

Saloni Saluja (T00608615) || Anandpreet Singh (T00608596) || Preet Kamal Singh (T00608608)

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PROJECT DESCRIPTION

Problems Addressed in the Project

The main aim of our website is to provide detailed information required by international students coming to Kamloops to pursue higher education by providing a wide spectrum of aspects all under one roof, thereby, making the information concise and accurate for the users. Collecting precise data from different sources is time consuming for the user. Therefore, our aim is to make this task easier for our prospects.

Giving user a new environment, which is understandable and easy to use as well as different from all existing applications without creating confusion and chaos by creating a dynamic and easy to use interface is the principal key for this project.

Overcoming Hurdles

For genuine data, we went through various reliable sources including websites, books and applications.

At present there is no such information providing platform where all basic knowledge, facts, and statistics required by a student before coming to Canada are provided. For information related to any government services (such as: provincial ID's), the exact office location with inherited geographical locations will be provided which different apps and sites doesn't easily lay out with.

Changing the Current User Experience

All the related sites, apps give a brief description which are easily accessible for the native Canadians but someone else such as an international student might have issues in understanding and using these applications in a right way. So, we made sure that our users have no trouble in grabbing exact data with overcoming these problems. Thus, a website with all collective data which is covering all major points provides user a new and better than usual user experience. We tried to keep the interface and user experience clean and fresh.

Assumptions

We would assume that the users feel that they must search all over the web and dozens of websites to get the information they want. So, they may feel the need for a source which provides them with all information needed by an international student coming to Kamloops under a single roof.

Claims

We claim that the data we provide is precise and verified from the government authorities and other reliable sources. as our aim is to reduce the amount of effort an international student would put in by equipping them with all the crucial aspects before and initially after they step into Canada, keeping Kamloops as a priority. Being students, we understand the value of every minute. Therefore, we don't want others to waste their precious time struggling with so many websites and applications.

Components of Conceptual Model

In order to carry out the task of gathering information, the user would be interacting with different modules or web pages of the website. The user would start with the home page, which would act as a gateway to all other pages. Separate webpages will be built for each of the support activities – accommodation, banking, health insurance, etc. The user would be interacting with all these pages as and when required.

Interface Metaphors

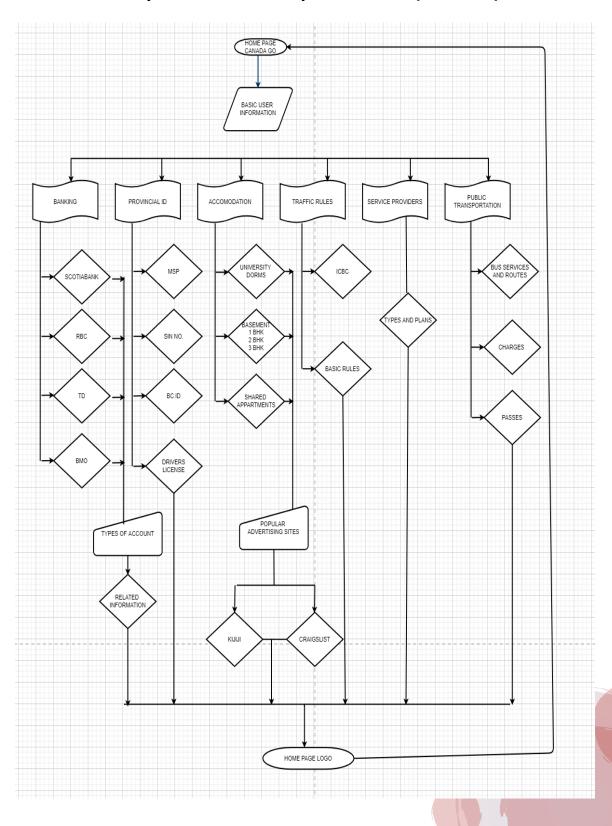
The interface of our website is comparable to that of a **book**. A book encloses several chapters within itself. Similarly, our website is going to contain several different webpages relating to different topics under one roof.

Interaction Types

The interaction types used in the website will be as follows:

- <u>Instructing:</u> The user would be controlling the website all by themselves. They would be issuing commands and selecting options.
- Manipulating: Users would be manipulating objects in the virtual world (our website) using pointing devices such as mouse and pouring in their input via keyboard.
- <u>Exploring:</u> Users would be moving through the virtual environment of the website.

Components of Conceptual Model (Website)



DATA GATHERING FOR REQUIREMENTS

Data Gathering Goals

Our aim is to gather the knowledge level that students have regarding various day-to-day activities in Kamloops such as traffic rules, housing, banking, health insurance etc. before / immediately after they came here. Along with this, our aim is to figure out which of the sources (websites or applications) were used by the students to gather information. Also, we wanted to find out if the students had any friends or relatives already present in Canada who could help them with potential problems they could face before they came here.

Participants / Target Users

Our focus group for this project will consist of international students in Thompson Rivers University between the age range of 18 to 26. Our basic aim is to help them deal with the difficulties they come across before/when they reach here.

Data Gathering Techniques

The data gathering techniques we chose for the sake of this project were **Questionnaires** and **Interviews**.

The **Questionnaire** consisted of two sections – *Objective Analysis* and *Subjective Analysis* respectively. The Objective Analysis consisted of a total of 10 questions, whereas the Subjective Analysis had only 3 questions. We tried to keep the questionnaire as brief as possible because most people would refuse to fill in questionnaires that are lengthy and require them to put in a lot of effort. A copy of the questionnaire had been attached as '**Appendix 1**'.

The very next technique used for gathering data was **interviewing**. The basic essence of questions presented to the target audience was same as that of the questionnaire, however, they were presented in a different way. A script was setup for the interview. First, the three of us began with an introduction and explained the goals of the interview to the interviewee. We reassured them

about the ethical issues. Further, we started with easy questions to collect demographic information about our target audience. After about 4 questions, we began with the main body of the questionnaire. The questions were aimed at discovering how much the international students knew about amenities before coming here. Lastly, we thanked the interviewee for their time. A copy of the interview script has been attached as 'Appendix 2'.

Pilot Studies

In order to ensure that we had the correct script for the interview and questions for the questionnaire, we conducted 2 pilot studies. We asked two different individuals to review the first draft of our questionnaire and interview script and provide us with feedback. The initial draft of the questionnaire was a little lengthy. So, we were asked to cut down the number of questions. Also, we were asked to decrease the number of subjective questions and increase objective questions as they are easier and quicker to solve. Based on the feedback, we modified our questionnaire. A copy of the final questionnaire has been attached in 'Appendix 1'.

As for the interview, we were suggested not to begin directly with the main questions. As per the feedback we received, we were told to add an introduction of who we are and what we aim to do. Then, start with the lighter or easier questions, proceeding on with the main body. Further, we were asked to provide intermediate cool-off periods between questions. Ultimately, we were told to present the closure statement and thank the interviewee. A copy of the interview script has been attached as 'Appendix 2'.

Demographic Data

The demographic data collected from our target audience via Questionnaires and Interviews is listed as under:

- <u>Gender</u>: Male/Female/Transgender.
- Age range: Anywhere between 18 to 26.
- Level of Study at TRU: Ranging from Diploma to Master's degree.
- <u>Time duration for which they have been studying at TRU:</u> Ranging from less than a year to over 3 years.

DATA ANALYSIS

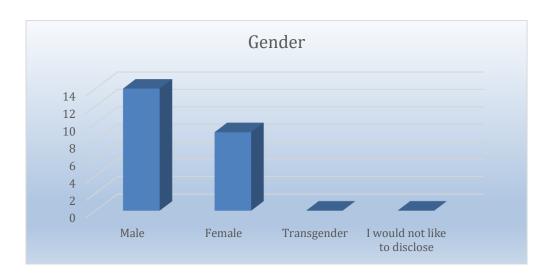
Quantitative Analysis

The tabular and graphical analysis of the various responses recorded through the abovementioned data gathering techniques is as under:

Note: Sample space for this survey consists of 23 international students currently studying in TRU.

Question 1: I identify myself as:

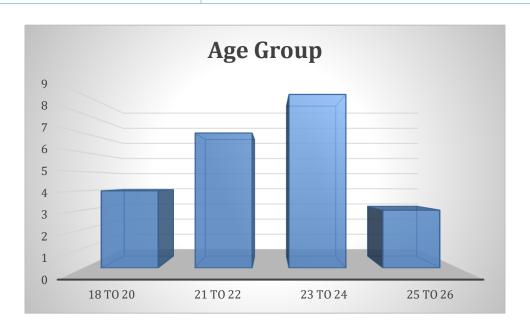
| Options Presented | Number of people who checked this option |
|------------------------------|--|
| Male | 14 |
| Female | 9 |
| Transgender | 0 |
| I would not like to disclose | 0 |



Question 2: Which of these age groups do you belong to?

