A4:Design Requirements and Short Form Creative Brief

Group #: 16 (HelpingGrads)
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Design Requirements

Problem
Students who are applying to graduate schools find the application process difficult and stressful as they have trouble writing personal statements, collecting letters of recommendation, and they feel anxious from awaiting the results of their application. In addition, due to the varying requirements and application processes for the many programs available around the world, students feel overwhelmed in trying to gather and submit all the necessary pieces for their application in time.

Design Principles
Accessible: accessible to all students, should strictly follow established accessibility guidelines so students with disabilities can still easily access our system.
Simple: clean visual style, easy to navigate and to view relevant information.
Reliable: fault tolerant, failure of some part of the system should not cause catastrophic failure of the whole application.
Effortless: automate as many tasks as possible while providing an easy way to manually modify them.

Environmental Requirements
Our system targets students who will be working from their laptops and desktop computers anywhere around the world. There is no specific requirement on where and when they use the system.

Functional Requirements
Our system must be able to provide students with the application requirements for their program of choice, they must be able to enter their personal information, they must be able to request their references to submit their letters of recommendation, and they must be able to submit all the pieces of their application (admission exam scores, GPA etc.) to the institution they are applying to.

Technical Requirements
Our system is a web application that allows students to submit all their application materials all in one place. It must be accessible on the most recent release of Chrome and Firefox. It must also work on a reasonably fast internet connection that is not behind a firewall or proxy.

Usability Requirements
Error Tolerant: The system should do validation for all user entries, and show detailed actionable error messages whenever possible.
Informative: The system should clearly present the users with all the relevant information about admission requirements.
Easy to Navigate: The system should walk students through a straight-forward, easy-to-follow application process.

Measures of Success
- 80% of users should be able to submit a college application without needing support.
- 60% of users should be satisfied with their experience.

We should also see the following in follow-up surveys
- Decrease in comments regarding stress levels
- Decrease in comments regarding difficulties of preparing and collecting documents
- Increase in users (students, institutions) using the system

Experience Map

	Entice: Pursuing a graduate education is considered	Enter: Seeking relevant grad school information	Engage: Applying for grad schools and looking for resources to help with the applications	Exit: Applied to grad schools	Extend: After applying to grad schools and getting accepted/rejected to schools
Thinking	? Should I attempt a graduate education ? What are the benefits to completing a graduate education ? Do I have the required post secondary education to even be competitive for a position ? Can I afford to pursue a masters + I have decided to go to graduate school	? What programs should I apply to ? What are the minimum requirements for applying ? What documentation is required to apply for each school ? Should I have references prepared - There is so much information and so much to consider - So many big life-changing decisions to make	? When is the due date ? How do I write a letter/statement of intent ? Who do I ask for a reference letter ? How do I maximize my chances of getting accepted ? What scholarships/bursaries are available to me - I have to fill out this information again?!?!	? When will I get a response ? Has my application been viewed yet ? Will I get an interview + I have finally applied to all my dream schools! - I hope these universities respond to me soon	+ I got into my dream program! - I got denied from my dream program ? What are the next steps in the process ? Do I get any scholarships ? What would my budget be like
Feeling	+ Relieved - Anxious - Worried - Scared	- Nervous - Anxious	- Stressed - Frustrated	+ Relieved - Anxious	+ Excited + Happy - Sad - Disappointed
Doing	Finishing/Finished their post secondary and considering enrolling in a graduate program	Researching and looking at the different programs they might apply to	Filling in grad school applications Obtaining/creating letters	Waiting for interviews and responses	Viewing results Making decisions
People	Individuals who completed/going to complete their post secondary and are looking to take their education to the graduate level	Individuals who completed/going to complete their post secondary and are looking to take their education to the graduate level Family/friends looking at the different schools and helping the applicant choose fitting programs	Individuals who completed/going to complete their post secondary and are looking to take their education to the graduate level Professors and reference providers	Individuals who completed/going to complete their post secondary and are looking to take their education to the graduate level Grad school admissions departments	Individuals who completed/going to complete their post secondary and are looking to take their education to the graduate level
Context	Considering next options for your life after finishing your post secondary education Considering graduate school after working for some time	Searching online Talking to current/past graduate school students Talking to professors and graduate school admissions office	University websites HelpingGrads App references Online searching for letter writing resources	HelpingGrads App Traveling to different universities for interviews	HelpingGrads App
Touch-point	Web advertisement, Word of mouth, University advertisement	Sign up for app and fill out basic information	Apply to schools on the app	Wait to hear back from the schools you applied to	Make a decision on what school to attend and get instructions on what to do next

Takeaway:
From the experience map, we can see that the applicants are anxious and nervous throughout the whole process. Some of the problems can be attributed to lack of resources available and some of it is because of the lack of instructions available. There may even be resources out there but the applicant has to view many websites as no current website has quick access links to everything. The wealth of information about each university is available on their own respective websites which makes it very tedious for a student to apply to separate schools. We also noticed that there was a lot of redundancy between applications such as signing up for different portals with the same high-level information(GPA, achievements etc.). Our team believes we can greatly reduce the difficulty of this process by addressing those problems. 1) Have a centralized hub that contains all the information for all the programs that applicants can navigate easily to get the relevant information 2) Pre-fill applications so the applicants can focus on program specific portions of the applications 3) Have resources available to applicants to help them throughout the application, for example, providing them resources to help them write their letter of intent. 4) have a quick chat option to speak to someone online for any quick questions about the application process or any technical inquiries

Short Form Creative Brief

Project objective:
Build an application service that helps students with their graduate school applications. The service has various personalized features to help with different parts of the application process like advice on how to prepare for exams and documents, a resource hub for Personal Statement help and to see status updates from their fellow peers to see if universities have rolled out application acceptances.

Key Personas:
1. Sally, a 4th year computer science student, will be finishing her undergraduate degree soon. She has plans to get into artificial intelligence research as a career and will soon be applying for graduate schools based on the program requirements and program offerings that different graduate schools have. Being a newbie to the graduate school process she is looking forward to finding helpful resources that will guide her with the document completion and university selection process.
2. Anjali, a neuroscience undergraduate student from UTSC, wants to enter UofT's medical school. After two unsuccessful attempts, she wants to try a third time. Even though she isn't new to the application process, she wants enough help to enter successfully.

Key Scenarios:
1. Sally has begun searching for artificial intelligence programs online but she is having difficulty finding the right program for her. She is now starting to feel overwhelmed by the wealth of information online and is having trouble keeping track of all the requirements for a program. She is spending too much time researching programs rather than her course work and is starting to feel stressed out. She would like to easily search for programs that match her interests and keep note of all the application requirements.
2. Anjali wants as much help as she can get with her application because she was unsuccessful in her last two attempts. However, she cannot get adequate in-person help due to Covid-19 restrictions, and professors are not replying to her emails in time. Due to this, she feels as if she will not be successful again.

Key Principles:
- **Convenient interaction:** We want to be able to create a place that allows students, peers, professors and advisors to communicate quickly and efficiently, and provide advice on how to prepare documents such as personal statements.
- **Time Management:** With all the different helpful resources for the application process in one place, students don't have to waste their time in searching on google or asking around. Instead they can simply access important information about programs and documents through our portal.

Plans for Individual Low-Fi Prototypes & Usability Testing

A resource hub where we help applicants:
- Help users view all programs and their requirements, deadlines
  - Assigned to: Muskan and Nikisha
- Status on if applications are being reviewed (people who have applied post their status updates on if they've heard back yet)
  - Assigned to: Gaurav and Sharjeel
- Help users with writing letters - Shamanth and Jun
  - Users can have their documents peer reviewed by other applicants by posting them online
  - People can make blog posts on advice on how to write their letters and prepare their documents
  - Assigned to: Shamanth and Jun

Appendix

Appendix 1

A few additional Personas::
- Tina, a student in the last year of her masters in communication program at UBC, has a vast experience with helping people known to her in applying for graduate schools.
- Joshua, a physics master's student at UTSC, has worked as a teaching assistant for reputable professors. He decides he wants to enter the PhD program at UofT, Waterloo and Queen's, and needs letters of recommendations from his professors.
- Adam, a biomedical engineering student from Ryerson, with a passion for cinematography, wants to complete his Masters of Engineering studies. He plans to apply to multiple schools, including Ryerson, UofT, and Waterloo.
- Tom, an Assistant Professor under the Biological Science department at UTSC, hires students for his lab on a regular basis to give them research experience. As a result he gets asked to write Letters of recommendations for students who have worked under him.

A few additional Scenarios:
- Adam, wanting to do his Masters of Engineering, decides to apply to multiple schools, including Ryerson, UofT, and Waterloo. When applying to these programs, he seems to notice that the questions UofT and Waterloo ask are similar to one another and finds it tedious to answer them separately.
- Tom is reached out to by three of his students, who need letters of recommendations. Due to covid-19, he doesn't have office hours and due to the high volume of emails, he doesn't see the three students' emails in time. He is frustrated by this as he wanted to help them out.

Appendix 2

Assignment Attribution
Shamanth Chedde: Contributed to design requirements, Plans for Individual Low-Fi Prototypes & Usability Testing

Jun Zheng: Contributed to design requirements.
Gaurav Sharma: Contributed on the experience map
Syed Sharjeel(Sharjeel) Haider: Contributed on the experience map, Plans for Individual Low-Fi
Prototypes & Usability Testing
Nikisha Jeyakumar: Contributed to Short Form Creative Brief and Appendix 1
Muskan Patpatpia: Contributed to Short Form creative Brief and Appendix 1

Appendix 3

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