The primary goal of this project is to create a device that automates many of the time consuming aspects of growing plants by automating soil data collection along with water/fertilizer dispensation. This will be accomplished by pairing a variety of sensors with a microcontroller which will periodically send sensor data to a server. This data will then be accessible via a mobile app where it will be displayed in a visually convenient way. Additionally, the device will be equipped with water and fertilizer reservoirs. These reservoirs will be capable of dispensing both water and fertilizer depending on commands from the server which will utilize sensor data to decide how much water or fertilizer to dispense and when.