

## **SYSC 3303 Group Project**

### **Iteration 3**

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<b>Group member name</b>	<b>Contribution</b>
Tristan Demers	Wrote floor to scheduler message timing system, aided with scheduler algorithm conception.
Toman Aleksiev	Wrote algorithm class
Kenji Isak Laguan	Refactored code duplication, repackaged for cleaner file structure, implemented/integrated UDP Communication. Separated subsystems into 4 programs to use UDP(w/ own version of RPC) with different devices(on the same network). Helped debug scheduler algo/integration for OTW requests.
Steven Johnson	Created contributions document. Wrote bodies of a few methods for a separate version of scheduler algo for OTW requests. Created all UML diagrams.
Irina Ionescu	Refactored scheduler code to assign jobs to different elevators, part of floors sending messages at different times, keep track of when jobs are completed in scheduler, integrate algorithm into the scheduler state

Note: Set up instructions and testing instructions are located in the "README.txt" file

1. Files included:
2. Setup instructions -
  - Open project in IntelliJ and download any necessary libraries, sdk, etc. when prompted by the IDE
  - In IntelliJ, open ElevatorSimulator as a project
  - select the Mailbox.java file and run by clicking the green arrow
  - Output can be seen in the console
  - select the Scheduler.java file and run by clicking the green arrow
  - Output can be seen in the console
  - select the Elevator.java file and run by clicking the green arrow
  - Output can be seen in the console
  - select the Floor.java file and run by clicking the green arrow
  - Output can be seen in the console
3. Testing instructions - find "README.txt"  
Manual testing:
  - run application as described in ## Build and run
  - the floor subsystem class outputs the messages that were read from the input.txt file
  - observe output of the floor subsystem, elevator and scheduler threads as they pass a message back and forth
4. Class diagrams - Elevator\_classDiagram.jpg, Floor\_classDiagram.jpg, Mailbox\_classDiagram.jpg, Scheduler\_classDiagram.jpg in iteration3\_diagrams folder
5. Sequence diagrams - Elevator\_sequenceDiagram.jpg, Floor\_sequenceDiagram.jpg, Mailbox\_sequenceDiagram.jpg, Scheduler\_sequenceDiagram.jpg in iteration3\_diagrams folder