1. Farmer

User Story: As a farmer, I want to know more information about plants so that I can grow my crops as efficiently as possible and choose the right ones.

Use Case(Find Crop Info):The user will enter the site and selects search criteria to specify crops. The user will be given a list of plants that match their interest as specified by the criteria. The user can then select individual plants to gain more specific information.

Formal Use Case
Name:Find Crop Info
Actors: Farmer
Precondition: Farmer is at the website home page
Success End Condition: Farmer finds the crop info
Failure End Condition: Farmer is unable to find the crop info
1. Farmer navigates to the plant lookup page from the homepage
2. Farmer inputs search criteria
3. Farmer sees a list of plants that match the search criteria
4. Farmer clicks on the crop he/she is interested in to find additional info
Extensions:
3a1. No Plants show up.
    3a2. farmer goes back to step 2 and puts in new criteria

2. Survivalists/Foragers

User Story: As a forager, I want to be able to sort by area and edibility so that I can find which plants I can safely eat.

Use Case(Find edible plants in a certain geographical area): A forager enters the site, and navigates to the search options. The forager enters their location, and indicates that they only want to search for plants that are edible. The system returns all plants that fulfill these requirements in an easy to read list. The forager many then interact with each list entry to view more specific information about each plant.

3. Environmentalists

User Story: As an environmentalist, I want to know more about the habitat and environments that different plants thrive in so that I can help protect them.

Use Case(Find endangered plants): An environmentalist will go to the search bar. The environmentalist selects the criteria for endangered and threatened plants. The environmentalist sees a list of plants that meet these criteria. The environmentalist can then select plants to receive more detailed information.

4. Students

User story: As a student, I want to get basic information of the plants according to my location and their name, so that I can go outside near my home to observe them and write reports.

Use case: A student enters his location to find the possible plants near the area. The user will be given a list of plants (including their figure) that usually grow in the area. The student enters the plants' name to get more information. The user will be given detailed information of the plant by receiving its name.

Formal Use Case
Name: Find Nearby Plants
Actors: Student
Precondition: Student is at the website home page
Success End Condition:Student finds the plants information
Failure End Condition: Student is unable to find the plants information
1. Student navigates to the location page from the homepage
2. Student input his/her location
3. System returns lists of plants near this region
4. Student clicks on a plant in the list
5. System returns detailed information of the plant

5. House Gardening

Use story: As a house gardener, I want to get basic information of the plants according to my location and their functions(for decorating or fragrance), so that I can design my garden or decorating the rooms.

Use case: A house gardener enters his location to find the possible plants suitable for gardening in this area. The user will be given a list of plants (including figures) that usually planted in this area. A house gardener enters a gardening feature to find the

possible plants. The user will be given a list of plants (including figures) that satisfy this feature.

6. Campers

User story: As a camper, I want to find plants near my camp to see if there were any interesting or rare plants and make some records.

Use case: A camper enters his location to find rare or interesting plants that may grow in this region. The user will be given a list of plants with sorting function on features such as rarity. The camper click on the plant then the system returns detailed information of the plant.

7. Plants Salesperson / Companies

Use story: As a salesperson, I want to get basic information of the plants in two ways: First I need the suitable plants for sale in different regions in different stores to get more profits. Second I need the information of the plants I am selling to provide to my customers.

8. State Park Visitors

Use story: As a visitor to a state park, I want to get basic information of the plants available in the park and their specific appearance before I go, so that I can notice them and making my tour more enjoyable. Also, I want to know the plants I meet while visiting and search for their information now.

9. Researchers

Use story: As a researcher, I may want to get basic information of the plants which I need to mention during my research, so that I can obtain the official names of them, and the other basic information needed by my research and report.

10. Plants Collectors

Use story: As a collector for plants, I want to get the list of the plants available in the area I will go. Also, when I'm interested in a specific plant, I need to know the region where it shows up the most, or what kind of ecoregion I should pay attention to.

11. Supervisors of School Trip

Use story: As a supervisor of school trip, I want to know about the basic species we may meet during the trip. I also need to make sure to warn students from eating any inedible plants and keep them away from the poisonous ones. I will look up all the information above before and during our trip.