A

Application to the University of Auckland Human Participants Ethics Committee

- 1. Completed Research Project Application Form.
- 2. Participant Information Sheet.
- 3. Participant Consent Form.
- 4. Poster.
- 5. E-mail Templates.

Reference Number*.....

This number will be assigned when the application is accepted for the UAHPEC agenda. You will receive an acceptance letter with the number included. Quote this reference number on all documentation to the Committee and Participants.

University of Auckland Human Participants Ethics Committee RESEARCH PROJECT APPLICATION FORM (2006)

Applications will only be accepted on forms dated for the current year. Please complete this form in reference to the UAHPEC Guidelines 2003 available on the University of Auckland website under Research and Research Ethics and Biological Safety Administration. Submit one unstapled, single sided copy of the form and all accompanying documentation to the Research Ethics and Biological Safety Administration, the Secretariat, Room 005 Alfred Nathan House, 24 Princes Street. For Yes or No answers delete whichever does not apply. Use language that is free from jargon and comprehensible to lay people.

GENERAL INFORMATION / COVERSHEET

- **PROJECT TITLE:** Investigation of Online Accounts and Password Management Strategies 1.
- 2. APPLICANT/PRINCIPAL INVESTIGATOR (P.I.) (This will be the supervisor for a Masters student.)

Name: Professor Clark Thomborson

Address: Department of Computer Science, The University of Auckland, Private Bag 92019 Auckland New Zealand

Email address: cthombor@cs.auckland.ac.nz

Phone number: (64 9) 373-7599 ext. 85753 If Doctoral student, name of degree, Department and Supervisor:

N/A

NAME OF STUDENT: Gilbert Notoatmodjo 3.

Address: <deleted for privacy reasons> Email address: gnot002@ec.auckland.ac.nz Phone number: <deleted for privacy reasons>

Name of degree and Department: Master of Science, Department of Computer Science

OTHER INVESTIGATORS: 4. N/A Names: N/A

Organisation:

N/A

Is ethical approval being applied for from another institution?

NO

If a student project, including doctorate, signatures of both the Supervisor and the student are required.

SECTION A: PROJECT

Use as much space as is necessary to complete your answers.

Type your answers in 12pt Times New Roman, beginning on the line below the question.

1. AIM OF PROJECT:

a) What is the hypothesis / research question(s)? (State briefly)

The main research question is "how do users construct 'mental map' to manage their accounts and passwords?"

Our current hypothesis would be that there are several patterns of mappings which people use to associate their accounts and password, and these patterns can be classified into four major categories:

- Completely random mapping, where randomly assign their passwords to their accounts
- Mapping based on the frequency of usage of the accounts
- Mapping based on the value/importance of information stored under the accounts
- Mapping based on the categories of accounts, e.g. financial, communication, education, and so on.

b) What are the specific aims of the project?

- To explore the relationship between accounts and passwords by looking at their similarities from users' perspectives.
- To investigate the mapping patterns of accounts and passwords by interviewing a number of users, and to finally create a framework of these mapping patterns based on the results of the interview.

2. RESEARCH BACKGROUND

Provide sufficient information to place the project in perspective and to allow the significance of the project to be assessed.

Many of us know, or have been told, that password reuse is bad practice. Indeed, our University's Account and Password Policy [1] explicitly forbids reuse. A possible reason for this policy is that if one of our passwords is compromised, then all our accounts that share the same password will be at risk. However, the limitation of human memory constrains most users from avoiding password reuse. A survey conducted by Brown, et al. [2] revealed that their respondents have in total 4.45 passwords in average, while another study by Riley [3], revealed that their respondents in average have only 3.31 passwords for their online accounts. These amounts are very few compared to the number of online services offered these days. While human memory capacity is very unlikely to increase significantly over the next few years, the rising number of online services will force most users to reuse their passwords. The main issue which will be explored in this project is related to how users manage the associations or mappings of their accounts and passwords. A recent study conducted by Gaw et al. [4] suggested that there are different reasons why people decided to reuse their passwords for several websites, but use unique passwords for several others, such as ease of recall, importance of the information stored, security and so on. In this project, we are planning to interview a number of users, investigate how their strategies to manage the mappings between their accounts and passwords, and finally construct a framework of these mappings.