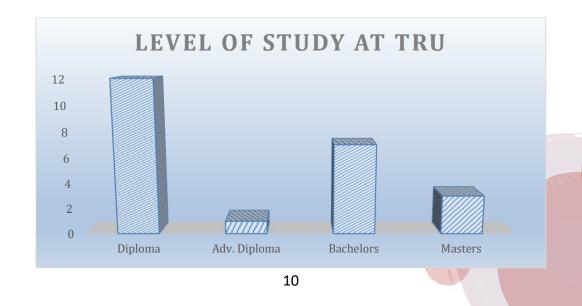
| Options Presented | Number of people who checked this option |
|-------------------|--|
| 18 to 20 | 4 |
| 21 to 22 | 7 |
| 23 to 24 | 9 |

25 to 26 3



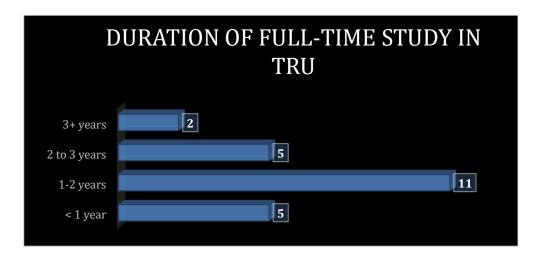
Question 3: What is your level of study at TRU?

| Options Presented | Number of people who checked this option |
|-------------------|--|
| Diploma | 12 |
| Adv. Diploma | 1 |
| Bachelors | 7 |
| Masters | 3 |



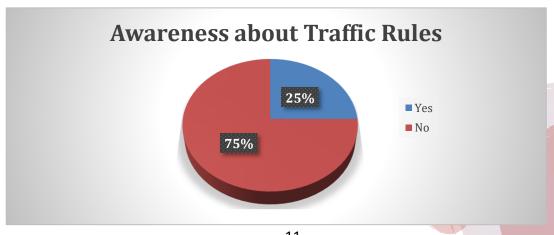
Q4: For how long have you been studying as a full-time student on-campus in TRU?

| Options Presented | Number of people who checked this option |
|-------------------|--|
| Less than 1 year | 5 |
| 1 to 2 years | 11 |
| 2 to 3 years | 5 |
| 3+ years | 2 |



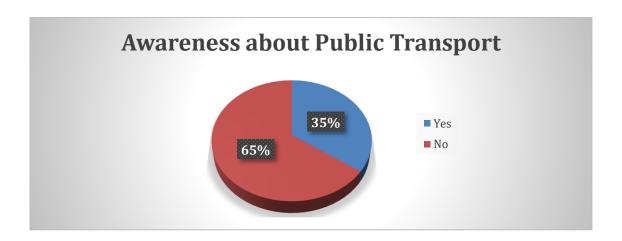
Question 5: Before landing in Canada, were you aware of the traffic rules followed in this country?

| Options Presented | Number of people who checked this option |
|-------------------|--|
| Yes | 6 |
| No | 18 |



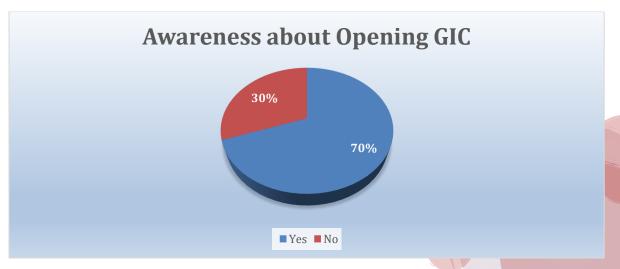
Question 6: Were you aware about the working of public transport facilities before coming to Kamloops?

| Options Presented | Number of people who checked this option |
|-------------------|--|
| Yes | 8 |
| No | 15 |



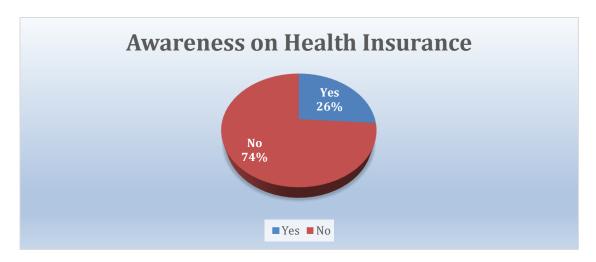
Question 7: Before coming to Canada, were you aware of the procedure you needed to follow to get your GIC account activated in Scotiabank/ICICI Bank?

| Options Presented | Number of people who checked this option |
|-------------------|--|
| Yes | 16 |
| No | 7 |



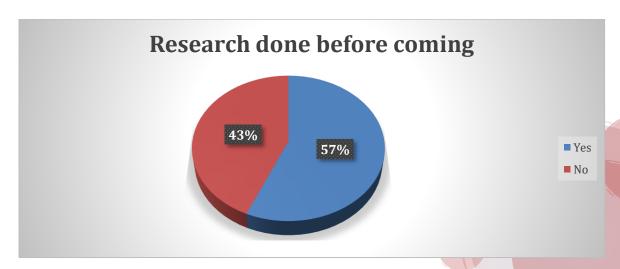
Question 8: Before coming to Canada, did you know about health insurance – MSP and GuardMe?

| Options Presented | Number of people who checked this option |
|-------------------|--|
| Yes | 6 |
| No | 17 |



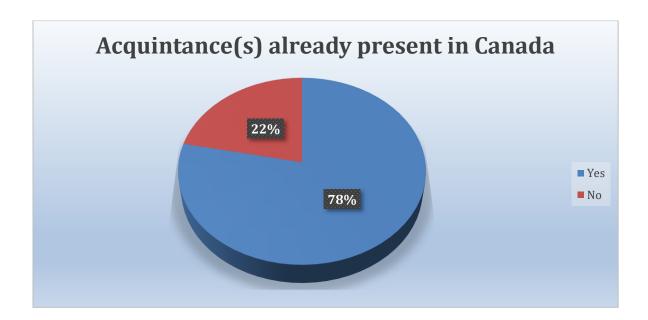
Question 9: Did you research any sources (websites or applications) for basic information before coming to Canada?

| Options Presented | Number of people who checked this option |
|-------------------|--|
| Yes | 13 |
| No | 10 |



Question 10: Did you have any friends or relatives already present in Canada who could supply you with information and help regarding potential problems that you could face once you come here?

| Options Presented | Number of people who checked this option |
|-------------------|--|
| Yes | 18 |
| No | 5 |



Qualitative Analysis

After performing subjective analysis on the questionnaire and analyzing the interviews conducted, we found out that most of the students used the official website of Scotiabank to gather information on how to open a GIC account. Further, most of the students made use of the transit app or BC Transit website to make themselves acquainted with the public transport facility available in Kamloops. Some of them said that they found BCTransit website clumsy and confusing to understand. Also, most of them were not aware of Health Insurance back in their home country. However, generally, they had friends or relatives already present in this country who they could rely on for help, support, and information. Yet another problem that they faced was with filling out on the forms for immigration and visa filing. Also, people had problems with the food available here. They failed to find restaurants which served them with traditional food items.

Key Findings

Demographic Characteristics

After conducting surveys and interviews, we found out that in our sample space, majority of the international students were men who were between the age of 23 to 24. Most of the students were pursuing Diploma, followed by Bachelor's. They had been studying as a full-time student on-campus in TRU for about 1 to 2 years as of now.

Prior Awareness Analysis

When asked about different aspects, the responses recorded were as under:

- 75% people did not know anything about the traffic rules followed in Canada, including pedestrian rules, rules for vehicles, etc.
- 65% people had no idea of the public transportation facility (BCTransit) that runs in Kamloops. During interview, participants also said that they had no idea if Kamloops had buses or subways running.
- 70% people said they knew how to open a GIC account from their home country.
 However, they were not aware of the procedure followed to access their account after coming to Canada.
- 74% participants said they were not aware of the fact that it is mandatory for international students to get a health insurance once they come to Canada.
- 57% participants said that they had done research before coming here. However, they failed to find the exact information they were looking for in one place.
 That's why they had no idea about the above-mentioned aspects. 43% said they did not do any research as they had friends/relatives they could rely on in this foreign land.
- 78% respondents had acquaintances already present in Canada who could help them with all the information they needed. However, 22% did not know anybody. Our aim is to help those who have no one to look at when they need help.

