

The Kale Master 2000

Leo Dantas Garret Ulrich Dylan Flejzson Connor Ryan



Client Meeting

Clients wants and needs:

- Redesigned lighting system
- Portability
- Larger Resevoir
- Water Spout
- Branding



- Ease of use
- Ensuring plants get sufficient water and light
- Tracking water level in the resevoir
- Access to plants
- Filtration
- Easily refillable resevoir
- Easy to move



Problem Statement:

The system must be able to effortlessly check the water level, and must be capable of sustaining the plants for multiple days. The structure must be able to be placed in a classroom, have bright and affordable lights.

Initial Designs











Final Design





Problems We Encountered

- Tracking Water level
- More consistent drip system
- Access to plants
- Filtration
- Adequate Lighting
- Portability
- Lightweight

Tracking Water Level in Resevoir





Adequate Lighting





Access to Plants





Lessons Learned

- Start design earlier
- Produce budget ahead of time
- Have backup plans
- Create more designs
- Research, research, and more research

Conclusion

- This project is good to let people know how to design something from top to bottom
- Make less deliverables for the future and more time to do each project deliverable
- Give students a bigger budget. A lot of students had a price less than \$150.
- Have the client come in for longer periods of time to view each prototype.
- Overall, it was a good project to learn from.