human-Computer Interaction projects that have been done before;

See item 45 for continuation.

31. Are there any plans for feedback on the findings or results of the research to the subject? Please describe below.

Should a subject desire, a full debriefing will be provided to that subject at the end of his/her period of participation. This debriefing will disclose the specific purpose, and motivations for the evaluation session(s).

Informed Consent

32. Describe the consent process. Who will ask for consent? Where, and under what circumstances?

Consent will be requested from subjects prior to the start of their participation in the evaluation session(s). The process will involve informing subjects about the general nature of the evaluation that is taking place. Subjects who freely choose to participate will have their signatures collected on formalized informed consent forms. Students will ask for the subject's consent.

33. How long will the subject have to decide whether or not to participate? If this will be less than twenty-four hours, provide an explanation.

Subjects will be given at least 24 hours from the intial time of contact with the project investigators to decide whether or not they would like to participate and will be permitted to withdraw at any point during the study.

34. Will every subject be competent to give fully informed consent on his/her own behalf? (see Guidance Note #34) ☒ Yes ☐ No
If Yes, skip to box 37. If No, provide details of the nature of the incompetence (for instance, young age, mental incapacity).

35. If a subject is not competent to give fully informed consent, who will consent on his/her behalf?

36. If a subject is not competent to give fully informed consent, will he/she be able to give assent to participate? ☐ Yes ☐ No
Explain how assent will be sought. (See Guidance Note #36).

37. Describe any situation in this research in which the renewal of consent might be appropriate, and how this would take place. (See Guidance Note #37)

There are no situations in which the renewal of consent will be appropriate.

38. What provisions are planned for subjects, or those consenting on a subject's behalf, to have special assistance, if needed, during the consent process (e.g., consent forms in Braille, or in languages other than English)?

Although it is highly unlikely, subjects who require special assistance during the consent process will be assisted to the fullest ability of the student investigators. The form of the assistance will be determined on a case-by-case basis. For those subjects who may not communicate in English well, direct translations of the consent materials may be provided. Other forms of assistance will be provided based on the individual needs of the subject in question.

39.a. Advertisements and posters

The following checklist includes the minimum amount of information that should be included in recruitment advertisements or posters.

- ☐ Institutional letterhead (UBC department or hospital) or a facsimile.
- ☐ The title of the project.
- ☐ The Identity of the Principal Investigator and the co-investigators, and the name and telephone number of a contact person.
- ☐ If the project is research for a graduate thesis, a statement indicating this.
- ☐ A brief description of the recruitment criteria and the research procedures.
- ☐ A statement of the total amount of time for participating in the research required of a subject.
- ☐ Details of payment for expenses and/or any other remuneration to be offered to the subjects (if any).
- ☐ A version number or date in a footer at the bottom of each page.

39.b. Consent for Questionnaires (Completed by Subjects)

Questionnaires must include a covering letter which includes the following information. Please check off items in the following list to show that these items have been incorporated into the letter. (See Guidance Note #39)

- ☒ Institutional letterhead (UBC department or hospital) or a facsimile.
- ☒ The title of the project.
- ☒ The Identity of the Principal Investigator and the co-investigators, and the name and telephone number of a contact person.
- ☐ An explanation of who is funding or sponsoring the study (if applicable).
- ☒ If the project is research for a graduate thesis, a statement indicating this.
- ☒ Second-person pronouns (you/your child), when referring to subjects. Be consistent throughout all consent forms.
- ☒ A clear explanation of why the subject has been invited to participate in the study.
- ☒ An offer to answer any inquiries concerning the procedures, to ensure that they are fully understood by the subject.
- ☒ A brief but complete description in lay language of the purpose of the study and of all research procedures.
- ☒ A statement of the total amount of time for participating in the research required of a subject.
- ☒ A statement of all known risks, (e.g. psychological, cultural, privacy, confidentiality), and a description of the procedures in place to minimize risks or to provide counselling or referral for those in distress.
- ☒ Assurance that the identity of the subject will be protected, and a description of how this will be accomplished.
- ☒ Assurance that the information collected (identifiable data) will be kept confidential, an explanation of how this will be done, and a statement of who will have access to the data.
- ☒ Details of payment for expenses and/or any other remuneration to be offered to the subjects (if any).
- ☒ An unambiguous statement that the subject may decline to enter, or withdraw from, the study at any time without any consequences to treatment, medical care, or class standing. For research done in the schools, indicate what happens to children whose parents do not consent. The procedure may be part of classroom work but the collection of data may be purely for research.
- ☒ A statement that if the subject has any concerns about his/her treatment or rights as a research subject, he/she may telephone the Office of Research Services at the University of British Columbia, at 604-822-8598.
- ☒ A statement that if the questionnaire is completed it will be assumed that consent has been given.
- ☒ Page numbers (“page 1 of 3,” “page 2 of 3,” etc.).
- ☒ A version number or date in a footer at the bottom of each page.

39.c Consent Forms

UBC BREB policy requires written consent in all cases, with the exception of surveys involving random digit dialling and questionnaires that are completed by the subject. All of the following information must be included in the consent form and not fragmented into information sheets. Please check off items in the following list to show that these items have been incorporated into all consent forms

- ☒ Institutional letterhead (UBC department or hospital) or a facsimile.
- ☒ The title of the project.
- ☒ The Identity of the Principal Investigator and the co-investigators, and the name and telephone number of a contact person.
- ☐ An explanation of who is funding or sponsoring the study (if applicable).
- ☒ If the project is research for a graduate thesis, a statement to this effect must be included and must also clearly indicate whether it is part of a thesis (public document) or graduating essay (semi-public document).
- ☒ Second-person pronouns (you/your child), when referring to subjects. Be consistent throughout all consent forms.
- ☒ A clear explanation of why the subject has been invited to participate in the study.
- ☒ An offer to answer any inquiries concerning the procedures, to ensure that they are fully understood by the subject.
- ☒ A brief but complete description in lay language of the purpose of the study and of all research procedures. (See Guidance Note #39)
- ☒ A statement of the total amount of time for participating in the research required of a subject.
- ☐ A statement of all known risks, (e.g. psychological, cultural, privacy, confidentiality), and a description of the procedures in place to minimize risks or to provide counselling or referral for those in distress.
- ☐ If the study involves behavioural therapy, include a statement describing what alternatives to participating in the research project are available to the subject (i.e., what other treatment options are available outside of the study).
- ☒ Assurance that the identity of the subject will be protected, and a description of how this will be accomplished. (See Guidance Note #39)
- ☒ Assurance that the information collected (identifiable data) will be kept confidential, an explanation of how this will be done, and a statement of who will have access to the data. Do not say that the information will be kept confidential, since it will be published.
- ☒ Details of payment for expenses and/or any other remuneration to be offered to the subjects (if any).
- ☐ A statement of any actual or potential conflict of interest on the part of the researchers or sponsor.
- ☒ An unambiguous statement that the subject may decline to enter, or withdraw from, the study at any time without any consequences to treatment, medical care, or class standing. (See Guidance Note #39) For research done in the schools, indicate what happens to children whose parents do not consent. The procedure may be part of classroom work but the collection of data may be purely for research.
- ☒ A statement that if the subject has any concerns about his/her treatment or rights as a research subject, he/she may telephone the Office of Research Services at the University of British Columbia, at 604-822-8598.
- ☒ A statement acknowledging receipt of a copy of the consent form, including all attachments.
- ☒ A statement that the subject is consenting to participate (by signing).
- ☒ The signature and printed name of the subject consenting to participate in the research project, investigation, or study, the date of the signature.
- ☐ Parental consent forms sent home from school must contain a statement of choice providing an option for refusal to participate, e.g. 'I consent/ I do not consent to my child's participation in this study.' (See Guidance Note #39)
- ☒ Page numbers ("page 1 of 3," "page 2 of 3," etc.).
- ☒ A version number or date in a footer at the bottom of each page.

