**Baba’s Toolbox**

CSCC10 Phase I: Project Proposal

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**Team Expectation Agreement**

**Communication**

* Discord
  + For sharing files and communicating via text and voice
  + Check and respond daily

**Meetings**

* Weekly meeting after tutorial
  + In-person, mandatory
  + Wednesday 3:00 at BV473
  + Like a stand-up meeting - discuss what is to be done next by whom, when it must be done by, if there is or could potentially be any blockages, etc.
  + Meeting minutes will be posted on a shared Google Doc
* Emergency Discord meeting
  + Online, optional
  + Will take place when something must be discussed right away
  + Meeting minutes will be posted in a dedicated Discord text channel

**Work and Collaboration**

* All team members will have tasks assigned to them for each phase of the project
  + Work will be assigned to team members based on a variety of factors including technical skills, background knowledge, time availability, etc.
* Work will be done through shared Google Docs and all work must be completed at least 24 hours prior to the deadline to leave time for peer review
* All team members will review each phase’s deliverable before it is submitted, and with everyone’s acknowledgement and consent, a member of the team will submit it on our behalf

**Contingency**

* If a team member drops the course or will be unable to work for a significant amount of time, we will have to reassign their tasks to one or more other members of the team for the current phase
* In the case that a team member does not show up to a meeting, a good reason should be provided 24 hours prior to the meeting time
  + If the reason for not showing up was an emergency, then the team should be made aware of this at most 24 hours after the meeting time if possible
* If a team member decides to use research that is not theirs, they should provide proper credit
  + If a team member does not provide credit where it is due, they must consult the rest of the team where we would then consult the TA and/or professor for advice

**The signatures below indicate that the members of Baba’s Toolbox have read, understood, and agreed with all expectations stated above.**













**Project Proposal**

**Purpose**

The challenges faced with organizing and planning group trips that accommodate all participants has caused a recent trend of solo travelling. However, problems such as safety, health and wellness concerns, and accessibility still persist whether travelling alone or with others. This is because according to a survey commissioned by Intrepid Travel, it was found that out of 2000 American travellers, 73% of respondents worry about safety while solo travelling, 53% worry about getting lost, and 39% dislike the stress of planning a trip (Haugen, 2018).

Focused on transforming the hospitality and tourism industry, UTour reinvents trip planning, interactions with other tourists, and how people tour new cities and their attractions in a safe and accessible manner. The application features a planner and agenda where users will be able to narrow down dates, plan their itineraries, and find the best local attractions unknown to commercial tour guide companies, but shared among the UTour community by locals and previous travellers. Once the planning phase is over, the connecting phase is when UTour match people who are interested in visiting the same places, at approximately the same time, and allows them to communicate with each other to coordinate their plans through a SMARTChat that breaks the language barrier. In the travelling phase, users will be able to carry out their plans with their matched tour groups and UTour will continue to facilitate this by providing detailed descriptions of cities and attractions, navigation, and health and wellness assistance. These features will have accessibility options for those with disabilities, as in a study conducted by Yau, Mckercher, and Packer, it was found that the majority of individuals felt discouraged or self-conscious about travelling alone due to their disability (Yau, Mckercher, & Packer, 2004).

In conclusion, travellers prefer to have peace of mind when it comes to safety and comfort, regardless of whether they are travelling alone, travelling with a group, or have a disability. This is especially crucial when visiting foreign places. Thus, UTour strives to solve many of the common traveller’s problems with its planning, social, and assistive features as if a tour guide was present.

**Target Audience**

The UTour application is targeted towards tourists of all races, gender, and capabilities, who we also assume to be above the age of 13, fluent in at least a single language, and possess enough basic knowledge on how to use a mobile application. The vast majority of the user base will most likely be younger adults as they are the ones that are travelling the most, but since some may travel alone or with family members, including youths and seniors, the application will also accommodate these groups by providing special features for them. The application will have a built-in language selection system that allows anyone from anywhere in the world to use it without needing to know one specific language such as English, as long as the user is fluent in one language, the application will adjust its text and speech content to be provided in that language. Since UTour targets tourists, we are also assuming that the users have the financial capabilities to afford travel accommodations, going to events and attractions, and owning a mobile device.