Ideally, to do this we would need to obtain current passwords and accounts from real users. However, we realize this information is very sensitive and it would be almost impossible to obtain these materials without raising ethical issues. In order to solve this, we have created a set of procedures which enables us to gather necessary information from the respondents without revealing their actual accounts and passwords.

References

- [1] S. Taylor, "Account and Password Management Policy Version 1.4," vol. 2006. Auckland: The University of Auckland, 2004.
- [2] A. S. Brown, E. Bracken, S. Zoccoli, and K. Douglas, "Generating and Remembering Passwords," Applied Cognitive Psychology, vol. 18, pp. 641-651, 2004.
- [3] S. Riley, "Password Security: What Users Know and What They Actually Do," in Usability News, vol. 2006, Vol. 8 Issue 1 ed. Wichita: Software Usability Research Laboratory, Department of Psychology, Wichita State University, 2006.
- [4] S. Gaw and E. W. Felten, "Password management strategies for online accounts" presented at The second symposium on Usable privacy and security Pittsburgh, Pennsylvania 2006.
- 3. Describe and discuss the ethical issue(s) arising from this project. (Be sure to address these in the body of the application.)
 - We are working with very sensitive information (real online accounts and passwords) in this project and we have developed a set of procedures which will enable us to gather necessary data about this information from the respondents without revealing their actual online accounts and passwords. However, our method utilizes a numbering system which still requires the participants to write down their actual accounts and passwords on several pieces of paper to aid them in the interview procedures, which will not be shown to or handled by to the investigator. At the end of the interview, participants will be asked to destroy the sheets containing their accounts and passwords by themselves using a commercial-grade

strip cut paper shredder provided by the investigator. The remaining shreds will be disposed in the waste paper container within the Department of Computer Science.

- There are possibilities that the respondents might accidentally or mistakenly attempt to reveal their accounts, passwords and their password remembering aids to the interviewer during the interview. To minimize the likelihood, respondents will be made aware of the whole procedures before signing the application consent form. The interviewer will position himself at least 2 meters away from the participant to prevent him from reading the sheets containing the actual accounts and passwords while still enabling him to guide the participant during the interview.
- Although it would be impossible to gather the data anonymously as the participants' handwritings might be recognizable by the investigator, we will not ask the participants for any personal information such as names, ID numbers, addresses, e-mail addresses, phone numbers or anything which can be used to directly identify the participants. The participants will also be warned not to write any personal information on their responses. The results will be assessed and reported anonymously.

SECTION B: PARTICIPANTS

The term 'participants' is taken to mean subjects, clients, informants and patients as well as persons subjected to experimental procedures.

- 1. What types of people are participating in the research? (Delete those who do not apply). Students at the University of Auckland.
- 2. Explain how many organisations, departments within the organisations, and individuals you wish to recruit. (Attach any letter of support you may have had from an organisation) At most 20 individuals all will be students at the University of Auckland.

How will you identify your potential participants? (If by advertisement / notice, attach a copy) Advertisement in the form of posters which will be posted on notice boards within

- copy) Advertisement in the form of posters which will be posted on notice boards within the City campus and Tamaki campus as well as e-mails. Potential participants are selected after responding and arranging meeting time via an e-mail address provided by the investigator. A copy of the advertisement is attached to this application form.
- 4. How and where will potential participants be approached? Explain how you will obtain the names and contacts of participants. (e.g. by email, by advertisement, through an agency holding these details.) Advertisement in the form of posters which will be posted on notice boards within the City campus and Tamaki campus. Names and contacts of participants will be obtained from e-mail correspondence via an e-mail address provided by the investigator.

5. Who will make the initial approach to potential participants? (e.g. will the owner of the database send out letters?)

The investigator (Gilbert Notoatmodjo) will post advertisement in the form of posters on the notice boards within the City campus and Tamaki campus.

6. Is there any special relationship between participants and researchers? (e.g. student / teacher. If YES, explain.)

NO

7. Are there any potential participants who will be excluded? YES

(If YES, explain, and state the criteria for excluding participants) Due to the nature of the advertisement, there is a small likelihood that we might still receive responses from potential participants after we have recruited a sufficient number of participants. In this case, the potential participants will be excluded from the study.

