TBD Gardening Project Name - Group 9

Team members:

Nicholas Chitty
Brendan College
Scott Peirce
Justin Pham-Trinh

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2 Requirements

2.1 MCU

2.1.1 Minimum Viable Product

- Read local sensor data (e.g. sunlight, soil moisture, temperature)
- Adjust parameters of local modules (e.g. shade, water, nutrients)
- Interpret user settings and adjust parameters of modules accordingly
- Fulfill web requirements with at least two computers/controllers

2.1.2 Stretch

- Fulfill web requirements with one computer/controller
- Local user display (e.g. LCD, dot matrix, segmented)

2.2 Power

2.2.1 Minimum Viable Product

- Power generated through a wall outlet
- Moves through an AC/DC converter
- Then into the power supply to get dispersed throughout the MCU
- Power is collected through solar panels
- From the solar panels through a solar power bank
- Then into the power supply to get dispersed throughout the MCU

2.2.2 Stretch

2.3 Sensing

2.3.1 Minimum Viable Product

2.3.2 Stretch

2.4 Web

2.4.1 Minimum Viable Product

2.4.2 Stretch

3 Block Diagrams

3.1 MCU

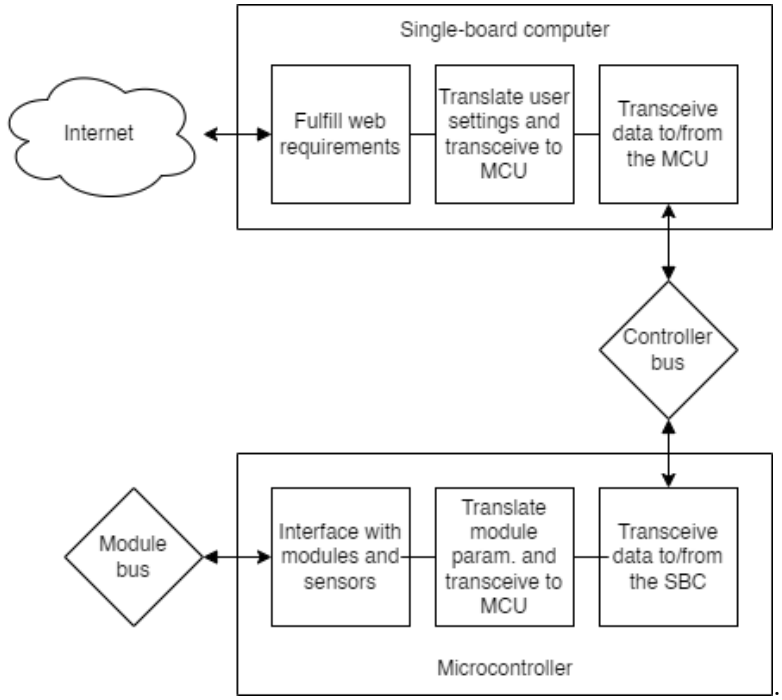
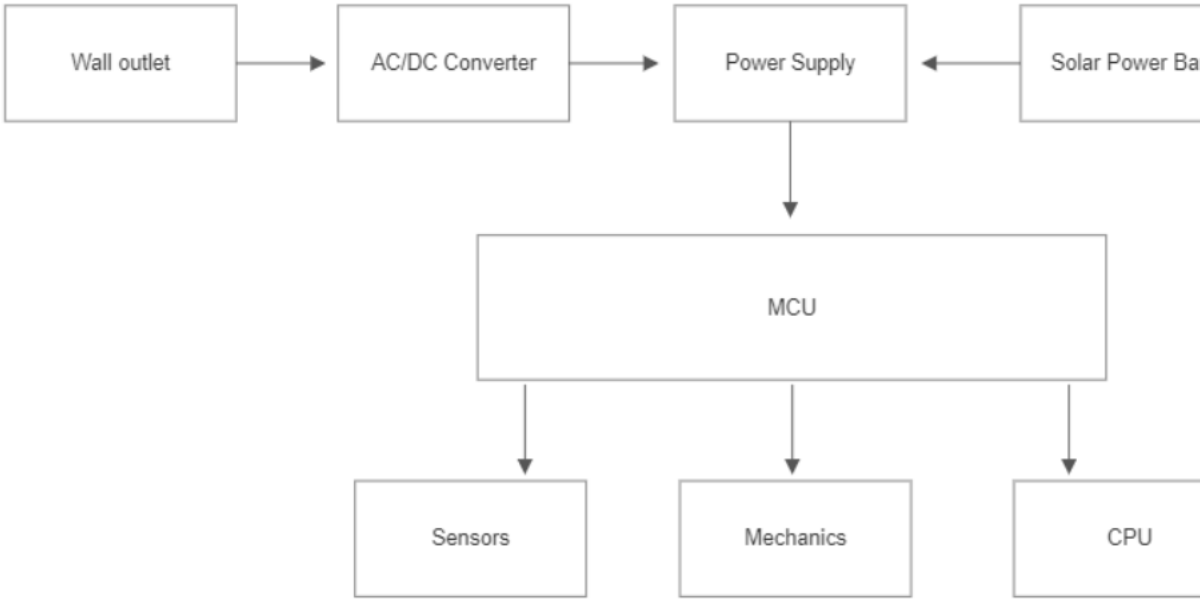


Figure 1: Power subsystem block diagram



3.2 Power

3.3 Sensing

3.4 Web

4 Project Management

4.1 Budget

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4.3.1 Fall

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