

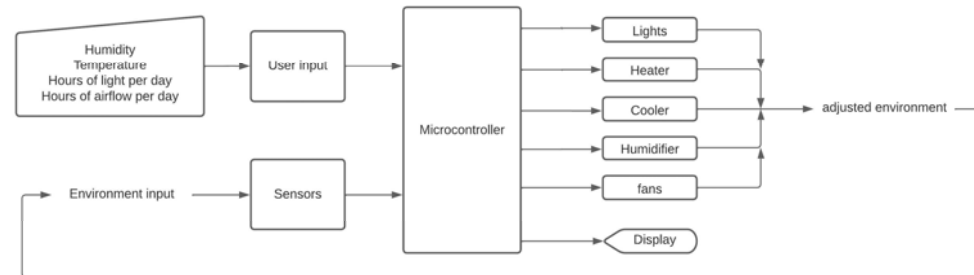
# GreenBox<sup>🌱</sup>

## Project

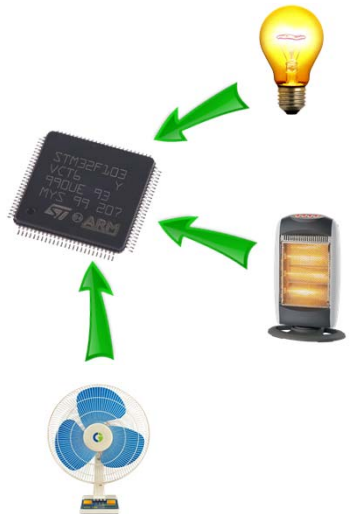
Raising and caring for plant life are some of the most fundamental things we do as a species.

- Caring for plants on a small scale can have many benefits.
- Farms, especially large commercial farms, are heavily automated to ensure positive results.
- GreenBox brings some of this automation into the home, along with its results!
- GreenBox combines existing technology with a control system to maintain a desired level of temperature, humidity, light, and air.

## System



## Methods



- Utilizes existing environmental control technologies.
- Controls these technologies using a microcontroller, sensors, and timers.
- Controls each subsystem's power source to allow scaling and increase reparability.
- Features simple and easy user interface.

## Conclusion

- The original goal of this project was to monitor and adjust the temperature, humidity, light, and air-flow in the main chamber.
- These goals were all met.
- Many lessons were learned through this project, many about the importance of flexibility in planning.
- In the future, this could become a product that does an even better job of maintaining conditions, as well as having more features such as wireless connectivity.