CSE 490/590

Summer 2015

Project #1

Due Date

This project must be submitted on *timberlake* by 11:59 PM on Thursday, June 11, 2014.

Project Description

Design a circuit on the BASYS 2 board that displays a binary number entered using the slider switches. Slider switch 3 corresponds to the most significant bit and slider switch 0 the least significant bit. When a momentary push button is pressed the number represented on the slider switches should be latched and displayed on the corresponding digit on the seven-segment display. It should remain displayed until a new number is latched for that specific digit (by pressing momentary push button again). You may assume that no more than one momentary push button will be pressed at a time. The number latched should be displayed as a hexadecimal digit (0 through F). The LEDs (3 through 0) should reflect the value on the slider switches. When a switch is moved to a different position, the LEDs should immediately reflect the change.

Documentation & Submission Requirements

Submit your Verilog source code (*project1.v*) and bit file (*project1.bit*) electronically on *timberlake.cse.buffalo.edu* using the submit command (***`submit_cse490 project1.v project1.bit`***) or (***`submit_cse590 project1.v project1.bit`***). If the files were submitted successfully, a message will be displayed confirming successful submission.