

Demo fault-tolerant client-server ticket reservation system

1. Started 2 servers and 2 clients: client 1 is connected to server 1; client 2 is connected to server 2.

- Server 1:
 - <serverId> <total#Servers> <total#Tickets>
 - <ip>:<port> (id and port of serverId 1)
 - <ip>:<port> (id and port of serverId 2)
- Server 2:
 - <serverId> <total#Servers> <total#Tickets>
 - <ip>:<port> (id and port of serverId 1)
 - <ip>:<port> (id and port of serverId 2)
- Client 1:
 - <total#Servers>
 - <ip>:<port> (ip and port of the closest server: serverId 1)
 - <ip>:<port>
- Client 2:
 - <total#Servers>
 - <ip>:<port> (ip and port of the closest server: serverId 2)
 - <ip>:<port>

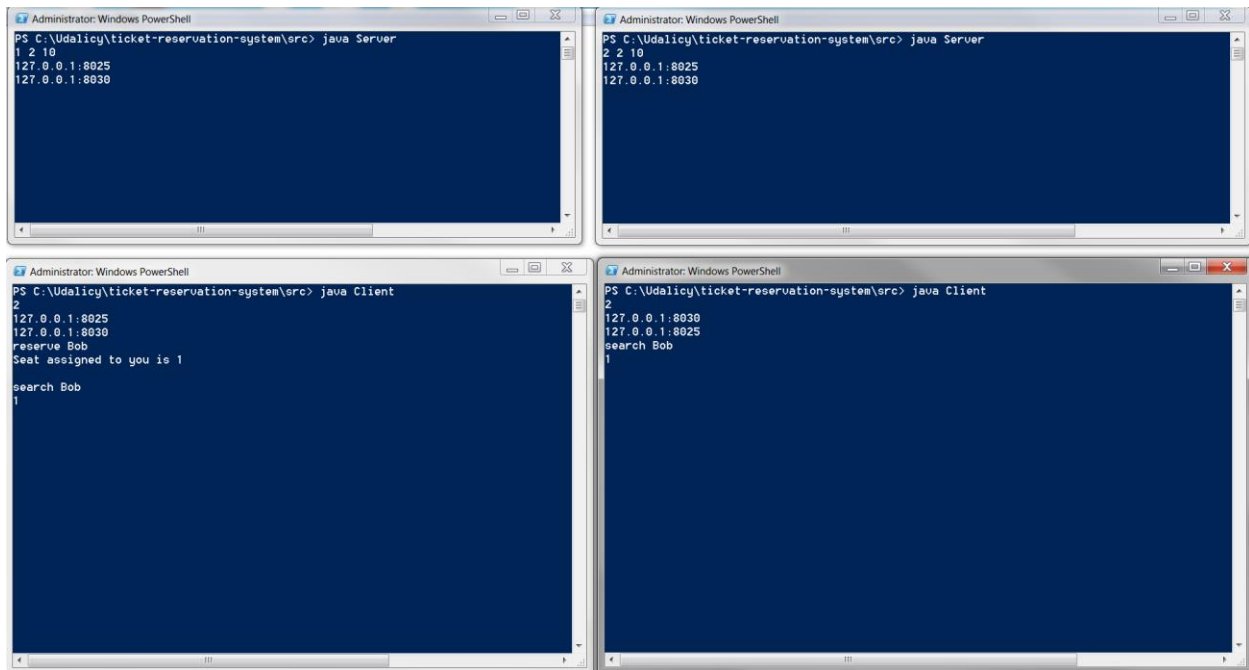
```
Administrator: Windows PowerShell Server 1
PS C:\Udacity\ticket-reservation-system\src> java Server
1 2 10
127.0.0.1:8025
127.0.0.1:8030

Administrator: Windows PowerShell Server 2
PS C:\Udacity\ticket-reservation-system\src> java Server
2 2 10
127.0.0.1:8025
127.0.0.1:8030

Administrator: Windows PowerShell Client 1
PS C:\Udacity\ticket-reservation-system\src> java Client
2
127.0.0.1:8025
127.0.0.1:8030
reserve Bob
Seat assigned to you is 1
search Bob
1

Administrator: Windows PowerShell Client 2
PS C:\Udacity\ticket-reservation-system\src> java Client
2
127.0.0.1:8030
127.0.0.1:8025
```

2. Server 1 and server 2 have the same seat information:



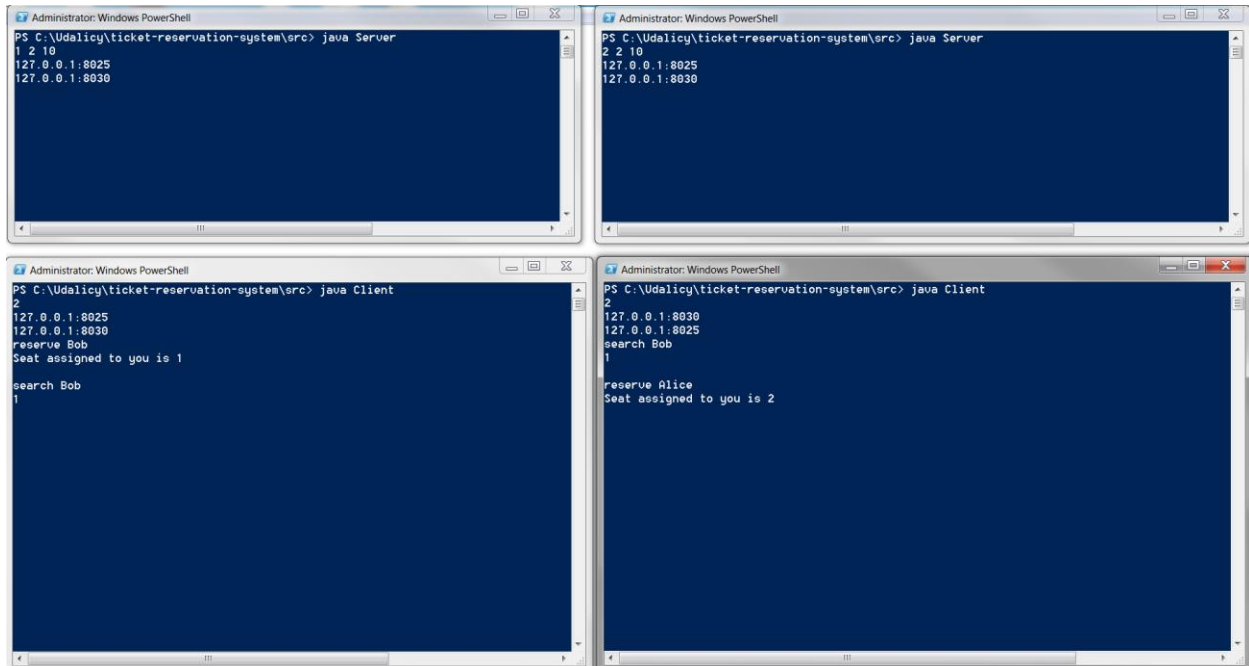
```
Administrator: Windows PowerShell
PS C:\Udacity\ticket-reservation-system\src> java Server
1 2 10
127.0.0.1:8025
127.0.0.1:8030

Administrator: Windows PowerShell
PS C:\Udacity\ticket-reservation-system\src> java Server
2 2 10
127.0.0.1:8025
127.0.0.1:8030

Administrator: Windows PowerShell
PS C:\Udacity\ticket-reservation-system\src> java Client
2
127.0.0.1:8025
127.0.0.1:8030
reserve Bob
Seat assigned to you is 1
search Bob
1

Administrator: Windows PowerShell
PS C:\Udacity\ticket-reservation-system\src> java Client
2
127.0.0.1:8030
127.0.0.1:8025
search Bob
1
```

