COMP 3004 - Assignment #2

1.

Name: Standard elevator use

Scope:Standard use of an elevator

Goal in Context(level?): To use the elevator to go to the desired level

Primary Actor: Elevator rider (the user)

Preconditions: For an elevator to be in a greater than 1 story building

Postconditions(Main Success scenario):

- User requests elevator to current floor
- Elevator arrives at current floor
- User steps in elevator cart and presses desired floor
- Elevator arrives at desired floor and its doors open
- User steps out safely at desired floor

Extensions:

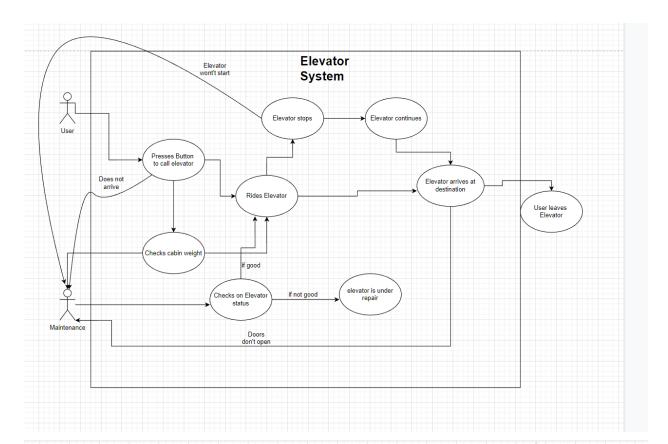
- 1. Elevator does not arrive at current floor
 - a. Elevator maintenance is informed
- Elevator arrives
 - a. User steps in elevator
 - b. Elevator informs user that weight limit is exceeded
 - c. Elevator maintenance is informed
 - d. User leaves elevator and takes the stairs
- Elevator arrives
 - a. User steps in elevator
 - b. User selects desired floor
 - c. Elevator begins to move but then is stopped
 - d. User contacts maintenance by emergency contact device built in
 - e. Maintenance safely extracts user from elevator
 - f. Maintenance takes not of what caused the issue
- 4. Elevator arrives
 - a. User steps in elevator
 - b. User selects desired floor
 - c. Elevator begins to move but then is stopped by user
 - d. User then restarts elevator by pressing start button
- Elevator arrives
 - a. User steps in elevator
 - b. User selects desired floor
 - c. Elevator moves to desired floor but doors don't open
 - d. User contacts maintenance by emergency contact device built in
 - e. Maintenance safely extracts user from elevator

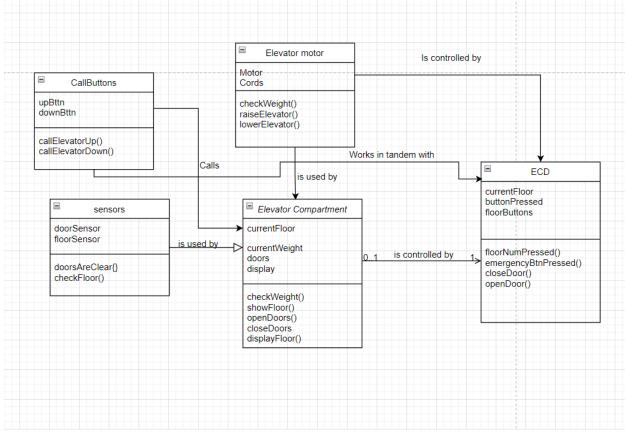
- f. Maintenance takes not of what caused the issue
- 6. Elevator arrives
 - a. User steps in elevator
 - b. User selects desired floor
 - c. Fire alarm within building goes off
 - d. Elevator informs user of fire
 - e. Elevator changes course to safe floor
 - f. Elevator arrives at safe floor
 - g. Doors open, user exits elevator
- 7. Elevator arrives
 - a. User steps into the elevator
 - b. Elevator door sensors notice something is blocking the door from closing
 - c. The elevator doors stop from trying to close and re-open again
 - d. Elevator doors remain open until obstacle in removed from blocking the door
- 8. Elevator arrives
 - a. User steps in elevator
 - b. User selects desired floor
 - c. Power in building, suddenly goes off
 - d. Emergency power turns on
 - e. Elevator moves to a safe floor
 - f. Doors open, user exits elevator

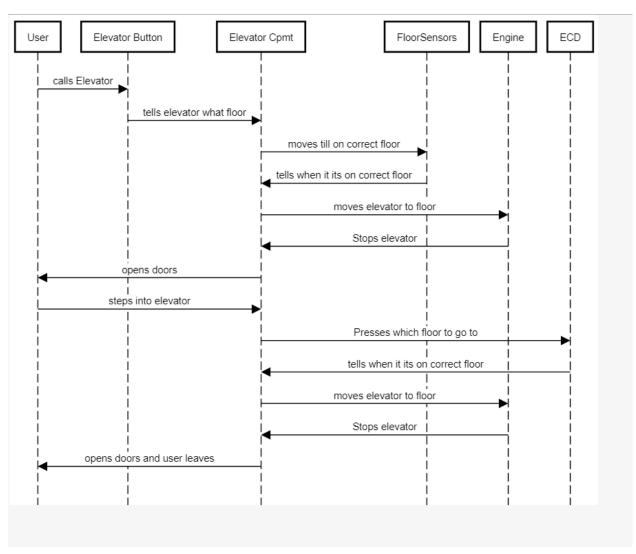
Minimum Requirements: User has left the elevator cart

