ECE 461/561 –   
Embedded System Design  
Pong Game Project

# Overview

In this project you will develop code to implement a single-player “Pong” game. Details on Pong are available on Wikipedia at <http://en.wikipedia.org/wiki/Pong>. Start with the LCDDemo project and modify it as needed.

# Stopwatch Program

Requirements:

* Switch 2 moves the paddle up (one pixel at a time) as long as it is pressed, or until it reaches the top of the screen.
* Switch 3 moves the paddle down (one pixel at a time) as long as it is pressed, or until it reaches the bottom of the screen.
* The paddle is two pixels wide and eight pixels high.
* The current score must be displayed. Each successful hit with the paddle adds one point, while missing the ball subtracts ten points.
* The ball can move in any direction. Use variables BallVX and BallVY to describe the velocity components, and BallPX and BallPX to describe the position of the ball’s center.

Deliverables:

* Project directory, including source code and subdirectories.
* Demonstration of game play.

Extra Credit:

* Make the ball accelerate by 10% each time it hits the paddle near the center. Note: you will likely need to use floating point variables to support this.
* Make the paddle change BallVY depending on where the ball hits the paddle (e.g. upper vs. lower half).