Class Diagram :

Request :

- int time
- int floor
- string button

+ Request (int t, int f, string b)
+ get_ floor ()
+ get_ button()
+ get_ time ()
+ set_ floor ()
+ set_ button()
+ set_ time()
+ ToString ()

Elevator :

- elevator ()

Scheduler :

+ mutex mutex
+ queue < Request>
request Queue
+ conditional-variable cd

+ add Request (request)
+ get Request ()
+ Send Response (int elevatorID, int floor)

Floor Subsystem :

+ inputFile (file)
+ Request req (time, floor, direction)

+ floorSubsystem ()

Sequence Diagram :