As this is a mobile application, we will also be assuming that users are able to use such devices, thus they would at the very least need to be able to touch a screen along with being able to see or hear. With over 15% of the world’s population being disabled, there is an ever increasing need for tourism that is accessible by all (Özogul & Baran, 2016). The application will accommodate visually impaired users as an accessibility feature by using alternative senses to deliver information such as audible sound and speech as well as vibration feedback. The application will also accommodate users with any health issues by allowing them to input that information into the application and depending on the type and severity, UTour will make any necessary adjustments in planning and providing assistance if the user requires it. Additionally, in order to adhere to the solutions proposed in the 2016 OECD technology proficiency tests, UTour will maintain only relevant information on screen, minimize the amount of operations required to complete a task, and overall, make utilizing the application as simple as possible for the user (Nielsen, 2016). Thus, keeping the cultural barriers and requirements for special skills at a minimal will allow as many people as possible to use UTour without any hindrances.

**Benefits and Solutions**

There are three key solutions that UTour will provide for users through the varying functionality that the application provides. This includes the ability to match up and travel with others, handling language barrier inconveniences, and improving the quality of the travelling experience.

One of the biggest reasons people tend to travel away from their home is to relieve stress. For most travellers, interacting with others is not something that hinders their travelling plans, and some even enjoy meeting new people during their stay to further enhance their experience. Since how travellers decide their travel plans can be directly manipulated through an additional social presence (Sanders & Geerts, 2019), with UTour, users will be able to actively look for other individuals or groups that want to meet up and experience excursions with the company of others.

In the case of travelling to foreign countries, it is possible that travellers may not understand the local languages and as many will know, not being able to communicate with the locals is one of the biggest challenges when travelling. An example of this problem arising would be from Canada’s 2018 Census, where it is shown that arrivals from overseas countries reached a record high of 6.9 million travellers (Statistics Canada, 2019). UTour has a solution for this by including a built-in translator, which automatically converts your preferred language into the local language of your travel destination. Additionally, if users choose to group up with other international users of UTour, the built-in SMARTChat will translate inputted messages and display them to the receiving users in their respective language preference.

UTour takes care of most of the aspects of travelling. While planning, the user will first select where they are planning to go. The user can then read details about nearby tourist attractions and cities and if they decide that they would like to go to one, they can save it into an agenda. Once users are done planning, the application will match users with overlapping plans according to their agendas with the goal of forming tour groups. This will continue to be done as users continue to create trip plans until it is near the time for the planned meetup. The tour group will now have access to a SMARTChat to communicate amongst each other. Once at a destination, users will be able to read or listen to a description of the location, as well as provide a rating, review, and pictures for future tourists to view when they are planning their trips. Therefore, planning and travelling is a hassle and lots of research and use of many applications is required. However, UTour reduces these struggles by providing the convenience of acting as a digital trip planner, agenda, and tour guide all in one application.

**Literature Review**

**Sanders, K., & Geerts, D. (2019, May 4). Social Influences on Travelling Behavior. Retrieved May 28, 2019, from https://dl.acm.org/citation.cfm?id=3313079**

In May 2019, Sanders and Geerts performed a study about possible effects on human behaviour arising from travelling alone versus travelling with others. Their findings concluded that there are three main components of a displacement - route, timing, and transportation mode, as well as some other aspects of travelling and travel planning. In other words, how travellers decide their travel plans can be directly manipulated through an additional social presence. For most people, planning out travel plans are always filled with uncertainty and revisions, since most travelling agencies focus on the individual experience instead of the inevitable social encounters for the traveller. With UTour, users will be able to make connections with others before and after their travel plans start forming, allowing them new alternatives for ideas they may not have had. For example, regarding means of transportation, users may now choose to carpool with a group instead of booking a flight, or when choosing attractions to look at, users now have the opportunity to enjoy group activity attractions instead of being limited to what fits them as an individual. Additionally, other users may want to see other attractions, extending route length for a greater experience.

**Haugen, J. (2018, July 31). Going It Alone: Solo Travel on the Rise. Retrieved May 28, 2019, from https://www.adventuretravelnews.com/going-it-alone-solo-travel-on-the-rise**

Several 2018 surveys have shown that 25% of respondents planned to travel on their own in that year, with solo travelling being much more common among millennials than baby boomers. Another survey found that 73% of respondents worry about safety while solo travelling, 53% worry about getting lost, and 39% dislike the stress of planning a trip. Therefore, with the rise of independent travel, tour companies have started providing special services to accommodate for solo travellers. One issue solo travellers face is being charged more for using a room on their own. Tour companies have addressed this with many different solutions, one solution being to form tour groups consisting of smaller groups of travellers from around the world. The design of UTour addresses these issues as well. The application makes planning and navigating much simpler and offers services for travellers who seek to share their experiences with others, as well as those who prefer to keep these experiences to themselves.