SECTION C: RESEARCH PROCEDURES

There is a need here to fully inform the Committee about all factors relating to the research, including where appropriate, the researchers' qualifications to conduct this work (Investigation).

1. **PROJECT DURATION** (approximate dates):

From 30/09/2006 to 15/07/2007

2. Describe the study design. (E.g. longitudinal study)

This study is a retrospective study, which intends to investigate the possible relationships between online accounts and passwords by looking at their properties from users' perspectives.

3. List all the methods used for obtaining information. (Attach questionnaires / research instruments / interview guidelines to this application).

Information will be obtained through a one-to-one interview with each participant. The participant will be advised to bring any password and account remembering aids (such as notes, books, digital assistants, laptops, and so on) to the interview. The interview will consist of two main parts. In the first part, the interviewer will ask the participant a few general questions about his/her experience with computers and the internet, and how they normally record their passwords and online accounts. The second part will consist of a guided exercise which involves completing several worksheets. During the second part, the participants will be asked to write a description of their accounts and passwords. At some stage, participants will be required to write down their actual passwords and accounts during the procedure in order to aid them in completing the whole exercise, however, the sheets containing their actual passwords and accounts will not be seen by anyone else (including the interviewer). They will also be asked to destroy the sheets containing their actual passwords and accounts using a commercial-grade strip cut paper

shredder provided by the investigator at the end of the interview. All necessary documents which will be used in the interview are attached to this application form.

- 4. Who will carry out the research procedures? The investigator (Gilbert Notoatmodjo).
- 5. a) Where will the research procedures take place? (Physical location / setting).

Room 187, Building 303

38 Princes Street, Auckland.

- b) If the study is based overseas, which countries are involved? (Provide local contact information on the Participant Information Sheet(s).) N/A
- c) If the study is based overseas, explain what special circumstances arise and how they will be dealt with? Explain any special requirements of the country and / or the community with which the research will be carried out.
- 6. How much time will participants need to give to the research? (Indicate this in the Participant Information Sheet(s).)

Approximately 1.5 hours.

- 7. Does this research include the use of a questionnaire / email? (If YES, attach a copy to this application.)
- 8. Are you intending to conduct the research in (University) class time? (If YES, include advice from the course Coordinator giving approval for this to occur.)
- 9. Is deception involved at any stage of the research? (If YES, justify its use, and describe the debriefing procedure.)
 NO
- 10. Will information on the participants be obtained from third parties? (e.g. from participant's employer, teacher, doctor etc. If YES, explain, and indicate in the Participant Information Sheet(s).) NO
- 11. Will any identifiable information on the participants be given to third parties? (If YES, explain, and indicate in the Participant Information Sheet(s).)

- 12. Provide details on any compensation or reimbursement of expenses, and where applicable, level of payment to be made to participants. (If payment / koha is offered, explain in the Participant Information Sheet(s).) Participants will be rewarded \$20 as a compensation of their time and effort at the end of the interview.
- 13. a) Does the research involve the administration of any substance (e.g. eye-drops / food) to participants?
 - b) Does this research involve potentially hazardous substances, (e.g. radioactive materials)?

SECTION D: INFORMATION & CONSENT

- 1. By whom and how, will information about the research be given to participants? (e.g. in writing, verbally – a copy of the information given to prospective participants in the form of Participant Information Sheet(s) must be attached to this application.) Information about research will be given to prospective participants by the investigator (Gilbert Notoatmodjo) by e-mail upon receiving response of interest from the prospective participants. After agreeing on the date and time of the interview, prospective participant will be sent a copy of the interview script to prepare themselves. If they disagree with the content or procedures of the interview after reading the interview script, potential participants may cancel their participation by a responding to the e-mail. A copy of the email communications are attached to this application form.
- 2. a) Will the participants have difficulty giving informed consent on their own behalf? (Consider physical or mental condition, age, language, legal status, or other barriers.)
 - b) If participants are not competent to give fully informed consent, who will consent on their behalf? (e.g. parents / guardians) N/A
- 3. Consent should be obtained in writing. Explain and justify any alternative to written consent.

Consent will be obtained in writing only.

