

# Order elevator

Scenario:

1. Elevator is executing an order
2. Person (outside elevator) orders the elevator
3. Elevator finishes order, opens door, starts timer, and closes doors.
4. Elevator starts moving towards ordered floor.
5. Elevator arrives at ordered floor, opens door, starts timer, and closes doors.
6. Person steps into elevator.

Details:

- "checkSensors" is a function running in main continuously that checks the different inputs: floor sensors, obstruction sensor, button sensors etc. This is part of controlling the setFloorIndicator function.

- The Event Manager calls for the FSM to handle the event of the button being pressed, which then checks the queue if there are any orders, which there are.

- The FSM calls for the Event Manager to handle adding a new order, which it then does, by adding to queue and setting the corresponding button light.

- The elevator then finishes executing the initial order, and opens and closes doors with help from the timer.

- "orderExecuted" is a function running in main continuously for checking if Event Manager is ready for handling the next order.

- When the Event Manager is ready to handle a new order, it calls for the FSM to handle the case of an order having been executed.

- The FSM calls for the Event Manager to handle the next order in the queue.

- The Event Manager then fetches the next order in the queue from the queue, and calls for the FSM to handle the new destination.

- The FSM calls the Event Manager to handle the execution, and the Event manager sets the elevators direction, and starts its motor.

- The elevator arrives at ordered floor, opens doors, the person waiting for the elevator walks in, and the doors close.