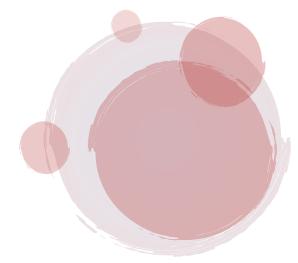
Task Description

Scenario

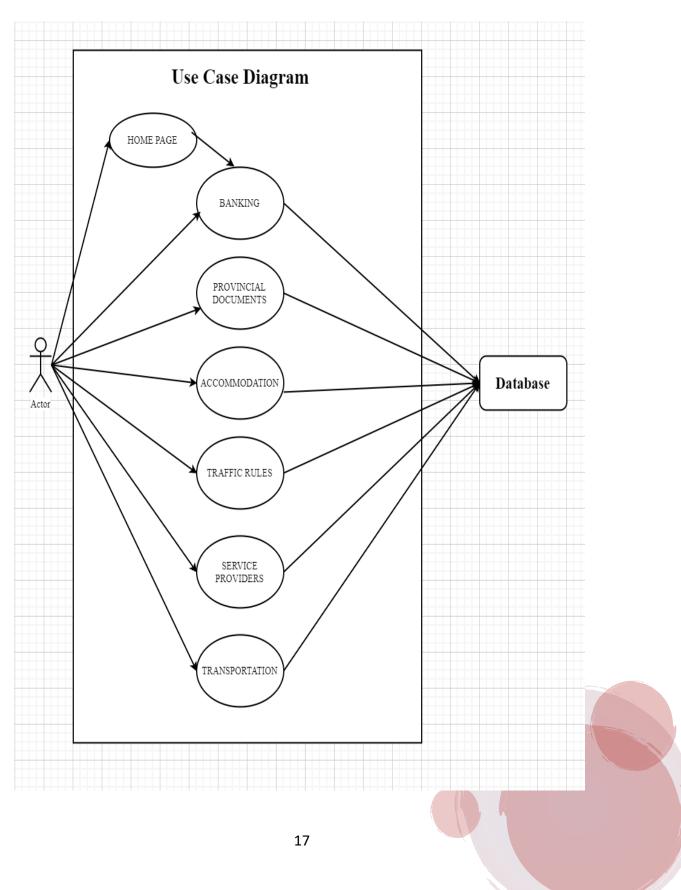
Susan D'Generes, born and raised in Australia chose to come to Canada for higher studies. She arrived in month of August and her acquaintances picked her up from Vancouver International Airport. After a short while, she left for Kamloops which is the home location of Thompson Rivers University. Initially, she lived with her friends who

were already present here before she came as she was not able to find an accommodation. Despite of the grief she was feeling separated from her family, she was interested to learn new things about this culture. In her initial days she faced trouble moving around the city. Seeing her face all these problems, one of her friends suggested her to surf Canada Go Website which would provide her with all the information she needed under one roof. However, she procrastinated this idea.

Everything was going fine until one day she caught flu due to the weather. Despite this, she overlooked it and went for work and classes. After two tp three days, the torment climbed and become horrendous for her. So, she rushed to the Royal Inland Emergency Clinic in Downtown, Kamloops. Before beginning with her treating, she was requested to present her MSP (Medical Service Plan) card. To her surprise, Susan did not know anything about that. Due to the absence of a health insurance card, the hospital charged her a bill of over \$1000. She gaped in awe after looking at the bill. She went back home and was weeping. She was almost bankrupted. Her friends saw her and asked her the reason for being upset. So, she narrated the entire incident to them. So, her friends told her again about Canada Go, and this time, with a detailed description. They told her that the website could provide her with all the information she was looking for under one roof. She could look for housing, transportation, health insurance, banking needs etc. She didn't need to surf dozens of websites for this. After this episode, Susan began using the website. She found the interface to be very dynamic and easy to use. It was possible for her to navigate to different parts of the website through the home page. Plus, the website composed of several different web pages for each category -Housing/Accommodation, Health Insurance, Transportation, Banking etc. So, all of it was very organized and she did not have to surf dozens of websites to get the right information. So, it was convenient to use. Plus, she could also post in her own questions, if any.



