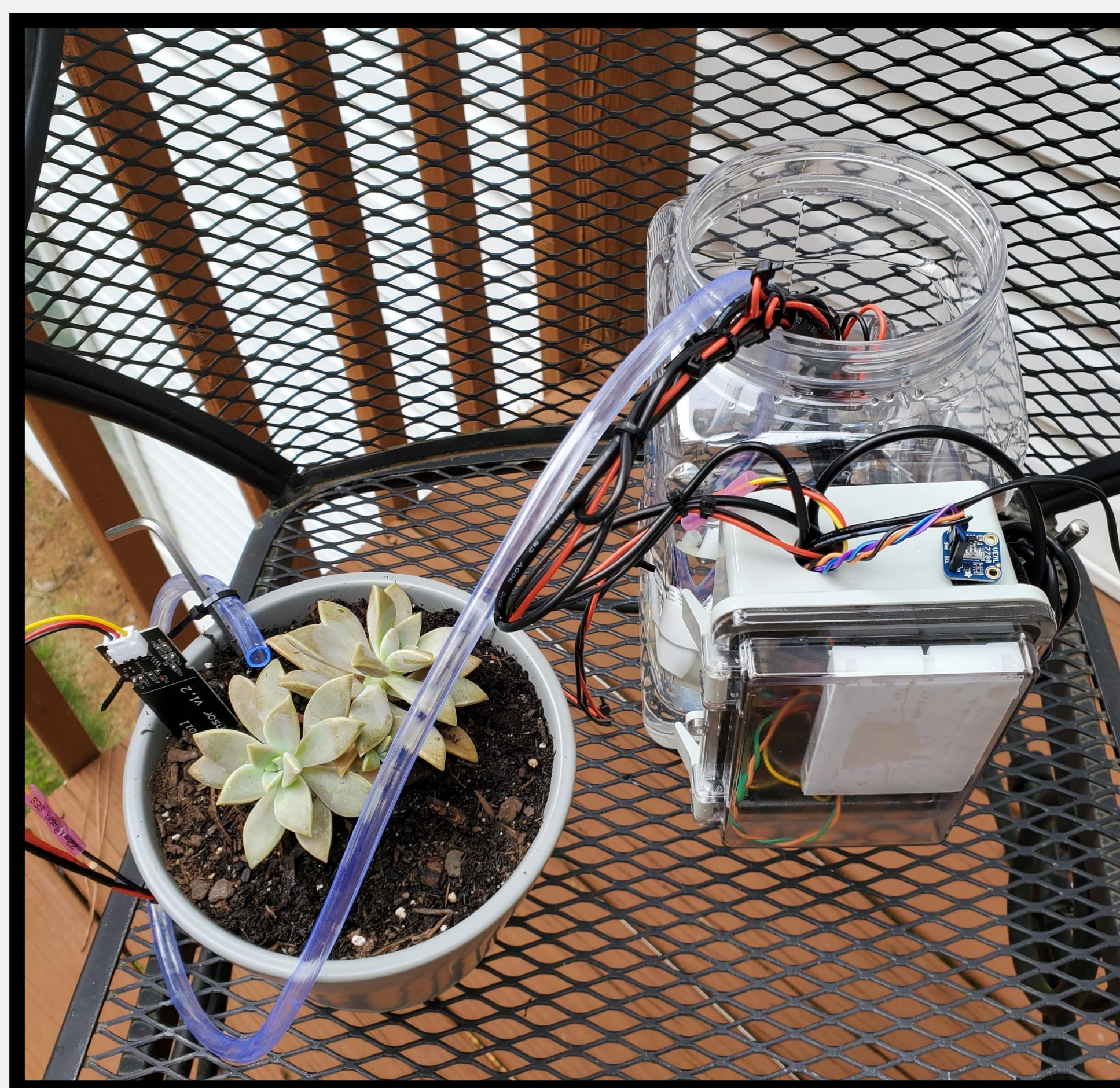
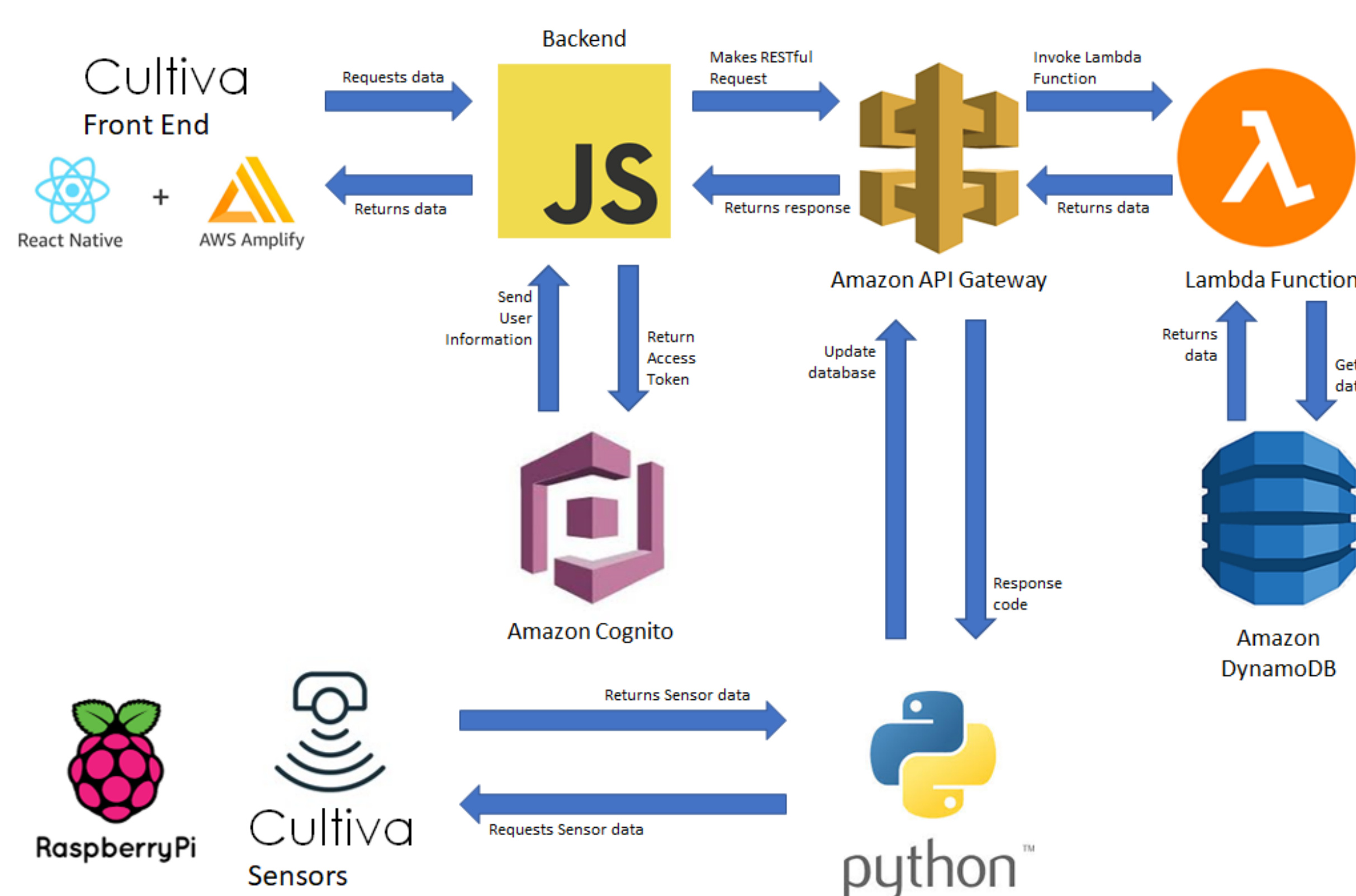


INTRO/ABSTRACT

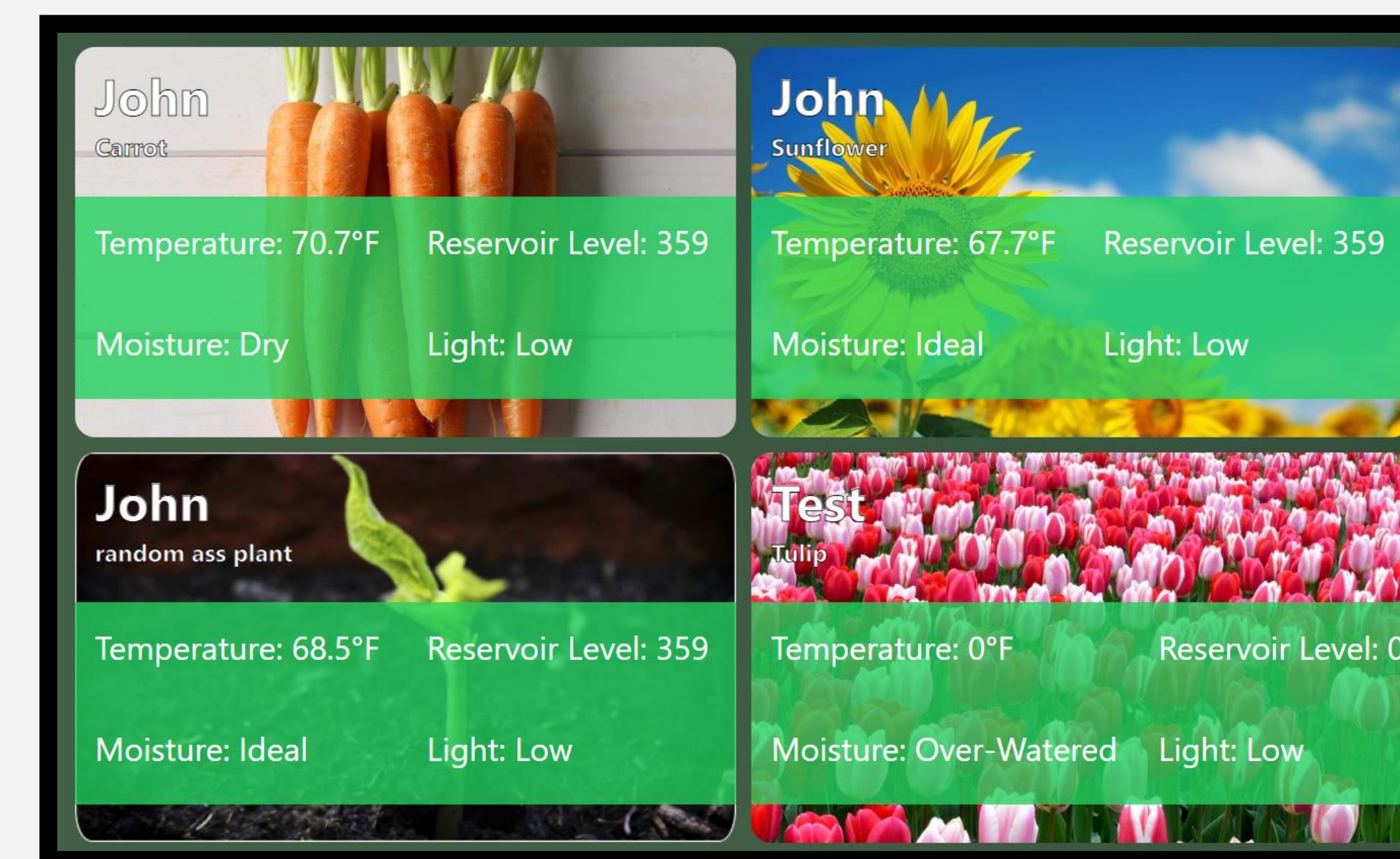
We want to enhance the plant nurturing experience for all individuals. Cultiva is a system of sensors and a water reservoir connected to a control center that relays information wirelessly to a web application for easy access to vital environmental information. We want to provide the user with real time data on the plant which includes temperature, sun exposure, soil moisture and water levels.

METHODS

Making use of the AWS suite (React, Amplify, Cognito, API Gateway, Lambda Function, and DynamoDb), javascript, python, various sensors and raspberry pi modules we are able to create a fully functional environmental monitoring companion for planters. Bluetooth enabled raspberry pi zeros are used to relay data to the control center allowing the support for multiple planters. We make use of four sensors to collect data. They are a moisture sensor, TDS sensor, temperature sensor, and a flux-light sensor. A web application is used to display collected information and allow the user to add, remove and edit sensors as they see fit.



Cultiva is an automated and wireless solution to all your home gardening needs



Scan QR code to check out our GitHub page!