3. Client 2 is connecting to server 2 and reserves a seat for Alice:



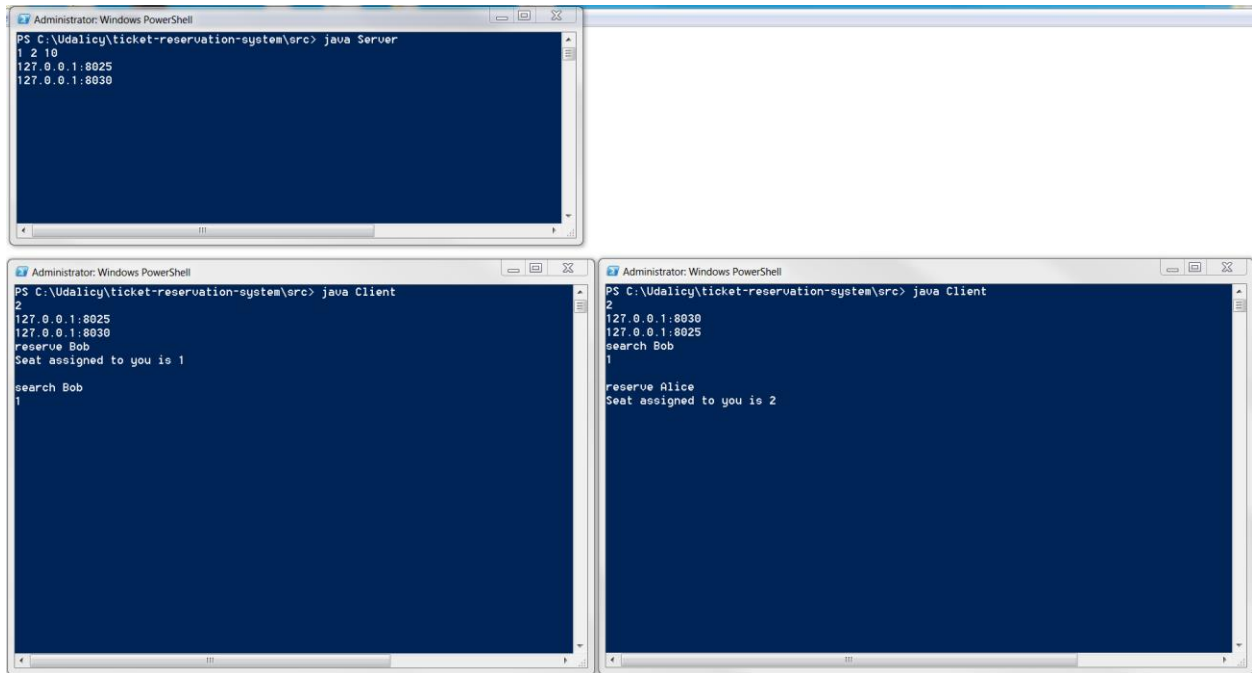
```
Administrator: Windows PowerShell
PS C:\Udacity\ticket-reservation-system\src> java Server
1 2 10
127.0.0.1:8025
127.0.0.1:8030

Administrator: Windows PowerShell
PS C:\Udacity\ticket-reservation-system\src> java Server
2 2 10
127.0.0.1:8025
127.0.0.1:8030

Administrator: Windows PowerShell
PS C:\Udacity\ticket-reservation-system\src> java Client
2
127.0.0.1:8025
127.0.0.1:8030
reserve Bob
Seat assigned to you is 1
search Bob
1

Administrator: Windows PowerShell
PS C:\Udacity\ticket-reservation-system\src> java Client
2
127.0.0.1:8030
127.0.0.1:8025
search Bob
1
reserve Alice
Seat assigned to you is 2
```

4. Server 2 is down:

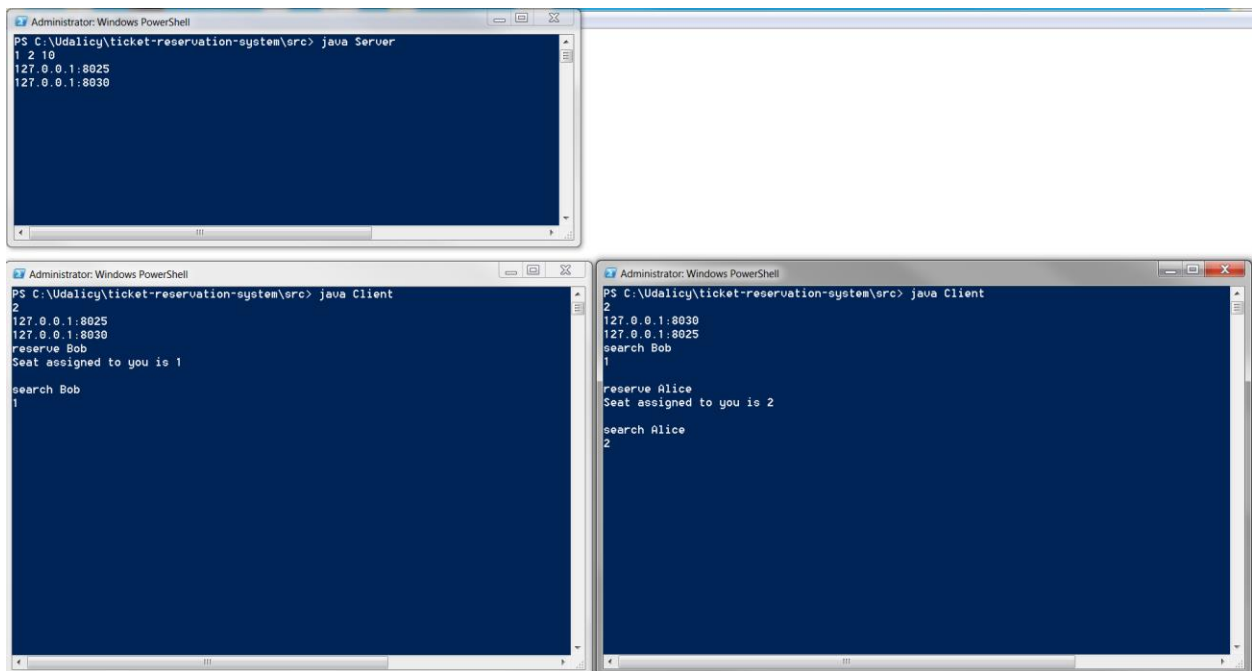


```
Administrator: Windows PowerShell
PS C:\Udalicy\ticket-reservation-system\src> java Server
1 2 10
127.0.0.1:8025
127.0.0.1:8030

Administrator: Windows PowerShell
PS C:\Udalicy\ticket-reservation-system\src> java Client
2
127.0.0.1:8025
127.0.0.1:8030
reserve Bob
Seat assigned to you is 1
search Bob
1

Administrator: Windows PowerShell
PS C:\Udalicy\ticket-reservation-system\src> java Client
2
127.0.0.1:8030
127.0.0.1:8025
search Bob
1
reserve Alice
Seat assigned to you is 2
```

5. Client 2 is connected to its next closest available server (server 1) to retrieve Alice's seat information:



```
Administrator: Windows PowerShell
PS C:\Udalicy\ticket-reservation-system\src> java Server
1 2 10
127.0.0.1:8025
127.0.0.1:8030

Administrator: Windows PowerShell
PS C:\Udalicy\ticket-reservation-system\src> java Client
2
127.0.0.1:8025
127.0.0.1:8030
reserve Bob
Seat assigned to you is 1
search Bob
1

Administrator: Windows PowerShell
PS C:\Udalicy\ticket-reservation-system\src> java Client
2
127.0.0.1:8030
127.0.0.1:8025
search Bob
1
reserve Alice
Seat assigned to you is 2
search Alice
2
```