CT Explored Scavenger Hunt App Sprint One Report Mad Hatterz 2/12/2024

Team members: [redacted]

## **Functionality**

During this sprint, the team was able to decide on a cross-platform development framework and started creating the user interface for the app, by making a basic layout and foundation that'll be used throughout the rest of the process. In addition, there is a list of trails available that the user will be able to choose from. Also, an XML file was created to hold different points of interest, and a parser was made to be able to parse that information, which was relayed to the front-end via a sample walking trail and points of interest displayed on the map screen. We planned for a total of 8 points and completed 15 points. In addition to the stories that were planned, two extra user stories got completed.

Two additional user stories completed:

- As a User I would like to be able to see the map and know where the POI's are (multiple of them), so I can walk to the POI.
- As a User, I would like to select a POI so I can learn more about it.

# Demo of the App:

[see attached video]

#### **Individual Contributions**

During this sprint, [redacted] and [redacted] worked together on creating the XML file, along with creating the functionality for it. First, [redacted] and [redacted] decided on an xml parsing library and successfully parsed the xml file as a JavaScript object. [redacted] provided some initial connection of this parsed data to the front-end, while [redacted] and [redacted] finished this task by creating a sample walking trail with a few points of interests all laid out on the trail map using this data. (User story: As a Developer I would like to pull in data from the XML file so I can create POI in the app; Also: As a User I would like to be able to see the map and know where the POI's are (multiple of them), so I can walk to the POI. As a user I would like to select a POI so I can learn more about it. AS a user I would like to be able to select a trail from a list so I can go to the point of interest (POI)).

[redacted] also created a placeholder page in the application for the leaderboard. There is currently dummy data used to show how points and usernames would be displayed, and the creation of this page will be useful after getting the social media bot to work and detect "pointworthy" posts.

In this sprint, [redacted] and [redacted] are collaborating on creating the initial React Native project, they worked on UI development and screen structure. Their tasks include integrating the react-native-map, as well as building a scrollable flat list populated with dummy data. Additionally, they researched and educated the team on the on-device testing capabilities of the platform, allowing individuals to utilize their iPhones to test the iOS app alongside the Android simulator on their computer, this will also be utilized for the demo. [redacted] worked as a support for everyone on the team, helping whenever necessary. (As a developer I would like to create the basic UI of the app, so I can create the rest of the functionality and have a basis to work from.)

#### Customer's Feedback

When meeting with [redacted], she liked the progress we made on the app and the overall design and layout we had going. She liked the color schemes we made and how it looks up to this point. She asked us again if we will have an alphabetical listing for the tours, and we mentioned how we might be adding that functionality at the end of the project, when we're nearing the end and if we have time.

## What Worked Well

The aspects of the sprint that worked well for us was the teamwork we had. We were able to split off into smaller pairs and work together to create different functionalities of the app, and then combine forces. We merged the functionalities together, and it came out well. The technologies we're using (react native and JS) are working well for us. There's lots of good resources online and helpful guides on how to approach certain problems, which makes developing much easier than if we didn't have that.

## **Problems Faced**

Some of the problems that were encountered had to do with the actual XML parser. There are lots of parsers available, but the one we initially started working with was not able to actually parse XML files. It could parse any other file but that one, which took days to figure out and lots of debugging. When we figured out what the issue was, we found a different parser and then were able to fix the errors and see good progress in the app.

In our search for a user-friendly cross-platform software application, React-Native and Flutter emerged as top contenders. Considering our collective lack of familiarity with iOS app development, we sought a framework that aligns with our basic programming knowledge in React, javaScript, or Java. Therefore, we have chosen React-Native as the preferred and most suitable option for this project based on our current programming expertise.

#### Lessons Learned

One of the lessons we learned was that newer isn't always better. Circling back to the problems we faced with the XML parser, the team had preferred to use a newer parser, thinking it would be the better choice (than the other parser that was originally found). The newer parser was not better in this case and it made the development process much harder. Sometimes, going with trusted technology is a better choice than something that is newer and might be filled with bugs.

Effective communication is a pivotal aspect of this sprint, enabling us to swiftly achieve our goals. Each team member demonstrates a high level of engagement, actively collaborating to address challenges and find solutions efficiently.

### Changes to be Made

Based on our experience and the lessons we learned, we will be doing more thorough research with the technologies that we pull into our project, and be more cautious about using something newer, as opposed to something that's been tested thoroughly.

# Sprint Two Plans

- As a developer, I would like to centralize styling into one file that could be used across all pages to make tweaks easier. (2 pts)

- As a developer, I would like to modify our XML implementation to grab all files from a directory & generate tours (3 points)
- As a Developer I would like to utilize Meta's API endpoint to fetch information on the hashtag, and gather a list of users and how many posts they have with the hashtags (8 points)
- As a developer I want to generate an HTML snippet and Json object to send to the website and app to display score information. (2 points-->reach goal for this sprint, possibly might move to sprint three)

Going into Sprint Two, we plan to accomplish 15 points. We want to move all our styling into one place and fix the styling issues that are present, so that the styling is the same across different devices. We also want to modify the XML implementation that already exists so that all the files can be grabbed to create tours. In addition, the last two stories dealing with the API will be integrated during this sprint to get started on the bot that's going to track points.

## **Challenges Anticipated**

Some challenges we anticipate might occur, might be with the API that will be integrated this sprint. There's a lot of research that needs to be done and the possibility of getting access from Instagram and submitting part of our project to Meta to get permission to do the API.

Additionally research must be done for the implementation of this bot, potentially in GitHub actions, we must verify we can execute and host files on a time based CRON schedule using this tool, and hosting publicly accessible raw files