GPS Trail Project Description Summary

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The project overview describes what our GPS trail application is meant to provide for users and how it is built. The main service the app provides is an accurate mapping of all park trails and a means for the user to communicate their thoughts about the park and it's trails. It also mentions how the user feedback helps lead to improving our parks. The app is designed to be mainly for mobile devices, Apple and Android, where it will be using Google API for the GPS system. The purpose of the project gives a brief reasoning behind the motivation to build this product. The app wants to help give the park visitors a much simpler way to view and traverse the park. Making the process easier will help attract more visitors which in turn helps generate money for the parks and local business. Our project goal is to improve the experience of coming to a national park. We will be able to measure the success of reaching this goal by observing the visitation of the parks. If we see an increase in people coming to National Parks then we know that we improved the experience for guests.

The scope of our work is mainly to provide a smoother experience for the National Park Service and its visitors. Sometimes it is confusing for first time visitors to navigate through the park and our help will certainly help. The situation that visitors are experiencing is that they have a hard time knowing what is the best trails and locations to visit through a certain park. It provides an interactive experience to guide the visitor or park employees. The application will be using a main database that will hold all useful information about parks and individual user profiles. It will also use the assistance of a Google API , in order to determine the location of users. This will be helpful also because there will be features such as creating new paths and locations through the application. Since this application has no direct competitors at the moment, we will be the only service providing this type of resources for the parks.

The main stakeholders of the GPS trail development project is the National Park Service. They will be the one who pays for the development of the project. Additionally, the Park Service will provide feedback during the initial development of the application. The end product will be distributed to customers through the app store on the customers' phones. The customer will not pay to download the app because the goal of it is to promote hiking in the park among the most amount of visitors possible. These users will not be involved during the initial development, but they may provide feedback after the product is released. It is expected for the end users to be at least 16 years of age.

Due to the fact that this application will be primarily used in national parks, there are many constraints that will need to be dealt with. The biggest hurdle will be connectivity issues since getting a stable internet connection will be difficult in that kind of setting. For this reason, the app will be as native as possible. For starters, all of the maps for the national parks will be downloaded during installation of the app. By having the maps downloaded during installation, there would be no need for an internet connection to view a park map since all the maps will be local and easily accessible.

The application will show the user paths they can take throughout the park. Without an internet connection, pinging the users exact location is going to be difficult. In order to alleviate

this issue, each map will come preset with a handful of starting points that the user can select. Once the user selects a specific starting point, the application will display a list of possible paths that the user will be able to take. If there is a solid internet connection, the application will be able to generate a possible path the user can take.

Since this application will be used primarily in national parks, there is an assumption that the user will not have a stable internet connection. For this reason, many facets of the application will be as native as possible and internet connectivity will be kept at a bare minimum whenever possible. This ensures the greatest user experience possible.