Student Names:
Student IDs:
Group ID:
Session:

CMPE 240 2022 Experiment 6 Preliminary Work

Capture the High-Level State Machine:

Describe the system's desired behavior as a high-level state machine.

Construct the Datapath:

Create a datapath to carry out the data operations of the high-level state machine.

Connect the Datapath to a Controller:

Connect the datapath to a controller block.

Connect the datapath to a controller block.

Derive the Controller's Finite State Machine:

Convert the high-level state machine to a finite state machine for the controller, by replacing data operations with setting and reading of control signals to and from the datapath.

Implement the controller's combinational logic: