TRACEABILITY

Elevator System

Team 1

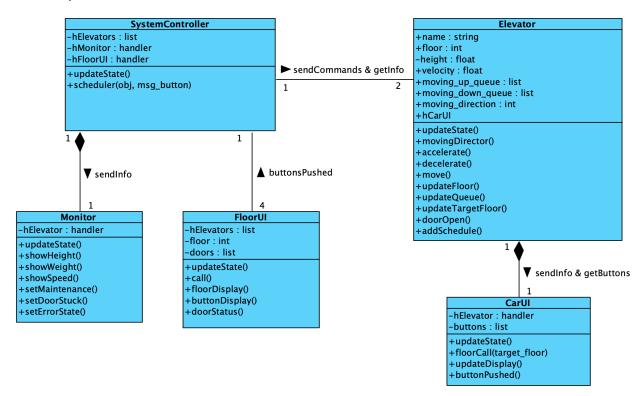
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Table of Contents

System Architecture	2
Software Traceability	3

System Architecture

The elevator system is controlled by a *SystemController*, receiving button information from each *FloorUI* and *Elevator*, and sending information and commands to the *Monitor* and *Elevator*. Each Elevator has a CarUI, with which users can observe the elevator status and select floors to go. The architecture of the elevator system is shown below.



Software Traceability

	Is implemented by	Is validated by
R1 (FloorUI)	S3.1, S3.2, S3.3	T1.4, T2.1, T3.1, T3.4
R1.1	S3.3	T2.1
R1.2	S3.3	T1.4
R1.3	S3.2	T1.4
R1.4	S3.1	T3.1
R1.4.1	S3.1.1	T3.1.1
R1.4.2	S3.1.2	T3.1.1
R1.5	S3	T3.4
R2(CarUI)	S4.1, S4.2, S4.3	T1.3, T2.2, T3.1, T3.2, T3.3
R2.1	S4.1	T1.3.2
R2.1.1	S4.1.1	T1.3.2
R2.1.2	S4.1.2	T1.3.2
R2.2	S4.1.4, S4.1.5	T1.3.2, T1.3.3
R2.2.1	S4.1.4	T1.3.2.2
R2.2.2	S4.1.4	T1.3.2.1
R2.2.3	S4.1.4, S4.1.5	T1.3.3.1
R2.2.4	S4.1.4, S4.1.5	T1.3.3.4
R2.3	S4.3	T1.3.1
R2.4	S4.2	T1.3.3
R2.5	S4.1.3	T3.4
R3(Monitor)	S5.1, S5.2	T2.1, T3.3, T3.4
R3.1	S5	T3.4
R3.2	S5	T3.4
R3.3	S5.1, S5.2	T1.5, T3.3, T3.4
R3.3.1	S5	T3.3
R3.3.2	S5.1	T1.5.1
R3.3.3	S5	T1.5.1
R3.3.4	S5.2	T3.4
R3.4	S5	T3.4
R4(Controller)	S1.1, S2.1, S2.2, S2.3	T1.1, T1.2, T2, T3.3, T3.4
R4.1	S1.1, S2.1, S2.2, S2.3, S4.3	T1.2, T3.3, T3.4
R4.1.1	S2.3	T2.1
R4.1.2	S4.3	T2.2
R4.1.3	S1.1.1, S1.1.2	T1.1.1, T1.1.2, T2.3.1
R4.2	S1.1, S2.1, S2.2, S2.3	T1.1, T3.3, T3.4
R4.2.1	S1.1	T1.1.1, T1.1.2
R4.2.2	S1.2	T1.1.2
R4.2.3	S1.1	T2.3.1, T3.3, T3.4
R4.2.4	S2.2.4, S2.3	T2.3.1, T3.3, T3.4
R4.3	S2.1, S2.2	T1.2, T1.3
R4.3.1	S2.1.1	T1.2.2, T1.2.3
R4.3.2	S2.1.3	T1.2.4, T1.3.3
R4.3.3	S2.1.3	T1.2.1, T1.2.4