CSCC10 - Introduction to Human Computer Interaction Assignment 8: Usability Study Results Report

Group #: 16 (HelpingGrads)

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

Nikisha Jeyakumar, Muskan Patpatpia

TA: Jaisie Sin

Table of Contents

Executive Summary	2
Research Method	2
Participants Demographic Summary	3
Findings and Design Implications	3
Research Limitations	8
Reflections	8
Appendix	10
Appendix A: Data Collected From Tests	10
Appendix A.1: Shamanth's Data	10
Appendix A.2: Jun's Data	13
Appendix A.3: Sharjeel's Data	16
Appendix A.2: Gaurav's Data	18
Appendix A.2: Nikisha's Data	20
Appendix A.2: Muskan's Data	24
Appendix B: Usability Workshop Participation Form	29
Appendix C: Assignment Work Attribution	29

Executive Summary

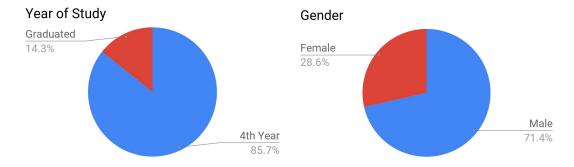
The problem space our group worked on was the graduate school admission process. Individuals who completed or who were currently completing the graduate admission process were interviewed and surveyed. Some major themes found in the data collected were that the most difficult parts of the application process were applying to multiple schools, keeping track of their deadlines, and writing documents such as the letter of intent. The data also showed that writing customized letters and collecting documents, such as the letters of recommendation, for every school was the most time consuming part of the application process. Our initial solution consisted of a centralized application hub where the users can apply to their programs and our application would take care of the organization and document tracking. Users could also get their documents peer reviewed and professors could upload their recommendation letters straight to a user's profile. However, this solution seemed to be unrealistic as it will be very difficult to get all graduate schools to partner with our application. It was decided to pivot our solution to more of an assistance and resource based platform, composed of helpful guides, a complete list of graduate level programs with their acceptance details, and even a discussion board for people to communicate with the graduate school community. Low-fidelity prototypes were created for initial testing. The prototypes were also evaluated by conducting a cognitive walkthrough and by testing against Nielson's heuristics. The results were then used to create a high-fidelity prototype, which was used to conduct one-on-one interviews for usability testing. The majority of uncovered issues were with naming and styling that would confuse users in navigating through the application. Many usability test participants praised the simplistic design and theme of the application. The majority of participants stated that the application was useful and would recommend it to a friend.

Research Method

The research method that our group used to conduct the usability testing was one on one interviews. Each member of the group conducted an interview with a participant for the prototype usability testing. Our target demographic was students who were going to apply for graduate school in the near future and those who have already applied and we made sure of it through a post usability testing survey. Some of the group members had family members who had gone through the graduate school application process and agreed to participate in the usability testing whereas others had friends they knew who wanted to apply/had already applied for graduate school. For the usability testing, the overall task goals included searching for specific program information, favoriting it, searching helpful articles, asking for help with their documents and other parts of the application process, answering other users questions, viewing their own uploaded documents, and creating guides for others. The data collected includes notes from observing the participant completing their tasks such as facial expressions, verbal behaviours and non-verbal behaviours. The raw data collected for each participant can be found in Appendix A: Data Collected From Tests. The data collected were grouped under major themes. Participants also completed a post-study questionnaire where the results were used to calculate our net promoter score.

Participants Demographic Summary

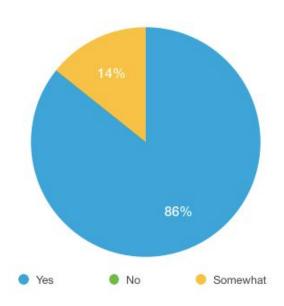
For our usability testing, seven people were interviewed. Regarding the demographics of our participants, two of them were 20 years old, four of them were 21 years old, and one was 22 years old. Six out of seven of them were fourth year students and the last participant had just graduated. Regarding their genders, we interviewed five males and two females. Three out of seven of our participants were interested in applying to Medical Schools programs at UofT, McMaster, uOttawa, Western and OMSAS Schools. Participant 4 (P4), is interested in the Masters of Engineering program at Ryerson, participant 5, (P5), is interested in applying to Occupational Therapy program at UofT, participant 6 (P6), is interested in applying to a Statistics program at UofT, and lastly, participant 7 (P7), is interested in applying to a Law program at UofT. From the demographic information obtained, we can see that all these students were all in the same age range of 20-22, and most of them wanted to pursue a program at UofT. Almost half of them (three out of seven) also want to pursue a degree in medical school.



