**ENEL 387 Project Proposal**

**Subject:**

Video game console with several small games and the ability to switch between games during the run time of the system.

**Details:**

A tiny video game console replica that would consist of a main menu, i.e. a screen showing the library of available games to choose from, and 2 to 4 small sized clones of classic video games such as Snake, rock paper scissors, Space Invaders, Pong, etc. In terms of hardware, the device would have a controller with an analog stick, two action buttons, and another button to return to the menu from any game to choose another game. The controller will operate differently based on the menu/game the system is currently in (i.e. each game could have different controls). In terms of outputs, the device’s primary output would be the LCD screen on the ENEL 387 board. Other outputs could include the LEDs on the board to signify various states and events such as health remaining, stage, player collision, etc. As well, a buzzer could be used as basic audio output to signify various events as well.

C:\Users\Daniel Shevtsov\Downloads\Controller.pngInputs:

* 2 action buttons, 1 menu button
* Analog joystick

Outputs:

* LCD Screen
* 4 LEDs
* Buzzer

**Block Diagram:**

**C:\Users\Daniel Shevtsov\Downloads\Block.png**