Ayush Shah, Vyom Singh

153b Final Project Proposal

The idea of our final project is to create a real time evaluation system of an over the board game of chess. Our plan is to use a camera module that fires twice every second and takes a picture of the board. The board is then displayed onto the LCD screen and gives a live evaluation of the game using the stockfish engine. We will use the nunchuk to swap to the different modes of evaluation. Additionally we hope to be able to play the game of chess on the LCD screen using the nunchuk to move. We plan to use I2C for the nunchuk and SPI for the display. We also plan to use SPI/I2C for the camera module as well. We will need register level programming for the different serial interface protocols.

The plan is for Vyom to work on the camera module and convert the image into a code that the stock fish engine can evaluate.
The plan is for Ayush to work on the nunchuk and make sure that it is properly firing interrupts and interacting with our system.
We will work together on making sure the correct information is displayed on the LCD screen.

Block Diagram: