

2 root 2

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### Control Tower

```
+ ArrayList < Passenger > people
+ ArrayList < Elevator > ellys
+ int minFloor
+ int maxFloor
+ int time // tracks time unit

+ void assignZones () // assign min, max zone to Elevators
+ void addPassenger () // add Passenger to Elevator with correct zone
+ void updateTime () // constantly incrementing time
```

ArrayList of...

ArrayList of...

ArrayPriority Queue of...

### Elevator

```
+ ArrayPriority Queue < Passenger > riders
+ int timeToEnd // how long until arrives at Ground Floor
+ boolean available
+ int minZone
+ int maxZone ] // zones covered by Elevator
+ int currFloor
+ int maxFloor
+ boolean returning ] // for evaluating calcTime()
+ int numFloors
+ int numPassengers

+ void calcTime () // calculates timeToEnd
+ void add (Passenger)
+ Passenger remove ()
+ is Empty ()
+ is Full ()
```

### Passenger

```
int destination
int enterTime
int boardTime ] // for data logging purposes
int exitTime
boolean isBoarded
```