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## SYSC3303 Project Iteration 1

### L2G2

#### Set Up & Test Instructions

##### Requirements

- Eclipse 2022 (any edition should be fine)
- Java 17 or higher

##### How to run

- Import the java project into eclipse using the "Import project" option in the eclipse workspace
- Navigate to the "Simulation.java" file in the simulation package.
- Right click this file, and tell eclipse to run as java.
- No command line arguments are required at this time

##### How to run tests in eclipse

- Right click the "tests" folder in the project explorer.
- Select "run as JUnit tests"

##### Overview

Our program is composed of four major components; the floor subsystem and the elevator subsystem are the threads, and the scheduler is the lock for the threads. Our fourth component, what we have called the simulator, is the entry point to run the program. For this iteration, all the simulator does is contain our main function. To run the program, you must run Simulation.java in the simulator package. This should then automatically input an example text file that we have created with elevator request data, and will print the results showing that the data was passed back and forth between the subsystems, through the scheduler.

In our test folder, we have created tests for the floor subsystem, file reader and elevator subsystem. We believe that these tests are enough to fully encompass the functionality of our program for iteration 1. An important thing to note is that we have used Mockito in some of our tests. It is a mocking framework that helped us to write clean and simple tests. This should not present any issue when running our program or tests, but we believe it is important to note that this library has been used in case there are any discrepancies.

All of the tests are included in the floor and elevator test packages, in `FloorSubsystemTest.java`, `InputFileReaderTest.java`, and `ElevatorSubsystemTest.java`. Each of these suites can be run from their respective files.