Consent Form

Purpose of the Study

This research study is designed to assess the usability of the e-logbook prototype, developed to substitute the logbook used by medical students in the surgery rotations. We would like to determine whether replacing the paper-based logbook with a softwarebased one, running on a Palm mobile device, would improve the precision and efficiency of the surgery students' recording of their rotation experience. More generally, we would like to investigate other potential uses of such a software logbook that would enrich the overall student rotation experience and would enable them to contextualize their background knowledge in their experience of practice.

Procedure

As part of this study, each surgery student (henceforth called *the subject*) will be randomly assigned to one of two groups: the first group (henceforth called *the control group*) will be provided with the standard paper-based logbook; the second group (henceforth called *the experimental group*) will be provided with the software e-logbook.

- 1. Before starting their surgery rotation, subjects in both groups will fill out Questionnaire A (see attached) to provide us with some information regarding the background.
- 2. During their surgery rotation, subjects in both groups will record their surgical experiences in their logbooks: the control-group subjects will use the paper-based logbooks and the experimental-group subjects will use the e-logbook.
- 3. At the end of their surgery rotation, the control-group subjects will return their paper-based logbooks to Ms. Dorothy Madu, Office of Surgical Education Department of Surgery, and the experimental-group subjects will provide an electronic copy of their e-logbooks to the instructor.
- 4. Finally, all subjects will fill out an exit questionnaire: Questionnaire B-control (see attached) for the control-group subjects and Questionnaire B-experimental (see attached) for the experimental-group subjects.

The contents of both types of logbooks will be examined by the instructor for evaluation purposes.

For the study, the experimenters will analyze the data after the evaluation of the surgery rotation has been completed.

Your Rights

Your participation in the study is completely voluntary and you can withdraw from the study at any time, without explanation. If you choose to withdraw from the study, the data collected about you will be excluded from the final analysis. Note, however, that you will still be required to use your (paper-based or electronic) logbook to record your surgery-rotation experience. Your participation (or not) in the post-course analysis will have no bearing on your course grade received. Any data collected in the study will remain confidential. Any analysis results that would be published will be anonymous.

Principal Investigators

Dr. Chris De Gara Director of Surgery Cross Cancer Institute Director Division of General Surgery University of Alberta Dr. E. Stroulia Department of Computing Science University of Alberta

Agreement

As a Participant, I have been fully informed of the following statements before proceeding with the study:

I understand the intent and purpose of this research, and my participation is completely voluntary.

I understand that if I choose not to participate in the study, this will not affect my grade.

I understand that I have the right to withdraw from this study at any time and not have the data collected about me included in the analysis.

I understand that data may continue to be collected for instructional reasons.

I understand that my identity will be kept confidential, and my name will not be released in any publication about this research. I will receive a copy of this agreement.

Participant Name: _____

Participant Signature: ______

Researcher Signature:

E-logbook Usability-Assessment Questionnaire A

Instructions:

Please describe your familiarity with paper-based rotation logbooks and with the Palm mobile device. Just circle or X out the level of agreement that applies.

Closed questions:

		yes	no
1	I have used paper-based rotation logbooks in a previous rotation.		
2	I own a Palm device.		
3	I regularly use a Palm device.		
4	I am an expert user of the Palm device.		
5	I am an expert user of a mobile device.		
6	I use a mobile device to access medical applications.		

Open-ended questions:

Please provide any information regarding your background you may think is pertinent to this experiment.

E-logbook Usability-Assessment Questionnaire B-control

Note:

This questionnaire was based on the sample available at http://www.mindspring.com/~alund/USE/ExampleQuestionnaire.html.

Instructions:

Based on your experience using the paper-based logbook, please rate your agreement with the following statements. Just circle or X out the level of agreement that applies.

Closed questions:

		Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
1	I am satisfied with it.					
2	It is simple to use.					
3	It is wonderful.					
4	It is useful.					
5	It is fun to use.					
6	It does everything I would expect it to do.					
7	It requires the fewest steps possible to accomplish the task.					
8	It is user friendly.					
9	I can use it successfully every time.					
10	It is flexible.					
11	I learned to use it quickly.					
12	It makes the things I want to accomplish easy to get done.					
13	I can recover from mistakes quickly and easily.					
14	Using it is effortless.					
15	I can use it without written instructions.					
16	It meets my needs.					
17	It works the way I want it to work.					
18	I quickly could become skillful with it.					
19	It is easy to use.					
20	It is easy to learn to use it.					
21	It is better than using the e-logbook.					

Open-ended questions:

1. How do you think your surgery-rotation experience would be different, if you had used the e-logbook?

2. What other resources do you think would be useful to have immediately accessible during your surgery rotation?

3. What background materials were relevant to this surgery rotation? List the top five.

E-logbook Usability-Assessment Questionnaire B-experimental

Note:

This questionnaire was based on the sample available at http://www.mindspring.com/~alund/USE/ExampleQuestionnaire.html.

Instructions:

Based on your experience using the e-logbook, please rate your agreement with the following statements about how you feel in general when using the application. Just circle or X out the level of agreement that applies.

Closed questions:

	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
1 I am satisfied with it.					
2 It is simple to use.					
3 It is wonderful.					
4 It is useful.					
5 I don't notice any inconsistencies as I use it.					
6 It is fun to use.					
7 It does everything I would expect it to do.					
8 It requires the fewest steps possible to accomplish the task.					
9 It is user friendly.					
10 I can use it successfully every time.					
11 It is flexible.					
12 I learned to use it quickly.					
13 It would make the things I want to accomplish easier to get done.					
14 I can recover from mistakes quickly and easily.					
15 It would help me be more effective.					
16 Using it is effortless.					
17 I can use it without written instructions.					
18 It meets my needs.					
19 It works the way I want it to work.					
20 It would save me time when I use it.					
21 I easily remember how to use it.					
22 I quickly could become skillful with it.					
23 It is easy to use.					
24 I would recommend it to a friend.					
25 It is easy to learn to use it.					
26 It is better than using the paper-based logbook.					

Open-ended questions:

4. What other uses do you envision for the e-logbook?

5. What other resources do you think would be useful to integrate with the e-logbook?

6. How would the e-logbook be more useful, if there was a wireless network available in your hospital?

7. What background materials were relevant to this surgery rotation? List the top five.