Use Case Diagram



Persona

ROMAN'S PERSONA TEMPLATE





PICTURE & NAME



DETAILS



GOAL

What does the persona look like? What is its name? Choose a realistic and believable picture and name.

realistic and believable picture and name.

What are the persona's relevant characteristics and behaviours? For instance, demographics, such as age, gender, occupation, and income; psychographics, including lifestyle, social class, and personality; and behavioural attributes like usage patterns, attitudes, and brand loyalty. Only list relevant details.

Susan D'Generes is a 23 year old student pursuing a Diploma in Computing Science from Thompson Rivers University. She has been studying in TRU for about 1.5 years as of now. She is an international student, native from Australia. Susan is a technowiz. She's loves to use new technological devices. She's loves to browse the web and search for information regarding her

What problem does the persona want to solve or which benefit does the character seek? Why would the persona want to use or buy the product?

Susan loves the environment of Kamloops. However, initially when she arrived here, she faced a lot of difficulties. She was not aware of the traffic rules, so initially, as a pedestrian, she had difficulty in even crossing the road. She had to refer to dozens of different websites to gather information on how to access her GIC account, transportation facility available in Kamloops, etc. She wasn't even aware of the fact that one had to pay approx. \$80 per month for health insurance.

Susan would want to use our website as it would provide her with all the information regarding housing, banking, health insurance, transportation etc. all at one single place.



Susan D'Generes

www.romanpichler.com Template version 04/17

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KEY REQUIREMENTS

Functional Requirements

Functional requirements basically take into consideration what the system should do. So, our website will be designed to increase the familiarity of international students with the culture and norms of this country. The website is going to be an informative website which provides our focus group with all the information they need regarding housing, banking, insurance, transportation all under one roofing. This provides convenience to the users, as they would not have to surf dozens of websites to gain information they need.

Data Requirements

The kind of data that our website would be housing includes information and link to various accommodation, rental, and housing websites. In addition to this, our website would contain information regarding banking systems and links to various student banking options including Scotiabank, ICICI Bank etc. Moreover, the website is also going to include information regarding BC Transit so that students can get themselves familiarized with the working of public transit system before coming to avoid any hustle. Last, but not the least, the website is going to house information regarding Medical and Dental insurance, including GuardMe and MSP. The website would also provide support for Provincial IDs as well as Connection/Service Providers.

In order to make our website interactive, we plan to create a quiz or FAQ session where the users could potentially post their questions, if any. Over the course of development, we would be using MySQL Database to store data wherever necessary.

Environmental Requirements

The context of use for our application will be technological. So, as for the technical feasibility, our website must run on all modern web browsers such as Google Chrome, Mozilla Firefox, Safari, Opera, Microsoft Edge, Internet Explorer, etc. The user will be able to run it anytime, anywhere. The only requirement would be connectivity to the Internet.

User Characteristics

The target group would consist of students from across the globe who have joined TRU are looking for sources of information regarding amenities such as accommodation, banking, transportation, health insurance, etc. The users should have basic knowledge of using a computer system, surfing the web, etc.

Usability Goals

- 1. <u>Learnability</u>: In order to successfully exploit this attribute, we will try to keep our website as simple as possible. We will avoid using too many callouts, navigation options, and images as they may distract a user from knowing what to do.
- 2. <u>Efficiency and Effectiveness:</u> These two attributes are almost the same. Both involve how well a user can interact with a website once they've learned how to use it.

The efficiency of a website is a measure of how fast the user can accomplish their goals using the website. To succeed with efficiency, the user experience needs to remain as uncomplicated as possible.

The effectiveness of a website is more related to how a user understands the navigation, organization, and functionality of a website. It should be easy for the user to carry out their tasks.

There are many ways to exploit this feature. One of them could be using Breadcrumb Navigation which is used to provide links back to each previous page which has been navigated by the user.

3. <u>Memorability:</u> After a user learns how to use our website, the next attribute that we need to consider is that of retainability. This attribute measures the ability of a user to come back to the website after an extended period and need not to relearn how to use it.

Besides simple design, we aim on creating an easy-to-access FAQ session or guide on how to navigate through the website.

4. <u>Safety:</u> In order to satisfy the attributes of low error rate and error tolerance, a website should be free of as many potential errors as possible. When errors are unavoidable, there needs to be a system in place that makes it easy to recover from them.