- 4. It is expected that access to the Consent Forms be restricted to the researcher and/or the Principal Investigator. If you intend otherwise, please explain.
- 5. Will Consent Forms be stored by the Principal Investigator, in a locked cabinet, on University premises? YES

It is required that Consent Forms be stored separately from data and kept for six years. If a different procedure is to be followed, describe and justify. N/A

SECTION E: STORAGE & USE OF RESULTS

- 1. Will the participants be audio-taped or video-taped, or recorded by any other electronic means? (If YES, explain in the Participant Information Sheet(s) and the Consent Form. Consider whether recording is an optional or necessary part of the research design, and reflect this in the Consent Form.) NO
- a) How will data, including audio and videotapes and electronic data be handled and stored to protect against unauthorised access? (Explain this in the Participant Information Sheet(s) with details of storage, possible future use and eventual destruction.)
 Data provided by the participants will be stored for six years in a locked cabinet within the university premises.
 - b) If the tapes are being transcribed / translated by someone other than the researcher, explain what arrangements are in place to protect the confidentiality of participants. (Attach any confidentiality agreements to this application.) N/A
 - c) If recordings are made, will participants be offered the opportunity to edit the transcripts of the recordings? (In either case, the Participant Information Sheet must inform the participants. Where participants are asked to make a choice, this should be shown on the Consent Form.) N/A
 - d) Will participants be offered their tapes (or a copy thereof)? (In either case, the Participant Information Sheet must inform the participants. Where participants are asked to make a choice, this should be shown on the Consent Form.)
 - e) Will data or other information be stored for later use? YES
 - i) If YES, explain how long the data will be stored and how it will be used. (Indicate this in the Participant Information Sheet(s). The period data is to be kept will be commensurate to the scale of its research. For peer reviewed publication or research that might be further developed, the University expects six years.) Data will be stored for six years in a locked cabinet within the university premises for possible further research.

- ii) If NO, describe how and when the data will be destroyed. (Indicate this in the Participant Information Sheet(s).)
- f) Describe any arrangements to make results available to participants, including whether they will be offered their tapes. (Explain this in the Participant Information Sheet(s). Where participants are asked to make a choice, this should be shown on the Consent Form.)
 The raw results will not be made available to the participants. However, participants are able to withdraw their information up to 15 January 2007.
- 3. a) Are you going to use the names of the research participants in any publication or report about the research? (The Participant Information Sheet(s) must inform the participants, and be part of the consent obtained in the Consent Form(s). This is a problem either when you are dealing with a small group of participants known to a wider public or when there is to be a report back to participants likely to know each other.)
 - b) If you don't use their names, is there any possibility that individuals or groups could be identified in the final publication or report? (If YES, explain, and describe in the Participant Information Sheet(s). NO

SECTION F: TREATY OF WAITANGI

- 1. Does the proposed research impact on Maori persons as Maori? If YES, complete all questions in this section and attach evidence of consultation from the nominated Maori Advisor within your Faculty. (If NO, go to Section G.) NO
- 2. Explain how the intended research process is consistent with the provisions of the Treaty of Waitangi. (Refer to the Guidelines for further information) N/A
- Identify the group(s) with whom consultation has taken place, describe the consultation process, and attach evidence of the support of the group(s).
 N/A
- 4. Describe any on-going involvement the group(s) consulted has / have in the project. N/A
- 5. Describe how information will be disseminated to participants and the group(s) consulted at the end of the project. N/A

SECTION G: OTHER CULTURAL ISSUES

- 1. Are there any aspects of the research that might raise any specific cultural issues, other than those covered in Section F? (If YES, explain. Otherwise go to Section H) NO
- 2. What ethnic or cultural group(s) does the research involve?
- 3. Identify the group(s) with whom consultation has taken place, describe the consultation process, and attach evidence of the support of the group(s).
- 4. Describe any on-going involvement the group(s) consulted has / have in the project. N/A
- 5. Describe how information will be disseminated to participants and the group(s) consulted at the end of the project.

SECTION H: CLINICAL TRIALS

- Is this project a Clinical Trial? (If YES, complete section, otherwise go to Section I. If YES, attach ACC Form A or B – see Guidelines
 NO
- 2. Is this project initiated by a Pharmaceutical Company?
- 3. Are there other NZ or International Centres involved?
- 4. Is there a clear statement about indemnity?
- 5. Is Standing Committee on Therapeutic Trials (SCOTT) approval required?
- 6. Is National Radiation Laboratory approval required? (Attach) NO
- 7. Is Gene Therapy Advisory Committee on Assisted Human Reproduction (NACHDSE) approval required?