Potential Conflict of Interest

40. Describe any restrictions regarding the disclosure of information to research subjects (during or at the end of the study) that the sponsor has placed on investigators, including those related to the publication of results. (See Guidance Note #40)

N/A

41. Describe any personal benefits that the investigators and/or their partners/immediate family members will receive, connected to this research study. Include details of all fees and/or honoraria directly related to this study, such as those for subject recruitment, advice on study design, presentation of results, or conference expenses.

N/A

42. Describe any current or recent (within the last two years) consultancy or other contractual agreements with the sponsor held by the investigators. (Include amounts.)

N/A

43. Give details, if any of the investigators and/or their partners/immediate family members has direct financial involvement with the sponsor via ownership of stock, stock options, or membership on a Board.

N/A

44. Give details, if any of the investigators and/or their partners/immediate family members holds patent rights or intellectual property rights linked in any way to this study or its sponsor.

N/A

Additional Information

45. Use this space to provide information, which you feel, will be helpful to the review committee, or to continue any item for which sufficient space was not available.

The principal investigator, Dr. Joanna McGrenere, and the co-investigators, Dr. Brian Fisher, Dr. Karon Maclean, and Dr. Kellogg Booth, have all conducted studies involving human subjects (which have been approved for ethical review), and are well versed in the matter of the ethical treatment of human subjects. All four professors are listed on this application as they are expected to teach CPSC 444 and/or CPSC 544 either this year or in the coming years.

Summary of the Instructions Given to Students:

Part of one lecture will be used to explain the ethical treatment of subjects. Students will each be given a copy of the current application for ethical approval, and they will be expected to read and know its contents, in the same way that they are expected to know all the other course material. In that lecture, the instructor will particularly highlight the process of informed consent, that subjects are able to withdraw at any time, and the confidentiality of data.

Student names do not appear in this application because we do not yet know who will be enrolled in CSPC 444/544. Before any sessions involving users takes place in either of those courses, a current list of students (including the name of their student project) will be forward to the BREB for its records.

Continuation of item 17:

Students will be explicitly told by their instructor that they cannot pressure anyone to participate in their study. Students must describe the parameters of their study to a potential subject (as described above) and allow that person 24 hours to freely decide whether or not to participate.

Beyond what is described above, proper subject recruiting methodology (e.g., subject pools, posting Calls for Participation) will be discussed in class. However, due to a lack of time within the term, such methodology will not be used.

Continuation of item 26:

All data collection instruments (e.g., questionnaires) will require a subject number rather than a subject name. Students will be instructed to destroy the electronic list of subject names within 6 months of the termination of the course. This will allow students to keep complete copies of their projects, including data collected, without comprising the confidentiality of their subjects.

CPSC 544 has an expected enrollment of 25 students per year and will be treated slightly differently in that the students in the course are graduate students and they may extend their course projects by generating research papers or creating thesis projects that build on their course projects. 544 students that have no intention of extending their course projects will be instructed to destroy the list of subject names and any video tapes within 6 months of the termination of the course. Those students who do expect to build on their course projects will be instructed to store all confidential course material in a locked filing cabinet (which all grad students in Computer Science have access to) for a period of 5 years. If such a student leaves the university before 5 years have passed, the confidential material will be transferred to the instructor's locked filing cabinet.

Copies of course project videotapes that the instructor believes will be instructive for future 444/544 classes or research meetings will be kept in the instructor's locked filing cabinet.

Continuation of item 29:

Although the data collected in CPSC 544 is not specifically intended for publication, there may be cases where a graduate student will build on a course project in such a way that a publication results. If this is the case, all the data will be maintained in a locked filing cabinet for at least 5 years. If students do not intend on publishing their course projects, the subject list will be destroyed and any videotapes will be demagnatised.