I. Use Case Description

Use Case Name	When To Go Where
Use Case Identifier	NP-001
Source	Student In CSCI 4340
Point of Contact	Benjamin Rodgers, Tyler Layton, Annabelle Choi, Samyuth Sagi
Creation / Revision Date	September 2024
Associated Documents	Requirements documentation, traceability matrix if applicable

II. Use Case Summary

Goal	To help explorers and adventurers decide on a national park they wish to go to based on their preferences
Requirements	Given data points such as the typical weather, terrain, visitation statistics, hike statistics of a particular park the system needs to be able to make a recommendation suited to a particular user. This recommendation should be made based upon certain preferences input by the user.
Scope	The scope would contain all the national parks in the United States. Based on whatever settings the user would want, this would be a recommender for your novice to experienced adventurer who requires specifics on their hike/camp. The scope should remain national parks and not national forests or sites, this keeps the data within a doable nature.
Priority	N/A
Stakeholders	Stakeholders would be novice to experienced adventurers/campers looking to checkout national parks
Description	Many campers/explorers have experienced quite a bit of nature. I, for example, have seen 40+ states within this beautiful country. When you do such a thing for so long, you develop preferences and desires for what you want to see and experience. When you develop these preferences, they tend to revolve around the people you are hiking with, the temperature to hike in, and the terrain you wish to climb. For example, in 2023 I was at Yellowstone National Park. I experienced the beauty of the park and the great hiking trails. The only problem was the tourists ruining the views. Taking the cheap hiking routes just to get to the bigger picture, clogging up scenic views, and getting in the way. I would like a way to easily pick out when to go to avoid this and so would many others.
Actors / Interfaces	Actors would mainly include hikers and campers willing to see more with more preferences. Campers who seek to hike and camp when nobody is around at a certain temperature. Anyone who wants specifics influencing their planning. Databases would include weather forecasting data, National Park visitation statistics, and map terrain data.
Pre-conditions	Ability to access weather forecasting data, National Park visitation statistics, map terrain data, or any other needed source.
Post-conditions	None, hopefully the actor will be satisfied.
Triggers	An actor looking for specifics and needing a recommendation.
Performance Requirements	
Assumptions	The data is acquirable and there is a market for this
Open Issues	

III. Usage Scenarios

Provide at least two usage scenarios that flesh out the requirements outlined in the summary, including identification of requirements specific to any envisioned ontology or semantically-driven service or application. Scenarios should be described as narrative, with supporting diagrams as appropriate. In an Agile process, every user story relevant to the use case should be included and elaborated/rolled up into one or more usage scenarios, with a clear mapping from the user story to the scenario it is integrated in or mapped to.

1. John, an experienced hiker, is looking for something new. He has never been to the true midwest of the United States. He is looking for someplace in South Dakota where the weather is typically around 50 degrees in the Fall, is mostly flat land, and where no people show up. He has looked around but can't seem to find the correct data to point him where he needs to go. He needs specifics in order to satisfy his quench for adventure.

2. Jeb is fairly new to hiking, his legs are very weak and he can't go for long distances. He correctly assumes that National Parks with more visitation tend to have easier trails and sights to see, but he also wants something warm, dry, yet mountainous. Jeb also just wants to take pictures for Instagram and Hinge, he figures that seeming like he loves nature is a good way to seem likeable. He needs to find that easy popular place, he wants to follow the people trail.

3. Joe has never seen a moose before and he really wants to see one in his lifetime. He has never been north before, but he knows that moose can be found in some of the northern parks. He wants a park that is not visited a lot because he doesn't like people and also a park with lots of long hikes. He was thinking about going on a trip in the summer, since he has school off.

4. James has never been to a national park before. He has gotten the recommendation to visit national parks but has never followed through because he is concerned about lodging and facilities. He would like to at the bare minimum make sure that he has a room with a bed he can stay in overnight and that he has consistent access to food and water.

IV. Basic Flow of Events

<u>Narrative:</u> *Often referred to as the primary scenario or course of events, the basic flow defines the process/data/work flow that would be followed if the use case were to follow its main plot from start to end. Error states or alternate states that might occur as a matter of course in fulfilling the use case should be included under Alternate Flow of Events, below. The basic flow should provide any reviewer a quick overview of how an implementation is intended to work. A summary paragraph should be included that provides such an overview (which can include lists, conversational analysis that captures stakeholder interview information, etc.), followed by more detail expressed via the table structure.*

In cases where the user scenarios are sufficiently different from one another, it may be helpful to describe the flow for each scenario independently, and then merge them together in a composite flow.

Summary: In the basic flow of events the user would reach out, through a UI, and declare what they're looking for. For the basis of scope, the plan is to have the user decide what they want based on, selection of states, temperature/weather required, and visitation/population in the park at a given time. Once this selection is made, the computer will take a look at the ontology and pick places that fit all the descriptions needed. Lastly, the computer will return the data to the user and the normal flow.