

Final Project Checklist

Portable Laser Function Generator

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Waveform Generation Module: Ciara

- Produces sine, square and triangle wave
- Duty cycle works for both square and triangle waves
- Output channels have a constant phase difference that can be programmed
- Status segment leds display wave status as well frequency and amplitude
- Output dacs produce clean waveforms up to a reasonable frequency (dependant on output DAC hardware)

Window / Display Module: Brandon

- Waveforms from waveform generator can be scaled and displayed on a vga monitor
- Alphanumeric characters and a basic grid can be displayed on the vga monitor
- Basic geometric shapes can be drawn using the laser and galvanometers
- Waveform can be displayed using the laser and galvanometers without alphanumeric characters

BONUS: Both

- Alphanumeric characters and grid can be displayed using the laser and galvanometers - IF TIME PERMITS
- Input from the IMU unit can be obtained and interpreted - IF TIME PERMITS
- Compensation module produces some image compensation - IF TIME PERMITS