Findings and Design Implications

Some of the areas of our design which proved to be very successful were searching for the program information and saving it for later, creating guides for helping other users, and viewing documents. Some of the areas of our design which proved to be challenging were commenting on a user's post in order to help them. Maybe it was the way we worded our tasks but the users were confused between commenting on other users posts for helping them and creating guides. Our task required the user to search for discussion posts on personal statements and then comment on one of the posts, but some of the participants thought that they needed to create a guide on personal statement to help users. So it was not as much an issue with navigating our prototype, but more so an issue with the wording of our task. So we believe the severity of this challenge is low. After compiling the test results, we found that the majority of our users found our application easy to use. The participants who found it somewhat easy gave us this verdict due to the confusion caused by the misinterpretation of our tasks rather than the actual task and design itself.

Do you think our application is easy to use?



Majority of our applicants (6/7) found our application easy to use



Our net promoters score (NPS) is: 57

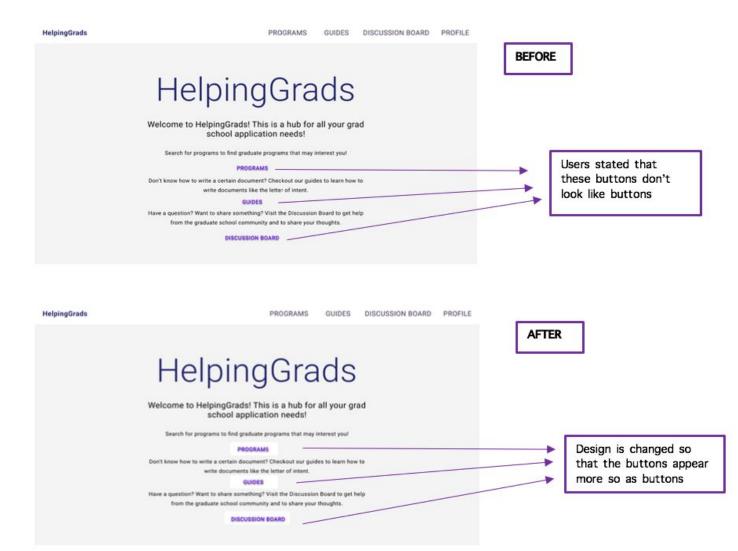
Recommendations

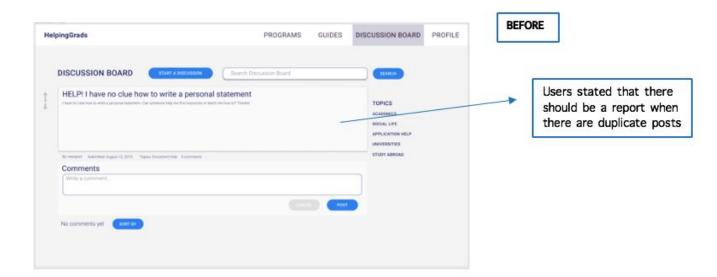
Some suggestions/recommendations from our users include:

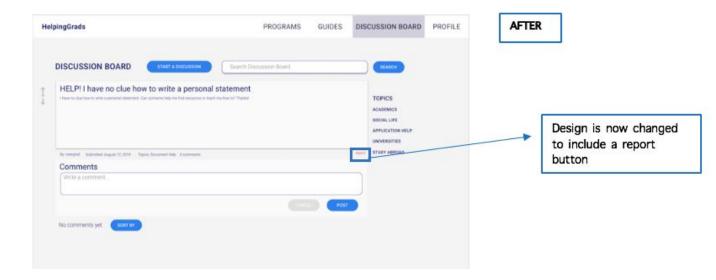
- For example, one user stated that they wouldn't want to share documents publicly because of privacy. There should be an option to private message someone. Also, when creating a guide, it seems like anyone can create a guide. Would much rather have some kind of privileged account that makes guides because of credibility. Don't necessarily know that what someone has posted as a guide is true. And so was a little confused about this at first. Also suggests putting images like school logos maybe?
 Buttons on the home page don't really look like buttons, they look more like just text so hard to see that they are buttons at first glance.
- Another user stated that we should make the filters more clear, as it is very unclear if I click on another tab, the previous filter is saved.
- Another user stated that they would like to add a report button for duplicate posts

