12/14/16

**Lab 3 – Multiple Elevator – Use Cases**

Assume 2 elevators for each use case.

1. No inputs are placed
   1. Both elevators remain in idle state
   2. Stay in idle until an input is placed
2. Floor request is placed
   1. One of the elevators responds to the floor request
   2. Elevator heads towards the request
   3. Once it arrives it loads the passenger
3. Passenger selects a destination
   1. Elevator heads towards the passenger’s destination
   2. Once it arrives at the proper floor it goes into loading state
   3. After loading the elevator remains at that floor in idle
   4. Wait for another input
4. Two floor requests are placed at the same time
   1. One elevator handles a floor request
   2. The other elevator handles the other floor request
   3. Each elevator handles request same as outlined in case 2
5. Three floor requests placed at the same time
   1. One elevator handles a floor request
   2. The other elevator handles the other floor request
   3. The third floor request defaults to the first elevator if all elevators are busy
6. Multiple destinations entered by passengers
   1. Each elevator handles its own destinations since those buttons are pressed from inside of the elevator.
7. Floor request input is entered twice
   1. Only one elevator responds to the request
   2. The other elevator remains idle