

## **Lab 4 PLD project**

### **EET 207**

Taking your learning from lab3, construct a simple state machine design of your own. It is encouraged for you to dream up your own project, but try not to make it too complicated.

Possible ideas are listed below:

1. Elevator with inputs from two floors to go up and down.
2. Traffic stop signal for an intersection
3. Thermostat control for heater and air conditioner
4. Full 4X 7-segment LED control PLD board. By pressing one of the inputs, the 4 7-segment LEDs should count up from 0000 to FFFF.

In your lab report, please show full simulation of all states and inputs and output transitions. Your VHDL source is also required.