**Nielsen, J. (2016, November 13). The Distribution of Users' Computer Skills: Worse Than You Think. Retrieved May 28, 2019, from https://www.nngroup.com/articles/computer-skill-levels/**

In a 2016 international study, the OECD performed technology proficiency tests on 215,942 adults across 33 countries by testing their technological aptitude in navigating a mock emailing website. They were each given 14 basic tasks to complete on the website with varying difficulties. Some of these tasks included using the reply-all feature and scheduling meetings using email messages. They were also given a level of proficiency from 1 to 4, based on how well the user performed their tasks. The results of the study showed that 70% of the participants ranked at or below level 2, where participants had difficulty with tasks involving multiple steps and inferential reasoning. It was concluded that the software-product team overestimated the aptitude of their users and made planning tools overly complicated and not user flexible. In UTour, since it involves planning and browsing patterns similar to this emailing software, we can look at some of their proposed solutions for the participants that had level 2 proficiency and under. These solutions included getting rid of extra information and clutter, as well as decreasing the amount of operations needed to complete a task. Since the goal of UTour is to make planning and organizing as easy and non-stressful as possible, it should follow the above principles to make sure that most of the users are satisfied.

**Yau, M. K., Mckercher, B., & Packer, T. (2004, October). Traveling with a disability: More than an Access Issue. Retrieved May 28, 2019, from https://www.researchgate.net/publication/223844518\_Traveling\_with\_a\_disability\_More\_than\_an\_Access\_Issue**

In this study, Yau, Mckercher, and Packer conducted in-depth interviews with individuals and focus groups to explore tourism experiences of individuals with mobility and visual impairments. The study was performed on 52 individuals, 28 with mobility disabilities and 24 with visual impairments, through 6 individual interviews and 9 focus groups. Most of these individuals explained that they were often discouraged in solo travelling due to the many worries conveyed by family and close friends. They also explained that they often felt self-conscious and unmotivated when travelling alone even when they had their volunteer helpers, since they were not particularly interested in the trip. In UTour, since you are able to get impairment-related travel options with user-catered resources, we can give the disabled user’s friends and family peace of mind while also providing these users with a sense of security when travelling. Furthermore, since you are able to connect with others to travel together in tour groups, it encourages individuals with impairments to leave their comfort zone and meet others with similar travelling interests.

**Statistics Canada. (2019, February 21). Travel between Canada and other countries, December 2018. Retrieved May 28, 2019, from https://www150.statcan.gc.ca/n1/daily-quotidien/190221/dq190221c-eng.htm**

In the 2018 Canadian Census, it outlines the rapid growth in the tourism industry for the country. This number of 21.1 million international tourists is a record high and it is part of a large growing trend. As tourism for Canada starts to grow and develop, its growth in attracting new oversea visitors is growing faster than the growth of tourists from the neighboring country. More people travel to Canada from the United States than any other country, and with almost 40% of the trips being one-day, UTour can aim to provide fast and reliable matching between other same-day traveler to provide a new and refreshing experience for tourists. Furthermore, the rise in travellers from other countries, with South America and Asia being the prominent areas of growth, UTour can assist in providing matching which can effectively pair tourists to abolish the language barrier. The application can pair tourists with the ability to converse in multiple languages with those who are in need of language assistance to provide a seamless and inclusive experience abroad. Alternatively, with the use of UTour’s SMARTChat, tourists will still be able to communicate to an effective degree with other tourists and locals.

**Özogul, G., & Baran, G. G. (2016). Accessible tourism: The golden key in the future for the specialized travel agencies. Retrieved May 28, 2019, from https://doi.org/10.1108/JTF-03-2015-0005**

The purpose of the research paper written by Özogul and Baran in 2016 is to help people understand the need of “Accessible Tourism”. With over 15% of the world’s population being disabled, there is an ever increasing need for tourism that is accessible by all. Many of the aspects of tourism are not favourable towards people with accessibility needs. Majority of places are not sufficiently equipped to assist those with mobility, sight, or hearing impairments. With this in mind, areas that do not already have accessibility accommodations will need to implement such services, otherwise travel agencies will be forced to discourage its clients from visiting these locations. With UTour, the aim is to alleviate this problem through the use of matching. The matching could potentially be used to group those who are in need of accommodations with others who have the ability to provide assistance. This gives both parties the opportunity for a unique experience and allows for more freedom while planning a travelling route rather than sticking to a strict path.