ECE 153B Project Proposal - EmbeddedNode

Anthony Guzman & Jonathan Sun

Overview: The goal of this project is to replicate the board game, and mobile game, *Node*. It is a game that is played among two players. We plan to have a shareable Wii nunchuk to control all aspects of the game that will be displayed on an LCD screen.

Game Link

https://boardgamegeek.com/boardgame/292379/node

Peripherals:

- Wii Nunchuk
- TFT LCD screen

Serial Interface Protocols

- I2C for nunchuk
- SPI for LCD display

Block Diagram:

Block Diagram



Software Structure: There will be a main game loop that will be running infinitely, constantly waiting for interrupts. The interrupts will be fired from the Wii Nunchuk to make a move on the screen, updating the screen and recalculating the scores.

Job Responsibility:

Jonathan - Hardware Peripheral Setup

Anthony - Software Setup

Website

https://sites.google.com/view/ece-node/home