

USABILITY TEST PLAN

ACL Injury Prevention Team — Evaluation Assignment 4

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1. TEST SET UP DETAILS FOR ALL THE SCENARIOS

Test will be conducted at 115 study room in the library. Participants will perform the test on a desktop. By exploring the application from Chrome browser, participants will be informed to start the test. For each task, the time will be counted through using a timer. Some of notes will be taken side by side for the later detailed report. Before starting the test, each participant needs to sign a consent form, which is included at the end of this report.

Pre-test questions (given before any scenarios)

1. I am very interested in the testing of this application. (Please indicate your level of agreement to the follow statement.)

- Strongly agree
- Agree
- Neutral
- Disagree
- Strongly disagree

2. Have you ever used any similar type of application?

- Yes
- No

3. What do you expect from this application?

2. TEST SCENARIO 1: EXPLORING QUESTIONNAIRE PAGE AND SUBMITTING DATA

2.1 Test Goals

Check if the participants can explore the questionnaire page and then submit the survey data easily and effortlessly. Test if the navigation buttons work. Identify the bugs in the application and the complexities to performing the task.

2.2 Test setup

The browser opens to the questionnaire page through clicking the “Take Questionnaire” button in the home page of the application.

2.3 Scenario description

Suppose you are an athlete and would like to assess your training in order to prevent traumatic knee injuries. Then someone recommend you “ACLIP app” to evaluate your training. To begin with you have to open it on your desktop or smart phone. By submitting the answers of some questions, you can receive the feedback and suggestion to your training.

2.4 Task list

- a) Direct to questionnaire page from home page.
- b) Select the answer of questions in the questionnaire page.
- c) Submit the answers.
- d) Direct to result page from questionnaire page.

2.5 Quantitative measurement list

- a) Time from questionnaire page to result page.
- b) Steps to complete the task.
- c) The number of errors.
- d) The number of times that the user needs assistance.
- e) Steps to recover from errors.

2.6 Qualitative measurement list

- a) Facial expression of users.
- b) Verbal expression of users.
- c) Analysis of post scenario interview or questionnaire.

2.7 Potential observations of participant

- a) Participants might have questions to complete the task.
- b) Participants might be hesitant to operate the application.
- c) Participants might feel the size of font too small.

2.8 Bug report form

Number	Name	Uniqueness	Location	Description
1				
2				
3				
4				
5				
6				

2.9 Post scenario interview or questionnaire questions

Please indicate your level of agreement to the follow statement.

1. Overall, this application was easy to perform the task.

- Strongly agree
- Agree
- Neutral
- Disagree
- Strongly disagree

2. I enjoy using this application.

- Strongly agree
- Agree
- Neutral
- Disagree
- Strongly disagree

3. I would like to use this application again.

- Strongly agree
- Agree
- Neutral
- Disagree
- Strongly disagree

4. Performing the task on this application took very few steps, couldn't have been any shorter.

- Strongly agree
- Agree
- Neutral
- Disagree
- Strongly disagree

5. It was easy to figure out where to go when using the application.

- Strongly agree
- Agree
- Neutral
- Disagree

6. I found this application confusing.

- Strongly agree
- Agree
- Neutral
- Disagree

7. I found this application is helpful to prevent ACL injuries.

- Strongly agree
- Agree
- Neutral
- Disagree

8. I would like to recommend this application to friends.

- Strongly agree
- Agree
- Neutral
- Disagree

9. What did you like about the application while performing the task?

10. What are the things that you thought were frustrating or confusing?

11. Mention the things that you thought could improve this application's usability.

3. TEST SCENARIO 2: DOWNLOADING THE SURVEY DATA

3.1 Test Goals

Check if the scientists can download the survey data easily and effortlessly. Test if the navigation buttons work. Identify the bugs in the application and the complexities to performing the task.

3.2 Test setup

The browser opens to the scientist page. Have an address where keeps the downloaded file.

3.3 Scenario description

Suppose you are a scientist and doing some of researches in the area of preventing traumatic knee injuries. You use "ACLIP app" to collect data

about athletes' activities for the research. After all the athletes submitted their answers of the questions in the survey, you can open the app on your desktop or smart phone and download the data for the analysis.

3.4 Task list

- a) Direct to scientist page from home page.
- b) Download all the survey data from the database.
- c) Open the downloaded csv file to check the data.

3.5 Quantitative measurement list

- a) Time from home page to scientist page.
- b) Steps to complete the task.
- c) The number of errors.
- d) The number of times that the user needs assistance.
- e) Steps to recover from errors.

3.6 Qualitative measurement list

- a) Facial expression of users.
- b) Verbal expression of users.
- c) Analysis of post scenario interview or questionnaire.

3.7 Potential observations of participant

- a) Participants might have questions to complete the task.
- b) Participants might be hesitant to operate the application.
- c) Participants might feel the size of font too small.

3.8 Bug report form

Number	Name	Uniqueness	Location	Description
1				
2				
3				
4				
5				
6				

3.9 Post scenario interview or questionnaire questions

Please indicate your level of agreement to the follow statement.

1. Overall, this application was easy to perform the task.

- Strongly agree
- Agree
- Neutral
- Disagree
- Strongly disagree

2. I enjoy using this application.

- Strongly agree
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- Neutral
- Disagree
- Strongly disagree

3. I would like to use this application again.

- Strongly agree
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4. Performing the task on this application took very few steps, couldn't have been any shorter.

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5. It was easy to figure out where to go when using the application.

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7. I found this application is helpful to prevent ACL injuries.

- Strongly agree
- Agree
- Neutral
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8. I would like to recommend this application to friends.

- Strongly agree
- Agree
- Neutral
- Disagree

9. What did you like about the application while performing the task?

10. What are the things that you thought were frustrating or confusing?

11. Mention the things that you thought could improve this application's usability.

Computer User Interface Usability Testing

You are being invited to participate in a research study to determine the usefulness and usability of computer user interfaces. This study is being conducted by Dr. Robert Pastel of Michigan Technological University Computer Science Department and students in Dr. Pastel's Human-Computer Interaction (HCI) courses. The students are performing the usability tests as part of their project and to fulfill the HCI course requirements.

There are no known risks if you decide to participate in this research study. There are no costs to you for participating in the study. The information you provide and tasks that you will perform will determine the usefulness and usability of user interfaces. The questionnaires and the tasks should take less than an hour to complete. The information collected may not benefit you directly, but the information learned in this study should provide more general benefits.

The questionnaires and test are anonymous. Do not write your name on the survey. No one will be able to identify you or your answers, and no one will know whether or not you participated in the study except for the instructor of the class that is giving you credit for participating. Should the data be published, no individual information will be disclosed.

Your participation in this study is voluntary. By completing the questionnaires and performing the tasks, you are voluntarily agreeing to participate. You are free to decline to answer any particular question you do not wish to answer or not to perform a task for any reason.

If you have any questions about the study, please contact Dr. Robert Pastel, Assistant Professor, Computer Science Department, Michigan Technological University, Houghton, MI 49931.

The MTU Institutional Review Board has reviewed my request to conduct this project. If you have any concerns about your rights in this study, please contact Joanne Polzien of the MTU-IRB at 906-487-2902 or email jpolzien@mtu.edu.

Participant signature and date: