Hannah Bloyd

Thomas Sager

John Linder

Feasibility Report

**Product**

* Designing a cross-platform mobile application.
* Used by anybody ranging from kids to scientists.
* This application will help in identifying plants in a specific location.
* It will utilize the users geographical location and will display a variety of plants in that region.
* The user can compare the plant found with photographs from other plants found in that region.
* A search bar will help in minimizing the list for the user to cipher through.
* The data for plants will rely on what we choose, (plant database).

**Technical Feasibility**

* A mobile device that pulls from a database of plants to search through. This will be established by and not limiting too; search bar, checklists, photos, etc.
* Determine what tools we are going to use to create the mobile application, cross platforming, database access.
* Do we want to use an SQL database, C# language or other, what should we use to compile our code.
* Android and iOS.
* Have the iOS portion of the application working and implement the project for states within the continental US.

**Social Feasibility**

* It would be a great benefit to new scientists researching about Botany.
* It would also be good for experienced researchers. It would help in assisting them quickly because we all know time is important.
* Some jobs will become deskilled because the app will help cut down on thorough research into plant identifying. Of course it will still need a skilled scientist to make a final ID on the plant.
* Only training would be a simple tutorial on how to use the app. But there are thousands of different types of plants so it might take some practice.
* No new tasks will be established, if anything it gets rid of some.

**Economic Feasibility**

* Accessing a full database of plants, multiple different systems, databases, etc. Can it be free?
* Main costs will be determined by the labor and time.
* Space in the app store.
* License cost, is iOS paid for and what about Android.
* Hosting the service and securing access.
* This app will get exposure with skilled botanists with identifying plants faster and ameteur botanists wanting to learn more about plants and their environments.

**Market Research**

* Currently identifying plants requires a guide book to filter through thousands of different types of plants.
* This product is meant for plant enthusiasts, curious minds and academic research.
* Our product will be curved to a learning experience.
* Some apps are out but they don't have full documentation on specific plants, so there is a cause for error.
  + <https://www.idigbio.org/>
  + <https://www.businessinsider.com/plant-leaf-identification-app-2016-3>
  + PlantSnap app.

**Alternative Solution**

* Help make the ius Herbarium more mobile friendly, building to their database, extending the plant list to larger than 5 counties.
* Or just make the website more friendly in general. The websites search engine can should be updated with photos, extended search options, more directed with location to limit searches.

**Project Risks**

* Trying to obtain an accurate large database of plants across the country.
* Being able to obtain this information legally and avoiding copyright information.
* First time actually developing a mobile application and making it open source. Costs, process, research, etc.
* UI development.
* Cross platform interface, and making sure the database can be integrated properly.
* Working on the iOS side while not having a lot of access to a mac...