SECTION I: RISKS AND BENEFITS

1. What are the possible benefits to research participants of taking part in the research?

Research participants will be rewarded \$20 as a compensation for their time and effort.

2. What are the possible risks to research participants of taking part in the research? (Make sure that you have clearly identified /explained these risks in the Participant Information Sheet(s). The participants will be asked to write down their passwords and accounts to aid them in the interview procedures. Therefore there is always a risk that sensitive materials such as their accounts and passwords or other related information might be revealed to individuals other than themselves; however, our method ensures that it will be impossible to infer their actual accounts and passwords from their responses. The result will be assessed anonymously and the participants will be asked to destroy the sheets containing their actual accounts and passwords using a commercial-grade strip cut paper shredder provided by the investigator at the end of the interview.

There are also possibilities that the participants might accidentally or mistakenly reveal their accounts, passwords, or remembering aids to the investigator during the interview. To minimize the likelihood, the participants will be thoroughly briefed about the whole procedures of the interview before they sign the application consent form. The interviewer will position himself at least 2 meters away from the participant in order to prevent him from reading the sheets containing the actual accounts and passwords and any password remembering aids the participants may bring to the interview while still enabling him to guide the participants through the interview procedures.

3. a) Are the participants likely to experience discomfort (physical, psychological, social) or incapacity as a result of the procedures? (If YES, describe, and explain them clearly in the Participant Information Sheet(s) YES

Although very unlikely, there is a chance that the participants might feel uncomfortable writing down sensitive materials such as their accounts and passwords and revealing the associations between their accounts and passwords. However, before they are asked to sign the consent form and proceed with the interview, the participants will be assured they would not be required to reveal their actual accounts and passwords to anyone else including the interviewer, and that the results will be collected in such a way that there is no way to infer their actual accounts/passwords from their responses. In the case where a participant suddenly feels uncomfortable in the middle of an interview, the interview will be stopped immediately and the participant will be asked to destroy all records containing his/her responses using a commercial-grade strip cut paper shredder provided by the investigator.

b) What other risks are there?

c) What qualified personnel will be available to deal with adverse consequences or physical or psychological risks? (Explain in the Participant Information Sheet(s) N/A

SECTION J: FUNDING

It is expected that all funding will be mentioned in the Participant Information Sheets.

- Do you have or intend to apply for funding for this project? (If YES, complete this section and acknowledge it in the Participant Information Sheet(s)), otherwise proceed to Section K)
 YES
- 2. From which funding bodies? New Economy Research Fund contract UOAX0214, "Software techniques and systems for the protection of intellectual property", 2002-7
- 3. Is this a UniServices project? (If YES, what is the project reference number?) NO
- 4. Explain investigator's and /or supervisor's financial interest, if any, in the outcome of the project.

There is no financial interest in the outcome of the project.

5. Do you see any conflict of interest between the interests of the researcher(s), the participants or the funding body? (If YES, describe them.)

SECTION K: HUMAN REMAINS, TISSUE & BODY FLUIDS

- Are human remains, tissue, or body fluids being used in this research? (If YES, complete this section otherwise go to Section L)
 NO
- 2. How will the material be taken? (e.g. operation, urine samples, archaeological digs)

N/A

3. Will specimens be retained for possible future use? (If YES, explain and state this in the Participant Information Sheet(s) N/A

- 4. Is material derived or recovered from archeological excavation? (If YES, explain how the wishes of Iwi and Hapu (descent groups), or similar interested persons, or groups, have been respected?) N/A
- 5. Where will the material be stored, and how long will it be stored for? N/A
- 6. a) How will the material be disposed of? (If applicable) N/A
 - b) Will material be disposed of in consultation with relevant cultural groups?

7. Is the material being taken at autopsy? N/A

If YES, provide a copy of the information to be given to the Transplant Coordinator, and state the information that the Transplant Coordinator will provide to those giving consent. Indicate how the material will be stored / disposed of, and explain how the wishes with regard to the disposal of human remains of the whanau (extended family) or similar interested persons will be respected.

