Elevator Control System and Simulator

```

Carleton University
Department of Systems and Computer Engineering
SYSC 3303A Real-Time Concurrent Systems Winter 2023
Iteration 1 - Establish Connections between the three subsystems.
@version 1.0, 02/04/23
@version 2.0, 02/22/23
```

Group 7 Members:
* Ismail Zakaria
* Liu Patrick
* Nguyen Trong
* Elmokdad Hussein
* Ngo Huu Gia Bao

The distribution of work was coordinated using Atlassian Jira Software which can be viewed using this link: ECSS for quick reference – see APPENDIX A.

Iteration 1:
Trong: Elevator class, README, UML class & sequence, refactoring
Bobby: Scheduler class, README, UI logger
Hussein: Floor class, FloorTest, ElevatorTest
Patrick: Parser class, ElevatorRequest class, ParserTest, Exception class
Zak: Integration of system and system testing, revisions
Everyone took part in major code reviews and approved pull requests.

Iteration 2:
Trong: SchedulerState class, FloorState class, SchedulerStateTest, FloorStateTest class, and javadocs
Bao: FloorState class, README, refactoring, documentation
Hussein: UI improvements, refactoring
Patrick: Update Elevator Location feature, UML and State diagrams
Zak: Proposing ideas, revisions

APPENDIX A

Type	Key ↑	Summary	Assignee	Reporter	P	Status	Resolution	Created	Updated
	ECSS-1	Setup tasks	Bobby Ngo	Bobby Ngo	=	DONE	Done	Jan 15, 2023	Feb 3, 2023
	ECSS-2	Iteration 1 Implementation	Unassigned	Patrick Liu	=	DONE	Done	Jan 18, 2023	Feb 4, 2023
	ECSS-4	Submit Iteration 1 on BrightSpace	Trong Nguyen	SYSC3303 Project Group 7	=	DONE	Done	Jan 18, 2023	Feb 4, 2023
	ECSS-5	Elevator class	Trong Nguyen	SYSC3303 Project Group 7	=	DONE	Done	Jan 18, 2023	Feb 2, 2023
	ECSS-6	Scheduler Class	Bobby Ngo	SYSC3303 Project Group 7	=	DONE	Done	Jan 18, 2023	Jan 29, 2023
	ECSS-7	Floor class	Hussein El Mokdad	SYSC3303 Project Group 7	=	DONE	Done	Jan 18, 2023	Jan 29, 2023
	ECSS-8	Complete README.txt	Bobby Ngo	SYSC3303 Project Group 7	=	DONE	Done	Jan 18, 2023	Feb 4, 2023
	ECSS-9	Iteration 1 - Breakdown of Responsibilities	Trong Nguyen	SYSC3303 Project Group 7	=	DONE	Done	Jan 18, 2023	Feb 3, 2023
	ECSS-10	Iteration 1 - UML Class Diagram & Sequence Diagrams	Trong Nguyen	SYSC3303 Project Group 7	=	DONE	Done	Jan 18, 2023	Feb 4, 2023
	ECSS-11	Verify JavaDoc & Meaningful Comments	Trong Nguyen	SYSC3303 Project Group 7	=	DONE	Done	Jan 18, 2023	Feb 4, 2023
	ECSS-12	Review Unit Testing for all Classes	Trong Nguyen	SYSC3303 Project Group 7	=	DONE	Done	Jan 18, 2023	Feb 4, 2023
	ECSS-13	Initial Environment Setup	Zakaria Ismail	Zakaria Ismail	=	DONE	Done	Jan 20, 2023	Jan 29, 2023
	ECSS-14	Configure CI/CD Automated Testing	Unassigned	Zakaria Ismail	≫	TO DO	Unresolved	Jan 21, 2023	Jan 24, 2023
	ECSS-15	Iteration 0 Results Processing	Trong Nguyen	Zakaria Ismail	=	DONE	Done	Jan 21, 2023	Feb 3, 2023
	ECSS-16	Configure Logging	Unassigned	Zakaria Ismail	≫	TO DO	Unresolved	Jan 21, 2023	Jan 26, 2023
	ECSS-17	Input File Parser and Tests	Patrick Liu	Patrick Liu	^	DONE	Done	Jan 23, 2023	Feb 2, 2023
	ECSS-18	Fix/Setup Relative Filepath for input.txt file	Unassigned	Zakaria Ismail	≫	DONE	Done	Jan 24, 2023	Jan 29, 2023
	ECSS-19	Setup config.properties file to select input file	Unassigned	Zakaria Ismail	≫	TO DO	Unresolved	Jan 24, 2023	Jan 26, 2023
	ECSS-20	Unit test main.parser.Parser class	Patrick Liu	Zakaria Ismail	=	DONE	Done	Jan 24, 2023	Feb 3, 2023
	ECSS-21	Unit test main.java.dto.ElevatorRequest class	Patrick Liu	Zakaria Ismail	=	DONE	Done	Jan 24, 2023	Feb 3, 2023
	ECSS-22	README file	Trong Nguyen	Bobby Ngo	=	IN PROGRESS	Unresolved	Jan 25, 2023	Feb 3, 2023

