

Team **BEG** Senior Design Team Contract

A senior design team contract for us, team **BEG**!

Members

Chris Butts

buttscm@mail.uc.edu

Kevin Eaton

eatonko@mail.uc.edu

Raymond Gee

geern@mail.uc.edu

Group Meetings

As a group, we have agreed to formally meet with each other Friday afternoons. We also have created a Discord group to have a space to communicate with one another as well as remotely hold meetings if necessary. We're fortunate to be in the situation where most of us have the same schedule, so we will also see one another every weekday, giving us even more opportunity to communicate if necessary.

Team Roles

All of us have experience in programming so each one of us will be contributing to the programming aspect of this project. However, each of us will have a specialization.

Chris Butts – For lack of a better term, Chris will be the “leader” of the project. Making sure deadlines are met, team members are contributing, writing out any required documents, etc. He also has the most experience with Android development so he will be the head honcho for that.

Kevin Eaton – Kevin is the one who owns the Raspberry Pi, so it makes sense that he would be the one in charge of the hardware elements. Kevin has experience working with little machines, so he will be a big contributor to making sure sensors are set up properly and the automation of watering.

Raymond Gee – For all five of his co-ops, Raymond worked with SQL and the management of databases. For this reason, it makes sense to make Raymond in charge of getting our back-end database properly set up and configured.

Project Focus

For our project, we have a couple main components we are going to tackle:

- App Development (Android)
- Back-End Database Management
- Hardware
 - o Read Sensor Data to Raspberry Pi
 - o Light Machine Automation

The general idea of our project is to create an Android App that allows the user to see the moisture and sunlight levels for their plant. The database will be filled with info on appropriate levels for these fields for different species of plants, and it will let the user know if the plant needs more/less sunlight or water. Finally, we intend to make a basic mechanism that will automatically water the plant if the moisture level gets too low.