8. Is blood being collected?

(If YES, what volume at each collection, how frequent are the collections, and who is collecting it?)

- a) Explain how long it will be kept and how it will be stored.
- b) Explain how it will be disposed of. N/A

SECTION L: OTHER MATTERS

1. The Committee treats all applications independently. If there is relevant information from past applications or interaction with the Committee, please indicate and append. N/A

- 2. Have you made any other related applications? (If YES, supply approval reference number(s). NO
- 3. Are there any other matters you would like to raise that will help the Committee review your application? NO

----END OF APPLICATION FORM-----



Department of Computer Science The University of Auckland Private Bag 92019 Auckland, New Zealand

Participant Information Sheet

Title: Investigation of Online Accounts and Password Management Strategies

Researchers : Professor Clark Thomborson / Mr. Gilbert Notoatmodjo

To: The Participant

This research is being undertaken as a part of an MSc degree at the Computer Science Department, University of Auckland by Gilbert Notoatmodjo. This study aims to explore the relationship between online accounts and passwords by looking at the similarities of their properties from end users' perspectives. Our research involves gathering information through one-to-one interview with each participant. The interview will consist of two main parts. In the first part, the interviewer will ask the participant a few general questions about his/her experience with computers and the internet, and how they normally record their passwords and online accounts. The second part will consist of a guided exercise which involves completing several worksheets to gather necessary information. Participants were selected after responding to our announcements and agreeing to participate in this research.

The information that you provide will be stored in a locked cabinet within the university premises for a period of six years for the purpose of possible further research. After that period the information will be destroyed using a commercial-grade strip cut paper shredder and disposed in a waste paper container.

Confidentiality will be preserved throughout the research process. If the information you provide is reported or published, it will be done in a way that does not identify you as the source.

During the interview, you will be asked to write down your actual online accounts and passwords to aid you in completing one of the procedures, where you will be asked to categorise your password based on their similarities and/or any grouping strategies that you may use, and to assign a unique code to each of your passwords. We believe that the complexity of these tasks will be greatly reduced by writing your actual passwords in the provided table. Furthermore, the codes which you assign to your passwords will be used in the following procedures and we do not wish to make the interview process more laborious than it should be by asking you to recall the associations between these codes and your passwords throughout the rest of the session. However, please note that the sheets containing your actual passwords and accounts will not be seen by anyone else (including the interviewer). At the end of the interview, you will be asked to destroy the sheets containing your actual online accounts and passwords using a commercial-grade strip cut paper shredder. Although very unlikely, there is a slight chance that you might feel uncomfortable writing down sensitive materials such as your online accounts and your passwords during this procedure. In this case, the interview will be stopped immediately and you will be asked to destroy all record containing your responses using a commercial-grade strip cut paper shredder provided by the interviewer.

Participation in this study is voluntary. Neither your grades nor academic relationship with the Computer Science Department at The University of Auckland or any member of the staff will be affected by either refusal or agreement to participate in this study.

At the end of the interview, you will be rewarded \$20 as a compensation for your time and effort in completing the interview. As a participant you have the right to withdraw from the project at anytime, irrespective of the payment involved. You have the right to withdraw your information up to 15 January 2007.

This research is funded by New Economy Research Fund of New Zealand, contract UOAX0214, "Software techniques and systems for the protection of intellectual property".

It is anticipated that participation in this study will take no more than 90 minutes.

Contacts

Associate Professor Robert Amor (Head of Department) +64 (9) 373-7599 ext83068, <u>trebor@cs.auckland.ac.nz</u>

Professor Clark Thomborson (Primary Investigator) +64 (9) 373-7599 ext85753, <u>cthombor@cs.auckland.ac.nz</u>

Gilbert Notoatmodjo (Master of Science Student) +64 (21)2345006, <u>gnot002@ec.auckland.ac.nz</u>

If you have any concerns of an ethical nature you can contact the Chair of the University of Auckland Human Participants Ethics Committee at (+64)9 3737599 ext 87830, Private Bag 92019, Auckland, New Zealand.