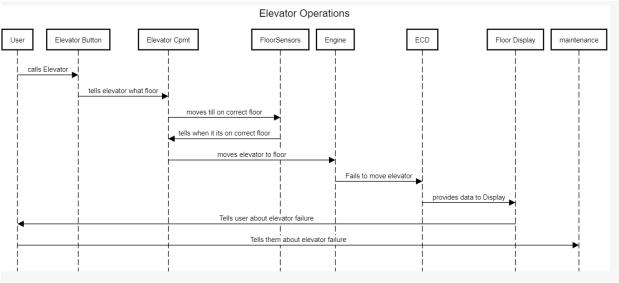
Stakeholders and Interest:

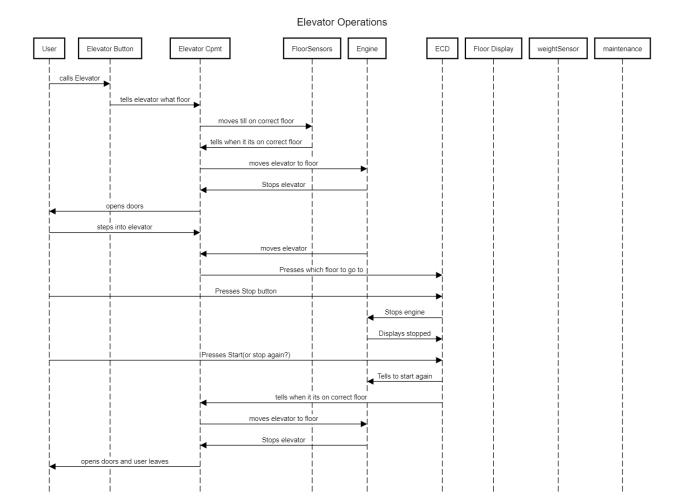
- Elevator user: To take the elevator to desired floor
- Elevator maintenance: to ensure the elevator functions smoothly



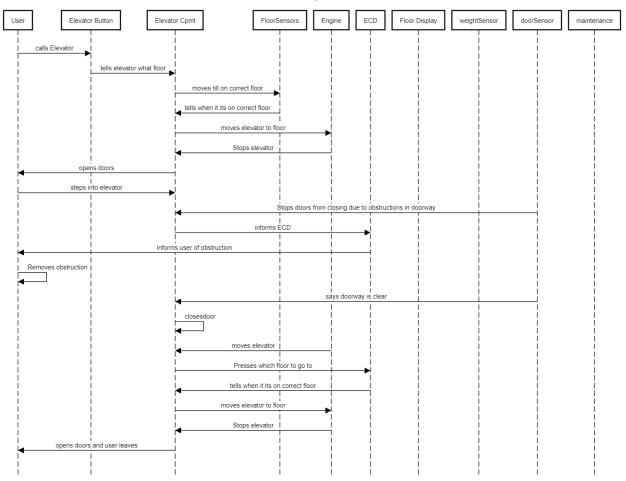


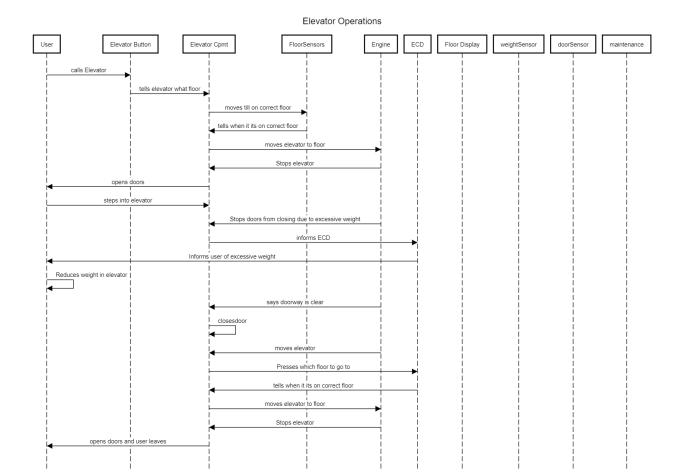


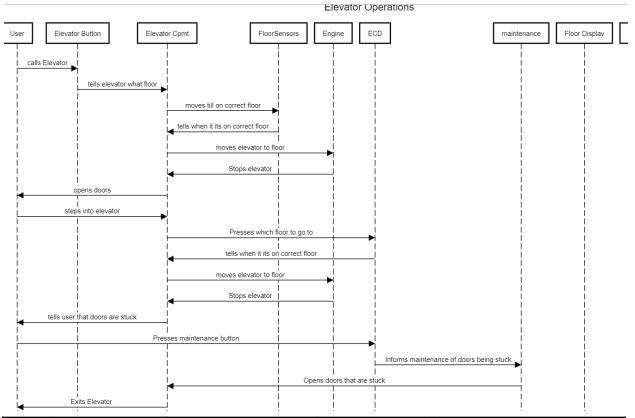




Elevator Operations







<u>ID</u>	<u>Description</u>	Requirement	Fulfilled By	Related Use Case
1.1	Elevator moves to floor it is called	Elevator arrives at the floor it is called	Elevator unit	Standard elevator use
1.2	Doors open and user steps in	User is now inside elevator compartment	User and Elevator	Standard elevator use
1.3	Doors close and elevator moves	Elevator doors safely close and elevator moves at destination floor	Elevator and Door sensors	Standard elevator use
1.4	Elevator arrives at desired floor	Elevator arrives at the floor the user inputted	Elevator and floor sensors	Standard elevator use
1.5	Doors open, user steps out	Doors open and the user steps out of the elevator	User and elevator	Standard elevator use

see Attached header file