

Project Proposal

Journey

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February 1st, 2022

CS 2063 – Introduction to Mobile Application Development

Overview

Journey is a travel application that enhances road trips to their fullest potential. It will enclose two core functionalities; (1) to provide an accessible interface to add recommended destinations of interest to their trip and (2) to create a virtual scrapbook of the trip to serve as a memento. This software will serve to be convenient by allowing users to create a unique trip itinerary in seconds, while being nostalgic by offering users to reminisce on their trip and share it with others.

Once the user confirms the start and end location of their trip, they will be prompted with an interface to optionally add any number of additional destinations they are interested in. The trip planner will then ask what the user is interested in to stop at, including restaurants, gas stations, outdoor activities, electric car charging stations, shopping areas, etc. On selecting one of these interests the system will provide several suggestions on their trip route that they can choose and add to the itinerary. On completion of creating their ideal journey, the trip route will be created via Google Maps APIs for the user's benefit. This entire process should take less than 60 seconds, enhancing on the traditionally journey.

Throughout the trip *Journey* will prompt the user to, based on location, take a photo or make a note, which will be added to the virtual scrapbook. Trip statistics are also added to the scrapbook, including data on weather, distance traveled, whether they were a speedy driver, or how many times they would have drove around something (i.e.: 0.5 times around the world). After the journey is complete, all the data collected on *Journey* will be compiled into a virtual scrapbook which they can export and share (on social media). Being able to keep and share a virtual logbook of all your journeys add sentimental value to your trip and give the user something they can look back on in the future.

Motivation

When on a road trip, we often pass places like local restaurants, waterfalls, beaches, and other great hotspots. This is where the proposed application *Journey* comes to provide this on demand attraction seeking service. The target market will include people who are on a romantic getaway, a family trip or just an individual who is traveling for work and has some extra slack time in between meeting to kill.

When looking to add stops to a trip, there are currently a few options in the market, including Google Maps. However, the experience is not intuitive on mobile and finding these extra stops is not the focus of the app. *Journey* would place a focus on discoverability of local attractions, making it simple to add them to your trip, improving on the experience found in Google Maps.

There is also a growing desire to document and share aspects of our lives, and *Journey* can give users a quick and easy way to compile and share aspects of their trip. This can improve

users experience of the trip, having a keepsake to remember it by, but also serves as promotional material for the venues visited.

Mobile Features

The proposed application will require the location-aware feature provided by android. The location APIs available in Google Play services will be used, specifically the automated location tracking feature. Another feature that we feel would be of great service to our users would be to integrate the rich maps provided by the Maps SDK for Android, which will embed Google Maps within the application.

As the users are traveling on their *journey*, they will want to take photos of memorable locations, the application will therefore need to be able to capture a photo as well as store it in external storage. The application will need to be able to create text files and image files where they can save their journal entries as well as attach any images that were taken at the time.

Once the user has ended their *journey*, they may wish to share their experience on one of their socials, the application will support exporting their journey to one of their social media applications. Android uses the action ACTION_SEND to send data across processes from one activity to another.

Why Android?

The proposed application will benefit from android's mobile system as it will be an application that will best serve the users who are on the road and need on-the-fly recommendations for passing by local hotspots that they might otherwise be unaware of if it were not for *Journey*. The application will benefit from the locations, internet and other features offered through android's open-source software.

Building a native app can also reduce "bloat" that apps built with cross platform tools often introduce. As mapping services can be very memory intense, *Journey* must keep that in mind. It also allows the team to focus development and testing to one platform of devices. Selecting Android over another native language, like Swift for iOS development, benefits from its connection to Google and thus Google Maps APIs.

Additional Details

- This could potentially work with third party review services like Yelp.
- If the User Experience is not significantly better than other options customs may not transition to use our app.
- Although it is a small risk our application, it depends on Google Maps APIs in order to function.