ID	Requirement	Related Use Case	Fulfilled By	Test	Description
1	The application interface contains button, display	UC1(Normal handling of an elevator for a passenger)	Floor, Up button, Down button, overload button, fire button	Run the app in the VM box to observe the ui.	The application interface has elevator buttons and a display for each floor it gets to and the signal it receives
2.	The elevator contains up and down marked buttons	UC1(Normal handling of an elevator for a passenger)	Floor	Run the app, and allow user to goa floor up and down the elevator	The app has a character marked u and d. For when the user wants to go up and down the elevator
3.	Elevator opens for a fixed time of 10secs, rings the bell then closes	UC1(Normal handling of an elevator for a passenger)	Door	Simulate the app for when the elevator door opens	The elevator door opens for a fixed time (10 seconds) allowing people to exit or board
4.	App allows user to enter and exit an elevator	UC1(Normal handling of an elevator for a passenger)	Elevator	Simulate the app for when passenger enters and exits the elevator	When elevator is in idle mode, it means passenger has exited the elevator
5.	Elevator has an overload level range for passengers	UC4(Overload alarm signal)	State, Elevator	Simulate the app for when the state is set to overload	When the elevator receives a overload signal. The state of the elevator changes to

					"overload". Then, the door of the elevator should open

6.	Elevator has a fire alarm signal	UC3(Fire alarm signal)	State, Elevator	Simulate the app for when the state is set to fire	When the elevator receives a fire alarm signal. The state of the elevator changes to "fire". Then, an audio and text message should be received, and the elevator should move to a safe floor
7.	Elevator has a door block alarm signal	UC2(Light sensor is interrupted when door is closing)	State, Elevator	Simulate the app for when the state is set to normal, but an obstacle is blocking the door when closing	When the door is closing and an obstacle interrupts it, the door should reopen and a warning message should be sent
8.	Elevator has a help alarm signal button	UC1(Passenger presses the help button)	State, Elevator	Simulate the app for when a user presses the help button. Help alarm signal is set to true	When the help button is pressed. The state of the elevator changes to "help". Then, a 911 call

					should be placed
9.	Elevator has a power out alarm signal button	UC 5(PowerOut alarm signal)	State, Elevator	Simulate the app for when the power out alarm signal is set to true	When the elevator receives a power out alarm signal. The state of the elevator changes to “powerOut”. Then, an audio and text message should be received, and the elevator should move to a safe floor
10.	A saved record saves the number of doors, number of elevators, number of floors, time period when an elevator opens to when it closes	N/A	Door, Floor, Elevator	N/A	Floor and Elevator class has attributes for number of floors, number of elevators as they are created. These classes will store and retrieve these records as required when simulated.

11.	Two allocation strategy	N/A	ECS	N/A	When user Calls for an elevator. If elevator is in an idle state it sends it, else it sends elevator_2
12.	The application doesn't contain any memory leak	N/A	N/A	Run valgrind to check for memory leaks	All dynamically allocated memory that the program was designed to allocate is deleted in the appropriate class destructor.