APPROVED BY THE UNIVERSITY OF AUCKLAND HUMAN PARTICIPANTS ETHICS COMMITTEE ON 16 October 2006 for 3 years from 16 October 2006 to 16 October 2009 Reference Number 2006/355



Department of Computer Science The University of Auckland Private Bag 92019 Auckland, New Zealand

Participants Consent Form

Title: Online Accounts and Password Management Strategies

Researcher: Professor Clark Thomborson/ Gilbert Notoatmodjo

- I understand that this consent form will be stored for a period of six years before it is destroyed.
- I have read the Participant Information Sheet.
- I agree to take part in this research.
- I understand that any information that I provide will be stored for a period of six years before it will be destroyed using a commercial-grade strip cut paper shredder and disposed in a waste paper container.
- I understand that I will receive \$20 as a compensation for my time and effort a compensation for your time and effort in completing the interview.
- I understand that I am free to withdraw from the research at any time irrespective of whether or not payment is involved.
- I understand that I have the right to withdraw my information/data up to 15 January 2007.
- I understand that my participation in this study is voluntary and that neither my grades nor academic relationship with the Computer Science Department at The University of Auckland or any member of the staff will be affected by either refusal or agreement to participate in this study.

By signing this I agree to participate in this research as outlined above.

<u>Date:</u>/..... (*dd/mm/yyyy*)

Participant (please state full name)

APPROVED BY THE UNIVERSITY OF AUCKLAND HUMAN PARTICIPANTS ETHICS COMMITTEE ON 16 October 2006 for 3 years from 16 October 2006 to 16 October 2009 Reference Number 2006/355



EARN \$20 BY PARTICIPATING IN A PASSWORD STUDY!!!

An MSc student in the Department of Computer Science is conducting a study to investigate how users associate their online accounts and passwords. There will be one interview session (approximately 90 minutes long). Participants will be asked to describe their experience with computers and complete a guided exercise to assess how they manage their passwords and online accounts. You must be a student at the University of Auckland to participate.

Participants will be rewarded \$20 at the end of the interview.

If you are interested to participate, please contact:

Gilbert Notoatmodjo gnot002@ec.auckland.ac.nz



Department of Computer Science Principal Investigator: Clark Thomborson MSc Student: Gilbert Notoatmodjo APPROVED BY THE UNIVERSITY OF AUCKLAND HUMAN PARTICIPANTS ETHICS COMMITTEE ON 16 October 2006 for 3 years from 16 October 2006 to 16 October 2009 Reference Number 2006/355

E-mail Templates

Response to prospective participants

Hi (Participant's name),

Thank you for your interest. Here is a short description about the interview procedures:

Prior to the interview, you will be advised to bring any password and account remembering aids (such as notes, books, PDAs, Laptops, and so on) to the interview. The interview will consist of two main parts. In the first part, you will be asked a few general questions about your experience with computing and the internet, and how you record their passwords and online accounts. The second part will consist of a password/account mapping exercise, where you will be asked to describe your accounts and passwords. At some stage, you will be required to write down your actual passwords and accounts during the procedure, to aid you in completing the exercise, however, the sheets containing your actual passwords and accounts will not be seen by anyone else (including the interviewer). At the end of the interview, you will be asked to destroy the sheets containing their actual passwords and accounts using a paper shredder provided by the interviewer at the end of the interview.

Attached is a copy of the Participant Information Sheet. Please read it carefully.

The interview will be conducted in room 187 building 303, 38 Princes Street, Auckland.

I'm currently available at these times:

•••

...

Let me know when you are ready to do the interview.

Regards,

Gilbert Notoatmodjo

Attachment: Participant Information Sheet

Upon receiving a response from the prospective participant

Hi (Participant's name),

Thank you for your response. As agreed, we will do the interview on (x day/time). Please come to room 187 building 303, 38 Princes Street, Auckland. To prepare yourself for the interview, please bring everything that you use to help you to recall all your online accounts and your passwords (books, daily planners/notebooks, personal digital assistants, internet cache, laptops etc). A payment of \$20 will be made at the end of the interview as a compensation of your time and effort.

Attached is the interview script that will be used during the interview procedures, please read it carefully. If you disagree or feel disadvantaged by the procedures, you may cancel your participation by responding to this e-mail.

Regards,

Gilbert Notoatmodjo

Attachment: Interview Script - Participant's copy