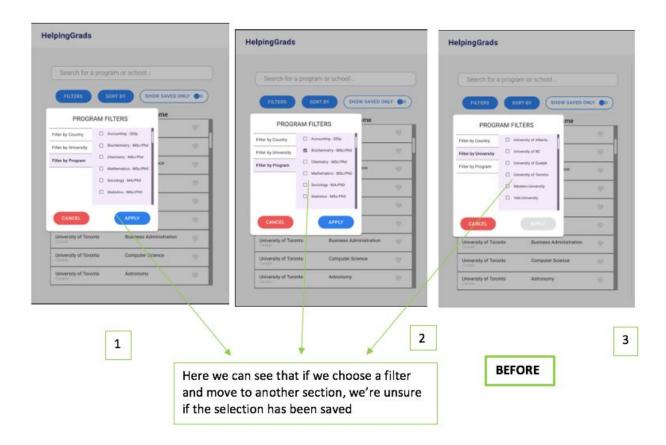
Changes Made

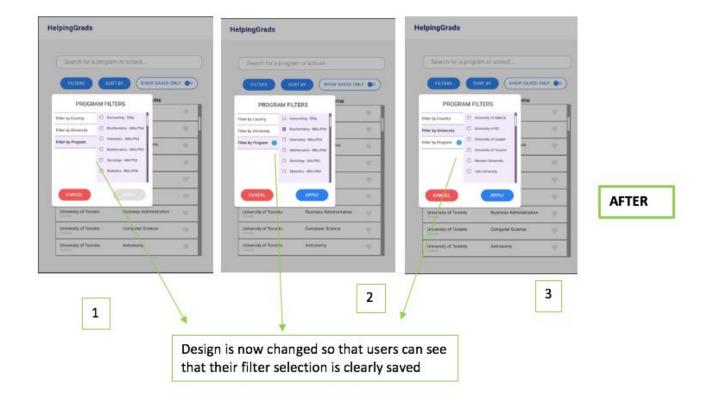
3 changes made to our prototype were:











Research Limitations

While conducting our usability testing, the group noticed there were some research limitations which may affect the generalizability of our findings and usefulness of the proposed solution. Our biggest limitation was conducting the entire test online, followed by limitations of the prototype, and finding participants that fit our criteria.

We are currently in a pandemic which forced us to conduct our usability testing completely online. We believe that this format was restricting and did not allow us to capture all the data that we needed. Some participants were not able to share their videos/live reactions while they were participating in the testing. This essentially narrowed down our observation scale to verbal communication only as we were not able to observe any facial expressions or unnatural behaviour that the user might exhibit. Most of our data collected was through surveys and questionnaires which could lead us to miss out on important insights that might be forgotten by the time we ask questions.

Due to our current situations, it was difficult to find willing participants that met our target audience. This ended with participants being people we know which could have potentially led to biased data. During our pilot testing, we practiced to avoid influencing our participants in such a way that would lead to biased data. Despite our efforts, there is always a chance that some of our data is biased because of our connections to the participants.

We also noticed a limitation of technology during our usability testing. Oftentimes, we will find participants trying to scroll somewhere, or click on something, or perform a gesture that would otherwise work perfectly on a working software(e.g. Swipe right to go back). Most of the time, participants were able to bounce back from such setbacks but they did express their frustration with these kinds of limitations. Sometimes, we noticed after such an incident the users would frantically click around which might not be completely indicative of a real user. We tried to make our prototype as realistic as possible but because of the platform we used to develop the prototype, there were some limitations that were impossible to rectify.

Reflections

During our initial data collection phases, the data we collected showed that a lot of people found filling out graduate school applications tedious, and tailoring documents accordingly was something that took significant effort and time. We assumed that the problem was the amount of time and effort it took for people to create their applications. Our initial solution was a central hub to apply to many different schools from a single point. Everything from submitting documents to filling out initial information would be simplified and made easier for the end user. However, after consulting and testing this solution we learned that it would be difficult to implement since it would require university buy-in. We also came to realize that the general problem was not what we thought it was. It became apparent that the problem was a lack of access to resources that could be used by students to learn how to prepare their applications

and to ask general questions about post-graduate education. After much refining and testing, we arrived at our current solution where people can research graduate programs that they are interested in, get help writing documents, and ask the community questions about any facet of graduate schools. This solution seemed to be more acceptable and desired after performing usability testing. When conducting usability testing for our low-fi and hi-fi prototypes, we assumed that users would perform certain tasks a certain way, for example when searching for programs users would use the search bar. However, during our pilot testing we found that some participants would use filters instead to narrow their search. The pilot testing gave us insight on how different users think. This allowed us to create a more complete prototype with more paths and functionality. The pilot testing also allowed us to find mistakes in our usability testing script. We found that some of our questions were a little more open to interpretation than others which led to confusion for some tasks. The changes we made to our hi-fi prototype and to our script prepared us even more for our usability tests.

Appendix

Appendix A: Data Collected From Tests

Appendix A.1: Shamanth's Data

Name of Facilitator: Shamanth Chedde Name of Participant: Aravinth Jebanesan Name of Observers: Shamanth Chedde Name of Note Taker: Shamanth Chedde

Start Time: 4:00pm End Time: 4:23pm

Task No.	Page No.	Explain Participant behavior	Test Result*
1		Clicks on programs, looks for Western University, tries to scroll, decides to search in the search bar for the program and finds it and clicks on it.	Completed without help
2		Clicks on the heart button, says heart associates with favorite or save or even a start, and sees the confirmation toast.	Completed without help
3		Goes to the guides page. Finds the post on the page. Finds other way which is to search. Clicks search, sees that there are more results	Completed without help
4		When thinking of community, thinks of forums or discussion board so goes to the discussion board page. Clicks on the topics "Application Help" button. Then clicks start a discussion. Wouldn't add an attachment right away because of personal security and not wanting to share their work. Would first see who is interested in helping and then privately message them afterwards. Usually refers "Tags" to keywords. Would rather have an option to choose which categories the post belongs in.	Completed without help

5	"Application H Thought abou asking if there	he posts categorized as lelp" by clicking the button. It creating a discussion post e's anyone that needs help. Also ag the search bar and writes a	Completed without help
6	Goes to profile Documents" b	e and clicks on the "My outton.	Completed without help
7	the tutorial an	ng to the discussion board to post d then later decides to go to the e and creates a tutorial.	Completed without help

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.	Participant was able to find multiple ways to complete tasks without help on their own or when asked

Verbal Behaviour	<u>Notes</u>
Strong positive comment	Liked the UI, simplistic design and color scheme of the application
Other positive comments	

Strong negative comment	
Other negative comment	Seems a little too simplistic, maybe some images like school logos would be nice.
Suggestion for improvement	Wouldn't want to share documents publicly because of privacy. Suggests an option to private message someone. Also, when creating a guide, it seems like anyone can create a guide. Would much rather have some kind of privileged account that make guides because of credibility. Don't necessarily know that what someone has posted as a guide is true. And so was a little confused about this at first. Also suggests to put images like school logos maybe? Buttons on the home page don't really look like buttons, looks more like just text so hard to see that they are buttons at first glance.
Question	
Stated confusion	
Stated frustration	

Nonverbal Behaviours	<u>Notes</u>
Frowning/Grimacing/Unhappy	
Smiling/Laughing/Happy	Happy during the test, making jokes
Surprised/Unexpected	
Evidence of impatience	
Leaning close to screen	
Fidgeting in chair	

Random mouse movement	
Groaning/Deep sigh	
Rubbing head/eye/neck	

Appendix A.2: Jun's Data

Observation

Observation List	<u>Notes</u>
Whether participant asks for help	Generally the participant did not ask for any help and most of the tasks are completed successfully.
Watch participant errors	The participant used multiple filters on our prototype to filter down the programs, this is perhaps not a participant error, but rather our prototype is not good enough. The participant never commented on the discussion board, instead she created a guide right away.
Participant zooms in/out more often	Never happened.
Text size making participant take longer to read	Pretty easy to read.
Participant can find a solution to tasks despite getting stuck on a step.	Yes, if the participant gets stuck, she is able to quickly find a solution.

Verbal Behaviours

Verbal Behaviour	<u>Notes</u>

Strong positive comment	None, did not have much strong positive comments.
Other positive comments	The UI is clean, navigation is clear.
Strong negative comment	None.
Other negative comment	A lot of UI elements are not clickable despite being there, this makes things more confusing.
Suggestion for improvement	Make the filter more clear, it is very unclear if I click on another tab, the previous filter is saved.
Question	None, participant did not ask any questions.
Stated confusion	None.
Stated frustration	None.

Non-Verbal Behaviours

Nonverbal Behaviours	<u>Notes</u>
Frowning/Grimacing/Unhappy	None.
Smiling/Laughing/Happy	None.
Surprised/Unexpected	None.
Evidence of impatience	The participant is clicking all over the screen.
Leaning close to screen	None.
Fidgeting in chair	None.
Random mouse movement	Yes, happens right from the start even before the test starts.

Groaning/Deep sigh	None.
Rubbing head/eye/neck	None.

Notes

Name of Facilitator: Jun Zheng Name of Participant: Zhuoying Li Name of Observers: Jun Zheng Name of Note Taker: Jun Zheng

Start Time: 10:50 pm End Time: 11:00 pm

Task No.	Page No.	Explain Participant behaviour	Test Result*
1		Participant first clicked on the search bar, however due to an error on the script, I did not realize that the Biomedical program is the program to search for. She then proceeded to use the filter, however was very confused by it.	Confusion, the test script was inaccurate.
2		Clicked on the fav button even before I finished the sentence.	Completed without help.
3		Participant found the guide easily.	Completed without help.
4		The participant easily found a way to post on the discussion board.	Completed with no help.
5		The participant created a guide instead of going into the discussion board. And she is very sure the task is completed.	Did not finish the task successfully.
6		User first clicked on the discussion board to find the post, with guidance, the user clicked on the profile tab and [My Documents].	Completed with little help.

7	User created a guide again similar to what she did for task 5.	Completed without help.

Appendix A.3: Sharjeel's Data

Observations

Observation List	<u>Notes</u>
Whether participant asks for help	Only when the prototype doesn't behave as a real application(e.g. scrolling)
Watch participant errors	Was able to come back after a few hiccups
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.	After a little brainstorming, the participant was able to find the correct solution

Verbal Behaviour	<u>Notes</u>
Strong positive comment	Simple, intuitive UI
Other positive comments	-
Strong negative comment	Felt there was some redundancy on the home page with the repeated buttons
Other negative comment	-
Suggestion for improvement	-
Question	-
Stated confusion	No scrolling???
Stated frustration	-

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

Name of Facilitator: Syed Sharjeel Haider Name of Observers: Syed Sharjeel Haider Name of Note Taker: Syed Sharjeel Haider

Start Time: 11:10pm End Time: 11:22pm

Task No.	Page No.	Explain Participant behaviour	Test Result*
1	Programs page	Notices the multiple ways program page can be accessed. (Mismatch between task and prototype)	Completed without help
2	Programs page	Looks for a save button but accepts heart button as an acceptable alternative	Completed without help
3	Guides page	Makes the symbolic connection between what is needed and the terms we used.	Completed without help
4	Discussion Board	Makes the distinction between discussion board and guides	Completed without help
5	Discussion Board	Mentions exactly how they would go accomplishing this task.	Completed with partial help
6	Profile Page	Expected own stuff to be accessible under Profile tab	Completed without help

7	Guides page	Didn't exactly know how to create a tutorial. After some brainstorming, they were able to complete the tasks. Tries to hit the 'Post' button that was in the comments section	Completed without help
---	-------------	---	------------------------

Appendix A.2: Gaurav's Data

Name of Facilitator: Gaurav Sharma

Name of Participant: Raghav

Start Time: 3:30pm End Time: 3:42pm

Task No.	Page No.	Explain Participant behaviour	Test Result*
1	Programs page	Was able to find program quickly	Successfully completed
2	Programs page	 Accidentally explored too much and did clicked acceptance status and favorited the program Explores the different components and understands what they are meant for immediately 	Completed with the previous task
3	Guides	Goes to home screen the clicks guides, immediately finds the personal statement one	Completed with ease
4	Discussion Board	 Goes to home page, and selects discussion board Recognizes he needs to start a discussion and proceeds to create one 	Completed with ease
5	Discussion Posts	 Tries to click application help to find people who need help Realizes he can search for personal statements Once he realizes he can search was able to complete fairly quickly 	Completed with minor setback

7	Profile	•	Was able to find my documents really fast	Was able to do it flawlessly
8	Create a tutorial	•	Was able to complete with easy Straight forward thinking	Was able to do it flawlessly

Observation List	<u>Notes</u>
Whether participant asks for help	NA
Watch participant errors	NA
Participant zooms in/out more often	NA
Text size making participant take longer to read	NA
Participant can find a solution to tasks despite getting stuck on a step.	NA

Verbal Behaviour	<u>Notes</u>
Strong positive comment	NA
Other positive comments	NA
Strong negative comment	NA
Other negative comment	NA
Suggestion for improvement	Would like to add a report button for duplicate posts
Question	NA
Stated confusion	NA
Stated frustration	NA

Nonverbal Behaviours	<u>Notes</u>
Frowning/Grimacing/Unhappy	No camera
Smiling/Laughing/Happy	Is laughing and making jokes
Surprised/Unexpected	NA

Evidence of impatience	NA
Leaning close to screen	No camera
Fidgeting in chair	No camera
Random mouse movement	NA
Groaning/Deep sigh	NA
Rubbing head/eye/neck	NA

Appendix A.2: Nikisha's Data

Usability Testing #1

Name of Facilitator: Nikisha Jeyakumar

Name of Participant: Saisa Jey

Name of Observers: Nikisha Jeyakumar Name of Note Taker: Nikisha Jeyakumar

Start Time: 8:32pm End Time: 8:45pm

Test No.	Page No.	Explain Participant behaviour	Test Result*
1	Programs Page	User immediately clicks on programs and attempts to scroll through universities. She then attempts the search bar and successfully completed the task	Completed without help
2	Programs page	User clicks on heart before facilitator completes the task description	Completed without help
3	Guides Page	User immediately clicks on guides and clicks on the first post regarding personal statements rather than searching personal statements in search bar	Completed without help
4	Discussions Page	User initially clicks on programs, and then the discussion board. She then clicks on the profile page and is confused. She initially thought of writing a comment, but after some clarification, she clicks on the discussion board again, starts a discussion and clicks post as wanted.	Completed with help
5	Discussion Page	User is hesitant at first and after some clarification, she states what she would do	Completed with partial help

		in this case and completes the task	
6	Profile Page	User immediately clicks on profile and clicks on 'my documents'	Completed without help
7	Guides Page	User clicks on guides and creates a guide as wanted	Completed without help

Observation List (Testing #1)

Observation List	<u>Notes</u>
Whether participant asks for help	N/A
Watch participant errors	User clicks on wrong buttons multiple times, however she ends up finishing the tasks after clarification
Participant zooms in/out more often	N/A
Text size making participant take longer to read	N/A
Participant can find a solution to tasks despite getting stuck on a step.	Yes, after explanation, she seems to find a solution

Verbal Behaviour	<u>Notes</u>
Strong positive comment	During the post-study questionnaire, she states "I would [recommend this website to friends], it's actually needed" and how everything is in one place
Other positive comments	N/A
Strong negative comment	N/A
Other negative comment	N/A
Suggestion for improvement	N/A
Question	Asked for task description clarification
Stated confusion	N/A
Stated frustration	N/A

Nonverbal Behaviours	<u>Notes</u>
Frowning/Grimacing/Unhappy	N/A
Smiling/Laughing/Happy	Was very pleasant and patient
Surprised/Unexpected	N/A
Evidence of impatience	N/A
Leaning close to screen	Yes, several times
Fidgeting in chair	N/A
Random mouse movement	N/A
Groaning/Deep sigh	N/A
Rubbing head/eye/neck	N/A

Usability Testing #2

Name of Facilitator: Nikisha Jeyakumar Name of Participant: Ahilan Sivakumar Name of Observers: Nikisha Jeyakumar Name of Note Taker: Nikisha Jeyakumar

Start Time: 11:45pm End Time: 11:58pm

Test No.	Page No.	Explain Participant behaviour	Test Result*
1	Programs Page	User immediately click on the programs page and attempts to press on the search bar, sees the biochemistry typed in and finds Western University as wanted	Completed without help
2	Programs page	User immediately knows what to do and clicks on the heart to save the program	Completed without help
3	Guides Page	User immediately clicks on the guides page, he doesn't search personal statements, but instead clicks on the personal statement post on the main guides page.	Completed without help
4	Discussions Page	User was hesitant at first, but after some clarification, he immediately clicks on the discussion board. He then clicks on 'start a discussion' without any help. Also mentions	Completed with partial help

		he would attach his personal statement and clicks on post	
5	Discussion Page	User mentions exactly what he would do in this case and completed the task	Completed without help
6	Profile Page	User clicks on profile page and presses on 'my documents' and completes task	Completed without help
7	Guides Page	User is hesitant and clicks on discussion board initially, and after some clarification, he goes to the guides page, creates the guide and posts it as wanted	Completed with partial help

Observation List (Testing #2)

Observation List	<u>Notes</u>
Whether participant asks for help	N/A
Watch participant errors	User only clicks on the wrong button once during the last task
Participant zooms in/out more often	N/A
Text size making participant take longer to read	N/A
Participant can find a solution to tasks despite getting stuck on a step.	User found all solutions to tasks without getting stuck

<u>Verbal Behaviour</u>	<u>Notes</u>
Strong positive comment	N/A
Other positive comments	N/A
Strong negative comment	N/A
Other negative comment	N/A
Suggestion for improvement	User suggests for some clarification regarding the guides page and its features and also states that other users may get confused with the guides page and discussion board page.
Question	Asked to repeat the task, and asked for clarification of a task
Stated confusion	N/A

Stated frustration	N/A
--------------------	-----

Nonverbal Behaviours	<u>Notes</u>
Frowning/Grimacing/Unhappy	N/A
Smiling/Laughing/Happy	Was very calm and observant
Surprised/Unexpected	N/A
Evidence of impatience	N/A
Leaning close to screen	N/A
Fidgeting in chair	N/A
Random mouse movement	N/A
Groaning/Deep sigh	N/A
Rubbing head/eye/neck	N/A

Appendix A.2: Muskan's Data

Observation Notes

Observation List	<u>Notes</u>
Whether participant asks for help	Yes participant asked for help when they felt frustrated on getting stuck on a task.
Watch participant errors	Participant did click multiple times on random buttons rather than exactly on the ones that were part of the solution for each task.
Participant zooms in/out more often	no
Text size making participant take longer to read	no

Participant can find a solution to tasks despite getting stuck on a step.	Partially, participant did require a few hints and	
	repeating questions	
	again and again to be able to complete some	
	tasks.	

Verbal Behaviour	<u>Notes</u>
Strong positive comment	-
Other positive comments	-
Strong negative comment	-
Other negative comment	-
Suggestion for improvement	Participant feels there is a confusion regarding the tasks related to creating guides and helping users through commenting on their discussion posts as they are both ways of helping other users in the community. User felt the task were worded in such a way that they seemed very similar.
Question	Participant on getting stuck at some task asked further questions so as to get a better understanding of the task.
Stated confusion	Yes. In certain tasks participant was completely confused as to how to proceed and was also confused between the similarities of some tasks.
Stated frustration	Participant exclaimed "Why am I so bad at this" when unbale to complete task 4.

Nonverbal Behaviours	<u>Notes</u>
Frowning/Grimacing/Unhappy	-

Smiling/Laughing/Happy	Yes, when they couldn't seem to find a solution to the task.
Surprised/Unexpected	-
Evidence of impatience	Various hmmms when they were stuck on a task.
Leaning close to screen	-
Fidgeting in chair	-
Random mouse movement	Yes they tried to click on anything they could when stuck on a task.
Groaning/Deep sigh	-
Rubbing head/eye/neck	-

Notes summary:

Name of Facilitator: Muskan Patpatia Name of Participant: Suhail Mughal Name of Observers: Muskan Patpatia Name of Note Taker: Muskan Patpatia

Start Time: 9:40 pm End Time: 9:58 pm

Task No.	Page No.	Explain Participant behaviour	Test Result*
1		Participant clicked on programs then tried to scroll down instead of directly searching for the program. Then they finally clicked on the search bar to type biochmestry and clicked on search and then on	Completed Without help
2		Participant easily clicked on the favourite button.	Completed without help.
3		Participant first clicked on profile tab, then discussion board then finally on the guides tab and clicked on the personal statement related article on the front page itself rather than searching.	Completed in one way without help.

