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6.111 Project Checklist

Asterisks indicate time-permitting tasks

Input module:

- Interface with labkit buttons
- Movement via a joystick
- Shooting angle via a joystick

Game module:

- Player can move around on screen
- At least one type of enemy can move around on screen
- Several types of enemies can move around on screen simultaneously
- Units can't move past screen boundaries
- Enemies randomly spawn
- Bullets fire automatically
- Collisions are detected
- When a bullet collides with an enemy, both are destroyed
- When the main character collides with an enemy, the game halts
- Game can be reset by a button
- * - Difficulty scaling with time
- * - Enemies spawn in specific waves
- * - Score, which can be put on hex display

Graphics module:

- Double buffered video at 800x600 resolution, 30hz frame rate
- Lines between any two points drawn to off-screen buffer
- Looking up and drawing the line segments of each entity
- Translating and rotating those segments based on data from the game module
- * - Alpha blending