

CPTS 464 – Project 2
Pictures of Executables running.
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Operator – Subscriber running.

You can see both types of published content, Position and Accident, the proper Route name, bus name, traffic conditions(if applicable. I.e position), stop number, number of stops, time between stops, fill in ratio and finally a timestamp.

Position	Express2	Bus21	light	3	6	3	48	11.00.30
Position	Express2	Bus22	normal	3	6	3	34	11.00.30
Accident	Express1	Bus13		1				11.00.30
Position	Express1	Bus13	normal	1	4	12	74	11.00.30
Accident	Express1	Bus12		1				11.00.30
Position	Express1	Bus12	heavy	1	4	11	10	11.00.30
Position	Express1	Bus11	normal	1	4	2	58	11.00.31
Position	Express2	Bus23	normal	5	6	3	75	11.00.32
Position	Express2	Bus22	normal	4	6	3	41	11.00.33
Position	Express2	Bus21	normal	4	6	3	99	11.00.33
Accident	Express1	Bus11		2				11.00.33
Position	Express1	Bus11	normal	2	4	12	95	11.00.33
Position	Express2	Bus23	normal	6	6	3	79	11.00.35
Position	Express2	Bus22	light	5	6	3	7	11.00.36
Position	Express2	Bus21	normal	5	6	3	22	11.00.36

Passenger 1, 2 – Subscriber

The passenger Subscribers (1 and 2) Display messages from the route they are subscribed to, as well as the stop they are subscribed to. Once a bus reaches their stop, they get on the bus and sub to only that bus. Once the bus reaches their “Target” stop, they get off and the executable terminates with a timestamp.

```
I am passenger 1. I am waiting for the bus...
from route Express1 That im subbed to.
  Position      Route Express1 Bus Bus12      Traffic normal Stop#: 1      #Stops 4
from route Express1 That im subbed to.
Accident      Express1      Bus13      1      11.01.16
from route Express1 That im subbed to.
  Position      Route Express1 Bus Bus13      Traffic normal Stop#: 1      #Stops 4
from route Express1 That im subbed to.
  Position      Route Express1 Bus Bus11      Traffic normal Stop#: 2      #Stops 4
from route Express1 That im subbed to.
  Position      Route Express1 Bus Bus12      Traffic heavy Stop#: 2      #Stops 4
from route Express1 That im subbed to.
  Position      Route Express1 Bus Bus12      Traffic normal Stop#: 3      #Stops 4
from route Express1 That im subbed to.
  Position      Route Express1 Bus Bus11      Traffic normal Stop#: 3      #Stops 4
Bus Bus12 is at my stop!: 4
Getting on the bus.
  Position      Express1      Bus12      normal 4      4      2      52      11.01.21
stop is: 4
my target is 3
stop is: 4
my target is 3
stop is: 4
my target is 3
stop is: 3
my target is 3
Arrived at my destination, via bus Bus23 at 11.01.23
```

```
I am passenger 2. I am waiting for the bus...
from route Express2 That im subbed to.
  Position      Route Express2  Bus Bus21      Traffic heavy  Stop#: 2      #Stops 6
from route Express2 That im subbed to.
  Position      Route Express2  Bus Bus23      Traffic light   Stop#: 2      #Stops 6
from route Express2 That im subbed to.
  Position      Route Express2  Bus Bus22      Traffic heavy   Stop#: 2      #Stops 6
Bus Bus21 is at my stop!: 3
Getting on the bus.
  Position      Express2      Bus21  heavy  3      6      1      4      11.01.21
stop is: 3
my target is 2
stop is: 4
my target is 2
stop is: 4
my target is 2
Bus Bus21 Ariving at stop 4. Time: 11.01.22. Stops left: 0
stop is: 4
my target is 2
stop is: 4
my target is 2
stop is: 3
my target is 2
stop is: 1
my target is 2
stop is: 1
my target is 2
stop is: 5
my target is 2
stop is: 2
my target is 2
Arrived at my destination, via bus Bus11 at 11.01.24
```

Publisher

The publisher is responsible for publishing all the information to the subscribers. This will add routes and buses, start a thread for each bus, and then begin execution of the simulation. It writes position instances, or accident instances, depending on which happens.

```
<terminated> Run AccidentPublisher [Java Application] /usr/lib/jvm/java-8-openjdk/
NumVehicles: 3
Adding new route Express1
Adding new route Express2
NumStops 4
timeBW 2
NumStops 6
timeBW 3
Passed in routeInname as Express1
Passed in routeInname as Express1
Passed in routeInname as Express1
Starting thread

Starting thread

Passed in routeInname as Express2
Starting thread

Passed in routeInname as Express2
Starting thread

Passed in routeInname as Express2
Starting thread

Starting thread

Writing Position for bus Bus11
Writing Position for bus Bus12
Writing Position for bus Bus23
Writing Position for bus Bus22
Writing Position for bus Bus21
Writing Position for bus Bus13
Writing Position for bus Bus13
Writing Acciedent for bus Bus12
Writing Position for bus Bus11
Writing Position for bus Bus12
Writing Position for bus Bus22
Writing Position for bus Bus23
Writing Position for bus Bus21
Writing Position for bus Bus13
Writing Position for bus Bus11
```