Participant clicked on the discussion board tab, then started looking around on the page, then clicked on profile, then on the guides tab and then again back on discussion board and clicked on the application help button on the side, then started reading through the posts on the discussion board. Then again clicked on guides tab and clicked on the personal statement article on the front and tried to click on the comment button. They then clicked back on discussion board and when I gave a hint to look at everything on the screen they started clicking on random buttons. Then they finally clicked on start a discussion button and tried to type in which I don't know why it accidentally took them to the program info page. So then they looked around on the page clicked on close then again clicked on guides page and again clicked on the personal statement article. Then clicked back on the discussion board tab and again started looking all around on the page. I repeated the question again for them and then they clicked on profile tab and clicked on my documents button. Then they clicked again on discussion board and clicked on sort by button. Then again clicked

button finally.

on start a discussion and I had to give a hint that they don't need to type because it is just a prototype and then they clicked on post Completed with partial help.

5	User clicked on start a discussion button again and asked if it would be a similar thing. Then they tried to click on application help keyword and then clicked on guides tab again. Then they clicked on create a guide and save and asked if this is how they would help. So they technically confused the guide creating and commenting on a discussion board task. Then they started following the steps of starting a discussion and I had to remind them that this would be a way of them asking for help, but they want to help other users this time. I had to mention the personal statement keyword multiple times to let them know they want to help people specifically asking for help with personal statements. The user again started randomly clicking on different buttons to see what else they could do. Then clicked on profile tabs and looked all over then back to programs tab and then on the guides tab and tried to look at all the possible buttons available. Then again, they went to discussion board and tried to go through the posts and then back to guides tab and started doing the steps to create a guide. I had to let them know they were not that experienced at this point they just simply want to help another community user asking for help specifically with personal statements. Then even after that they again tried to create a guide. Then they started clicking on different tabs randomly and I had to remind them again that just like they previously asked for help from other users now they need to help the users asking for help. Then they finally clicked on the search bar on the discussion board(probably just randomly). Then they clicked on search and tried to click on other posts instead of the first one and realised they were not clickable. So then when they clicked on first post they didn't think they had to write a comment instead they tried to click on post but I had to remind them that they need to help them with their knowledge and then they finally clicked on the comment space and clicked on post. So, the confusion techni	Completed with partial help.
	their knowledge and then they finally clicked on the comment	
6	User clicked on profile tab and then clicked on my documents and then the close button	Completed without help.

7		User clicked on guides tab. Then they clicked on create a guide button and when the pop up showed they tried to lick on the blank spaces but realised they could not click so they finally clicked on save button. When the written guide showed up, they tried to click on the post button which I don't know why. They probably thought save was just saving the guide as a draft and then you had to click on post to actually post it for others to see.	Completed without help.
---	--	--	-------------------------

Appendix B: Usability Workshop Participation Form

The participants we pilot tested with were not much different from the participants we did our usability testing with. Both groups were students, however, the only difference between the groups would be that some participants that we pilot tested with were not interested in applying to graduate school. Some of the feedback from our pilot testing participants and our usability testing participants were similar. The major one was when participants were asked to "help other users who need help with their personal statement" both groups found two ways to complete the task. Some would comment on a discussion post, some would create a guide and some would do both. As a result, participants from both groups were unsure if they had completed the task and expressed this feeling in the post-study questionnaire. Our target audience is individuals interested in graduate school. These individuals can fall into any demographic so the participants in our pilot testing may also be in our target audience, therefore, it should not affect the generalizability of our results.

Appendix C: Assignment Work Attribution

Name	Contribution
Nikisha Jeyakumar	Participant demographics summary, Finding and design implications
Muskan Patpatia	Research method, Findings and design implications
Shamanth Chedde	Executive Summary, Reflections
Gaurav Sharma	Executive Summary, Research Limitations
Jun Zheng	Participant demographics summary, Research method
Sharjeel Haider	Research Limitations, Reflections