There are several different ways to succeed with the above stated attributes. The flow of the website needs to ensure that the possibility of an error occurring is aa less as possible by providing clear instructions and guidance or direction as to what the user needs to do next. If a form is filled out incorrectly by the user, there needs to be an error handling system that notifies the user about the mistake.

5. <u>Utility:</u> Utility is a measure of how much does the user benefit from the content on the website. In our website, we plan to implement utility by delivering content that our target users, i.e. international students want.

User Experience Goals

Our aim is to make the website so that it is **helpful** to the users. It should **motivate** them and make them feel **confident** enough to come to Canada on their own. The website should **provoke** the users to ask any queries or questions they may have. Ultimately, the users should feel **emotionally fulfilled** after visiting the website. They should feel that they have gained something after visiting it. These are the user experience goals that we would focus on.

APPENDIX 1 - Questionnaire

COMP 3450 – Human-Computer Interaction Design Project (Phase 2) – Questionnaire

| Na | me: |
|----|---|
| | Section I: Objective Analysis |
| 1. | I identify myself as: |
| | a. Male |
| | b. Female |
| | c. Transgender |
| | d. I would not like to disclose |
| 2. | Which of these age groups do you belong to? |
| | a. 18 to 20 |
| | b. 21 to 22 |
| | c. 23 to 24 |
| | d. 25 to 26 |
| 3. | What is you level of study at TRU? |
| | a. Diploma |
| | b. Advanced Diploma |
| | c. Bachelor's Degree |
| | d. Master's Degree |
| 4. | For how long have you been studying as a full-time student on-campus in TRU? |
| | a. Less than 1 year |
| | b. 1 to 2 years |
| | c. 2 to 3 years |
| | d. 3+ years |
| 5. | Before landing in Canada, were you aware of the traffic rules followed in this country? |
| | a. Yes |
| | b. No |
| 6. | Were you aware about the working of public transport facilities before coming to |
| | Kamloops? |
| | a. Yes |
| | b. No |
| 7. | Before coming to Canada, were you aware of the procedure you needed to follow to |

get your GIC account activated in Scotiabank/ICICI Bank?

| | a. Yes |
|--|--|
| | b. No |
| | Before coming to Canada, did you know about health insurance – MSP and GuardMe? a. Yes b. No |
| | Did you research any sources (websites or applications) for basic information before coming to Canada? a. Yes b. No |
| | D. NO |
| | Did you have any friends or relatives already present in Canada who could supply you with information and help regarding potential problems that you could face once you come here? a. Yes b. No |
| | Section II: Subjective Analysis |
| | 1. Before coming to Canada, what were some of the problems you faced? |
| | List some of the sources (websites or applications) you used to find out about banking in Canada. |
| | 3. List some of the sources you used to find out about public transit in Kamloops. |

APPENDIX 2 – Interview Script

Introduction

Hello! My name is Saloni and these are my fellow team members - Preet Kamal Singh, and Anandpreet Singh. All of us are pursuing a Major in Computing Science at Thompson Rivers University. We all are here to conduct a short interview about one of the projects we are working on which focuses on international students and issues the issues they faced at the time of coming to Canada. We assure you about the ethical concerns. Our primary goal is to ask you guys the bunch of questions to collect some data.

Warm Up

Starting with the simple question

- 1. What is your name and to which age group does you belong.
- 2. Secondly what is your field of study in Thompson Rivers University?
- 3. For how long you have been to Canada?

That's wrap up your introduction and now we would proceed further with our interview.

Main Body

Now, we shall begin with the main questions.

- 1. Were you aware about the traffic rules followed in Canada?
- 2. Did you know something about the public transport system and about how to activate your GIC account in Canada?
- 3. That must be the difficult one to answer. Let's move on our further question.
- 4. You must be familiar with MSP right. Were familiar with that before coming to Canada that how does that work and saves your lot of money?
- 5. Did you search about anything before coming to Canada here?
- 6. Does any of your relative lives here in Canada from whom you got helped?
- 7. How it going . are you comfortable. Here is some water . you can have it. Proceeding to the next question.
- 8. As we come across many students and people who faces a lot of problems when they are about to come to Canada .What problems did you faced before coming to Canada and after landing in Kamloops how did you get to know about the transportation system?

Closure

That's the end of our interview. We would like to thank you for providing us with such valuable information and primarily, your time. Thanks, once again. Have a great day!