**Seeds**

**Description**

Seeds is an agriculture app that can assist you with your gardening experience, by providing various tools to help you analyze the soil and give you the best botanic advice. This is done through the use of multiple sensors to measure factors such as temperature, humidity, and nitrogen in the soil. The app, then, does some calculations to decide which plants are able to grow on that soil. Other features also include following the lifespan of growing plants, sending notifications and reminders to aid in the gardening process.

**Requirements**

The main requirements of this project are the hardware used for reading in the data and the software that processes the data collected from the sensors. The hardware is a device that contains multiple sensors to measure the temperature, humidity, and nitrogen in the soil, among other factors that would need to be measured. The device will communicate with the app wirelessly to feed it the data. This wireless connection between the device and the mobile app will be set up through bluetooth, but the app requires wifi connection to access the botany database. There must also be a database with the most up to date information about botany.

**Design**

The app will be developed for mobile devices, mainly Android and iOS. It doesn’t require an account creation, but it is optional if the user wants to sync their data between multiple devices. As for the hardware, the sensors’ design will be a small mobile device with multiple probes, each used to measure a specific thing.

**Stakeholders**

The stakeholders vary from agriculture businesses to everyday gardeners who take it as a side hobby. Businesses will profit off of the expenses saved from not spending money on extra and expensive hardware, and individual users will be able to use the app for free. A business account, however, will require a small fee, but with an added benefit of having a database for the business to store all of its related data.