Type	Key ↑	Summary	Assignee	Reporter	P	Status	Resolution	Created	Updated
	ECSS-23	Create DOCs folder and include UML files	Hussein El Mokdad	Hussein El Mokdad	=	DONE	Done	Jan 25, 2023	Feb 4, 2023
	ECSS-24	.gitignore for IntelliJ	Zakaria Ismail	Zakaria Ismail	=	DONE	Done	Jan 25, 2023	Jan 25, 2023
	ECSS-25	Setup custom exception class with centralized error messages and refactor exception throws	Unassigned	Zakaria Ismail	⌄	TO DO	Unresolved	Jan 26, 2023	Jan 26, 2023
	ECSS-26	Unit test main.java.floor.Floor class	Unassigned	Zakaria Ismail	=	DONE	Done	Jan 29, 2023	Feb 3, 2023
	ECSS-27	Integrate Iteration 1 Components	Unassigned	Zakaria Ismail	^	DONE	Done	Jan 29, 2023	Feb 8, 2023
	ECSS-28	Phase 1 Component Integration - Parser, Floor, Elevator, Scheduler	Zakaria Ismail	Zakaria Ismail	^	DONE	Done	Jan 29, 2023	Feb 2, 2023
	ECSS-30	Bi-directional Communication Implementation	Zakaria Ismail	Zakaria Ismail	^	DONE	Done	Feb 2, 2023	Feb 4, 2023
	ECSS-31	Iteration 2 setup	Unassigned	Trong Nguyen	=	TO DO	Unresolved	Feb 3, 2023	Feb 3, 2023
	ECSS-32	Verify that program can read the input file and pass the data back and forth	Zakaria Ismail	Zakaria Ismail	^	DONE	Done	Feb 3, 2023	Feb 4, 2023
	ECSS-33	Standardize string output to use String.format for variables instead of + concat	Zakaria Ismail	Zakaria Ismail	≫	TO DO	Unresolved	Feb 3, 2023	Feb 4, 2023
	ECSS-34	Added some more content to the readme	Trong Nguyen	Trong Nguyen	=	DONE	Done	Feb 4, 2023	Feb 8, 2023
	ECSS-35	Implement remaining test cases (scheduler, floor, and elevator)	Hussein El Mokdad	Hussein El Mokdad	=	DONE	Done	Feb 4, 2023	Feb 4, 2023
	ECSS-36	Documentation breakdown of the responsibilities of each team member for iteration 1	Trong Nguyen	Trong Nguyen	=	DONE	Done	Feb 4, 2023	Feb 4, 2023
	ECSS-37	Add sleep timer to allow the user to see the system interactions	Bobby Ngo	Zakaria Ismail	⌄	TO DO	Unresolved	Feb 4, 2023	Feb 4, 2023
	ECSS-38	Review the output logging and add improvements to the presentation if possible	Bobby Ngo	Zakaria Ismail	⌄	TO DO	Unresolved	Feb 4, 2023	Feb 4, 2023
	ECSS-39	Improve console logging UI	Hussein El Mokdad	Bobby Ngo	=	IN REVIEW	Unresolved	Feb 4, 2023	Feb 21, 2023
	ECSS-40	Update UML Class diagram	Bobby Ngo	Bobby Ngo	=	DONE	Done	Feb 4, 2023	Feb 4, 2023
	ECSS-41	Documentation - Iteration 2	Unassigned	Trong Nguyen	=	TO DO	Unresolved	Feb 8, 2023	Feb 8, 2023
	ECSS-42	UML Class Diagram - update	Patrick Liu	Trong Nguyen	=	IN PROGRESS	Unresolved	Feb 8, 2023	Feb 22, 2023
	ECSS-43	UML Sequence Diagram - update	Patrick Liu	Trong Nguyen	=	IN PROGRESS	Unresolved	Feb 8, 2023	Feb 22, 2023
	ECSS-44	Distribution of Responsibilities	Bobby Ngo	Trong Nguyen	=	IN PROGRESS	Unresolved	Feb 8, 2023	Feb 22, 2023
	ECSS-45	README - update	Bobby Ngo	Trong Nguyen	=	IN PROGRESS	Unresolved	Feb 8, 2023	Feb 22, 2023
	ECSS-46	SCHEDULER - State machine diagram	Trong Nguyen	Trong Nguyen	=	DONE	Done	Feb 8, 2023	Feb 20, 2023
	ECSS-47	ELEVATOR - State machine diagram	Trong Nguyen	Trong Nguyen	=	DONE	Done	Feb 8, 2023	Feb 20, 2023
	ECSS-48	Unit testing - Iteration 2	Unassigned	Trong Nguyen	=	DONE	Done	Feb 8, 2023	Feb 20, 2023
	ECSS-49	ElevatorState - Unit Testing state machine implementation	Trong Nguyen	Trong Nguyen	=	DONE	Done	Feb 8, 2023	Feb 20, 2023
	ECSS-50	SchedulerState - Unit testing state machine implementation	Trong Nguyen	Trong Nguyen	=	DONE	Done	Feb 8, 2023	Feb 20, 2023
	ECSS-51	Implement ElevatorState enum based on StateMachine diagram	Trong Nguyen	Trong Nguyen	=	DONE	Done	Feb 18, 2023	Feb 20, 2023
	ECSS-52	Implement SchedulerState enum based on StateMachine diagram	Trong Nguyen	Trong Nguyen	=	DONE	Done	Feb 18, 2023	Feb 20, 2023