

ECE 3992 Milestones

- Prototype Physical Assembly
 - GPIO:
 - GPIO 14&15: I2C1 for Display
 - GPIO 26&28: ADC for IR
 - GPIO 13: Motor Control
 - GPIO 28&29: Reserved extra ADC
 - GPIO 0-7: Reserved for future in case
 - All others not listed available for anything.
 - PWM:
 - Ensure motor on the PWM pin works
 - Setup PWM to figure out how it relates to the RPM
 - IR Sensor:
 - Test functionality
 - Learn how to read its output
 - Final Assembly:
 - Test breadboard demo to ensure everything works.
 - Solder complete demo.
- Prototype Software
 - Blender: Extract 3D data
 - How to save data & review data formatting.
 - Custom Animations
 - Learn the mechanics for drawing to the display.
 - Adapt custom animations to 2D arrays.
- Final Assembly / Working Prototype
 - Read IR sensor to control motor speed
 - Enable display LEDs at correct frequency based on # of divisions
 - Fine tune any possible issues
- Prototype Complete and Functioning
 - Start the process of increasing the scale of the prototype
 - Lots of unknowns as it depends on how the prototype goes
- Final Prototype Ideas