## CSCC10 - Introduction to Human Computer Interaction Assignment 7: Usability Study Instruments

Group #: 16 (HelpingGrads)

Group Members: Shamanth Chedde, Jun Zheng, Syed Sharjeel Haider, Gaurav Sharma,

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## **Research Protocol**

1. **Project Title**: Interview for Hi-Fi Prototype Usability Testing.

#### 2. Investigators:

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- 3. **Purpose**: The purpose of our research is to understand the efficacy and the extent to which our hi-fi prototype is able to be easily used by our users.
- 4. **Process to be followed**: We will brief the participants about the purpose of the usability study, explain the consent form to them, and ensure that they verbally consent to participate. We will then engage the participants in a one on one interview of basic demographic questions and we will also test our prototype with the user.
- 5. **Participant selection:** Participants will be chosen from people who applied to grad school this year, have already finished grad school within the past few years, or are currently enrolled in one. They will be identified via having a conversation with them through text about how long ago they applied for graduate school. They will be selected according to how long ago they applied for grad school as some of the issues they may have had during their time have probably been resolved by now with the advancing technology. In general, they will be characterized by people who have applied for graduate school in North America, in the past 6-7 years.

- 6. **Relationships**: Our relationship to the participants may be described as follows: university friend's, friends of friends, volunteer participants that we have no relation with.
- 7. **Risk and benefit:** There will be minimal risk to the participants, for example that they feel that they have wasted their time. The only benefit will be to contribute to the education of the investigators. Participants are free to withdraw before or at any time during the study without the need to give any explanation.
- 8. **Consent details**: We will brief the participants about the purpose of the study, and explain the **attached consent form** to them, and ask for their verbal consent.
- 9. **Compensation**: Participants will receive no compensation.
- 10. **Information sought:** The information to be sought is described in the attached pre-study questionnaire which asks for some basic details about their experience with applying to grad school. We will also conduct a post-study questionnaire where we will ask them what their thoughts were of the prototype.
- 11. **Confidentiality**: Information will be kept confidential by the investigators. Names or other identifying or identified information will not be kept with the data. The only other use will be to include excerpts or copies in the assignment submitted, but names and other identifying or <a href="https://forms.gle/cgbcARs5buUefJYt7">https://forms.gle/cgbcARs5buUefJYt7</a>identified information will not be submitted.

### **Consent Form**

https://forms.gle/cgbcARs5buUefJYt7 on page 1 of Google Form

## **Hi-Fi Prototype**

#### **Link to Original Hi-Fi Prototype:**

https://www.figma.com/proto/bmehqM9iwm4dZPIOwilvjh/HelpingGrads-Web-Application?node-id=18%3A8249&scaling=contain&hotspot-hints=0

#### Link to Updated Hi-Fi

**Prototype:**<a href="https://www.figma.com/proto/bmehqM9iwm4dZPIOwilvjh/HelpingGrads-Web-Application?node-id=285%3A9342&scaling=contain&hotspot-hints=0">https://www.figma.com/proto/bmehqM9iwm4dZPIOwilvjh/HelpingGrads-Web-Application?node-id=285%3A9342&scaling=contain&hotspot-hints=0</a>

#### Change Log:

| Page Name | Description of Change |
|-----------|-----------------------|
|-----------|-----------------------|

| Discussion Board, Discussion Board 2, Discussion Board 3, Discussion Board Search Filled In, Discussion Board Search Results | Added page numbers at the bottom to show user if there are more discussion posts.   |
|--|---|
| Guide page/ Create guide modal   | Change "Save" button to "Post"  |
| Guide Page - on click featured tutorial, Guide Page - on click save guide  | Added a white sheet background to separate comments from the posted content   |
| Guide Page - Search bar  | Changed "Search For Tutorials" to "Search For Guides"   |
| Guide Page - on click featured tutorial/on click save guide  | Changed content with something more readable and realistic  |
| Multiple pages   | Remove typing cursor from all inactive search bars  |
| Programs Page  | Added functionality to filter by program and university, this also resulted in many more program page instances to be created to reflect the filtered lists |
| Programs Page  | Updated the toast when the user clicks the favorite button to say "University Name - Program Name" instead of just "University Name"                        |

## **Research Study Instruments**

#### **Pre-Study Questionnaire**

https://forms.gle/cgbcARs5buUefJYt7 on page 2 of Google Form

#### **Test Script**

**Scenario 1**: You are a 4th year life science student who is interested in applying for graduate school, however, you are unfamiliar with the process. You heard from a friend about a website that can help you research programs and prepare your application. Using this system can you show me how you would do the following tasks? Please think aloud as you interact with this prototype.

**Task 1:** Search and View program information.

**Question:** You are interested in applying to medical school at Western University. Can you show me how you would find information on their medical school program using the prototype?

**Task 2:** Save program information.

Question: You would like to favorite this program so you can find it quicker next time. Can you show me how you would save a program?

Task 3: Find information to learn how to write a document.

**Question:** You do not know how to write a personal statement and would like to learn how to write one. How would you go about this?

**Task 4:** Find someone to edit your documents.

**Question:** You have finished writing your personal statement and you would like to have it edited by the community.. Can you show me how you would get your **own** document edited using the prototype?

#### Task 5: View and respond to a discussion post

**Question:** After you've had some time to touch up your Personal Statement, you feel confident enough with your newly gained insight that you decide you want to help other users who need help with their personal statement. How would you be able to help them?

Task 6: View documents.

**Question:** You want to go review your personal documents that you've uploaded. How would you be able to view them?

**Scenario 2**: You are a guidance counselor who works at UofT and you came across this site. You realize that you will be able to help students on the site with their application. Using this system can you show me how you would do the following tasks? Please think aloud as you interact with this prototype.

#### Task 7: Create a guide.

Question: You are an expert at writing personal statements and would like to create a tutorial on how to write one. Can you show me how you would do that?

## **Observation and Performance Measurement Plans**

| Observation List                                 | <u>Notes</u> |
|--|--------------|
| Whether participant asks for help                |              |
| Watch participant errors                         |              |
| Participant zooms in/out more often              |              |
| Text size making participant take longer to read |              |

| Participant can find a solution to tasks despite getting stuck on a step. |  |
|---|--|
|   |  |

| <u>Verbal Behaviour</u>    | <u>Notes</u> |
|----------------------------|--------------|
| Strong positive comment    |              |
| Other positive comments    |              |
| Strong negative comment    |              |
| Other negative comment     |              |
| Suggestion for improvement |              |
| Question                   |              |
| Stated confusion           |              |
| Stated frustration         |              |

| Nonverbal Behaviours       | <u>Notes</u> |
|----------------------------|--------------|
| Frowning/Grimacing/Unhappy |              |
| Smiling/Laughing/Happy     |              |
| Surprised/Unexpected       |              |
| Evidence of impatience     |              |
| Leaning close to screen    |              |
| Fidgeting in chair         |              |
| Random mouse movement      |              |
| Groaning/Deep sigh         |              |
| Rubbing head/eye/neck      |              |

## **Note Capturing Tools**

Name of Facilitator: Name of Participant:

| Name of Observers:  |  |  |
|---------------------|--|--|
| Name of Note Taker: |  |  |
| Start Time:         |  |  |
| End Time:           |  |  |

| Task No. | Page No. | Explain Participant behaviour | Test Result* |
|----------|----------|-------------------------------|--------------|
|          |          |                               |              |
|          |          |                               |              |
|          |          |                               |              |
|          |          |                               |              |
|          |          |                               |              |
|          |          |                               |              |

• Refers to the three different levels: Completed without help, completed with partial help, couldn't complete.

# Post-Study Questionnaire <a href="https://forms.gle/cgbcARs5buUefJYt7">https://forms.gle/cgbcARs5buUefJYt7</a> on page 3 of Google <a href="Form">Form</a>

## **Appendix**

## **Pilot Testing Participants List**

| Name                  | Date Test Conducted     |
|-----------------------|-------------------------|
| Min Qi Zhang          | Tuesday, July 21, 2020  |
| Yuk-Ming (Carlos) Lam | Tuesday, July 21, 2020  |
| Renzo Reyes           | Tuesday, July 21, 2020  |
| Yiyang Zhou           | Thursday, July 23, 2020 |
| Kirusan Subeethakumar | Thursday, July 23, 2020 |

| Ajay Ravendran | Thursday, July 23, 2020 |
|----------------|-------------------------|
|                |                         |

## **Assignment Attribution**

| Name                 | Contribution  |
|----------------------|---|
| Muskan Patpatpia     | Made changes to Research Study Instruments.                                   |
| Nikisha Jeyakumar    | Contributed to Research Study Instruments                                     |
| Shamanth Chedde      | Contributed to test script and made some small changes to the hi-fi prototype |
| Gaurav Sharma        | Contributed to figma designs for hi-fi prototype                              |
| Syed Sharjeel Haider | Made some changes to hi-fi prototype  |
| Jun Zheng            | Contributed to Figma designs for hi-fi prototype                              |