

EE/CprE/SE 492 GROUP PROGRESS REPORT

Group number: Group 25

Project title: SMART Garden System

Client:

Advisor: Diane Rover

Team Members: Sarah Schoenke, Jake Thomaе, Bryanna Adamson, Julia Condon, Nick Vaughan, Jasen Hesel, Devon Sindt

- **Project Summary:** *(Short summary about the project. What are the design goals? Have the direction or scope of the project changed? This should be about a paragraph in length.)*

Our Goal is to build a Smart Garden System. In this system we will have the ability to monitor and adjust the heat levels, water system, and growth. There will be a camera stationed at each plant which will display on a website. The website itself is where the consumer will be able to monitor and adjust everything. There will also be a grade for the growth and levels you set for that plant vs what is actually occurring in the system itself. This allows the consumer to see if the grade is worse that means they know to be able to look at the system and see what might need to be adjusted.

- **Accomplishments:** *(Please describe/summarize as to what was done, by whom, when and, collectively as a group since the last report. This should be about a paragraph or two in length. Bulleted points are acceptable as well. Please keep only your technical details related to your project. Figures, schematics, flow diagrams, pseudocode, and project related results are acceptable, but please ensure that they are legible (clear enough to read) and to provide an explanation. If researching a topic, please add a few details about what was learned and how it is relevant to the project. If two or more people worked on a single task, be sure to distinguish how each member contributed to the task. Specific details relating to the assistance provided to other members may be included here.)*
 - The Navigation bar is up and pushed, all we have left to do is decided on the color scheme (Sarah Schoenke)
 - The Camera page skeleton is being completed, probably about 50-60% Done (Sarah Schoenke)
 - Got Certification for wood cutting through isu (Jasen, Devon)
 - We got all of the material needed- Everyone has helped pick up materials.
 - Building Process has started: more details down below in pending issues (issues with the 2x4's) - (Devon, Jasen)
 - Node.js app is running on an AWS VM with a few functional test API endpoints. This will be useful for storing sensor states/data in the future. (Nick Vaughan)
 - Created scheduling file for water, lights, fan and sensors. (Jake Thomaе)

- **Pending issues** *(If applicable: Were there any unexpected complications? Please elaborate.)*

Problems with light wave lengths: We had a slight issue with our high pressure sodium bulbs, they emit a high concentration of red and yellow light, but is lacking in the blue light wavelength. To counteract this, we are including a blue light bulb into our design. Without it, our plants would grow too quickly for the foundation to keep up and the plants would become weak, stickley and crumble under their own weight.

Attendance: Continuing to have problems with team members not coming to weekly assigned meetings. It has been a regular occurrence for only half the members to show up to meetings, and the ones that aren't there give no explanation as to why they were unable to make the meeting.

We had a minor setback with some of the materials for our greenhouse enclosure. Some of the 2x4 boards that we ordered came in bad shape, so we will need to bring those back and try to exchange them for better quality boards.

- **Advisor Input/Signature:**

Please select one of the options below and sign.

_____ I am pleased with the progress the team is making.

_____ The teams progress could use some minor improvements which I will discuss with them.

_____ The team's progress has some major concerns that I will discuss directly with Dr. Bigelow
bigelow@iastate.edu , 515-294-4177

Signature: _____

Group report 2 : team 25 Inbox x

Sarah Schoenke Thu, Feb 24, 11:40 AM (2 days ago) ☆
Here is the link to our progress report. : https://docs.google.com/file/d/1ihZ1xXDtfGjLqCyyDQZY7N0TIKvYdyWX/edit?usp=docslst_api&filetype=microsoftword Than...

Rover, Diane T [E CPE] Thu, Feb 24, 11:54 AM (2 days ago) ☆ ↶ ⋮
to me, sdmay22-25@iastate.edu, Diane ▾

Sarah and all,
I'm satisfied with the progress overall. However, I'd like to make sure that attendance issues are getting worked out. Please keep a log of team meeting dates and times, as a team and with me, and record who's absent or late to these meetings and whether the absence/lateness was notified in advance. I'd like the log to be included in the next progress report and in our Slack team channel.

Thanks,
Dr. Rover

⋮

Will do. Will do, thanks! Noted.

↶ Reply ↶ Reply all ↷ Forward