

Group Number: #8

Group Members:

Pengliang Zhang 101014341

Xinrui Li 101018938

Xinyu Chen 101031031

Tongdan Zhu 101057752

Lixuan Luo 101019254

Running Instructions:

1. First run ElevatorSubsystem.java

//This class is the server side of a simple echo server based on UDP/IP.

// The server receives from a client a packet containing a character

// string, then echoes the string back to the client.

2. Then run Scheduler.java

//This class is a intermediate host based on UDP/IP.

3. Next run FloorSubsystem.java

//This class is the client side of a simple echo server based on UDP/IP.

//The client receives from a server a package containing elevator state and date.

4. Finally, run FloorUser.java

//This class is the client side of a simple echo server based on UDP/IP.

//The client sends a package to server containing a request and date.

Files included:

1)ElevatorSubsystem.java

2)Elevator.java

3)ElevatorSubsystem.java

4)idle.java

5)Downmode.java

6)Upmode.java

7)Scheduler.java

8)ElevatorStatus.java

9)FloorSubsystem.java

10)FloorUser.java

11)TextFile.java

Port:

PORT 23: Bond to floor's receive Socket

PORT 3000: Bond to scheduler's receive Socket

Data Format:

Packet send from Floor:

byte 0-1: 00=user, 01=elevator-1

byte 2-3: 00=up, 01=down

byte 4-5: 01=01, 02=Cart2, 03=Cart3,...(user's current floor)

byte 6-7: 01=floor 1, 02=floor 2, ...(destination)

byte 8-35: current time

Packet send from elevator to scheduler:

byte 0-1: 01 sent to scheduler

byte 2-3: elevator number (01=elevator-1)

byte 4-5: elevator currern mode (01 up , 02 down , 03 idle)

byte 6-7: elevator floor

byte 8-35: time

Packet send from scheduler to elevator

byte 0-1: user current floor

byte 2-3: destination floor

byte 4-28: time