

Programming Project 3

CS5352 Advanced Operating Systems Design

Spring 2017

How to Run the Project

- Just Run the Makefile Using make command**
- Enter 1 to start the server**
- Enter 2 to start the client**
- Follow the instructing in the program**

To start another peer

- Open another command prompt and run the makefile and start the peer**

Test Run

Start the Server

```
disci:/Project 3$ make
javac -g Client.java
javac -g Server.java
java main
Select you Option
1 to Run as Server
2 to Run as Client
1
Server Started at Port number 8888
Waiting for Client...
```

Start Peer1 and follow the program instruction

```

disci:/Project 3$ make
java main
Select you Option
1 to Run as Server
2 to Run as Client
2
Connecting to Server 127.0.0.1 on Port number 8888
Just Connected to client on port no /127.0.0.1:8008
Enter Peer Id of this Client
1
Enter the Shared Directory Path
/home/ajegarka/Project 3/Files/Peer1
Enter the port number of the peer to act as the server
8080
Client server created
Registering File F16.txt from /home/ajegarka/Project 3/Files/Peer1 to server
Registering File F20.txt from /home/ajegarka/Project 3/Files/Peer1 to server
Registering File F19.txt from /home/ajegarka/Project 3/Files/Peer1 to server
Registering File F11.txt from /home/ajegarka/Project 3/Files/Peer1 to server
Registering File F12.txt from /home/ajegarka/Project 3/Files/Peer1 to server
Registering File F13.txt from /home/ajegarka/Project 3/Files/Peer1 to server
Registering File F38.txt from /home/ajegarka/Project 3/Files/Peer1 to server
Registering File F17.txt from /home/ajegarka/Project 3/Files/Peer1 to server
Registering File F14.txt from /home/ajegarka/Project 3/Files/Peer1 to server
Registering File F15.txt from /home/ajegarka/Project 3/Files/Peer1 to server
Registering File F18.txt from /home/ajegarka/Project 3/Files/Peer1 to server
Enter 1 to search for a file 2 to exit

```

Peer1 Files are registered at the server

```

disci:/Project 3$ make
javac -g Client.java
javac -g Server.java
java main
Select you Option
1 to Run as Server
2 to Run as Client
1
Server Started at Port number 8888
Waiting for Client...
Waiting for Client...
Conncted to Client on port /127.0.0.1:35537
File F16.txt Registred from Peer 1 Shared Dir /home/ajegarka/Project 3/Files/Peer1
File F20.txt Registred from Peer 1 Shared Dir /home/ajegarka/Project 3/Files/Peer1
File F19.txt Registred from Peer 1 Shared Dir /home/ajegarka/Project 3/Files/Peer1
File F11.txt Registred from Peer 1 Shared Dir /home/ajegarka/Project 3/Files/Peer1
File F12.txt Registred from Peer 1 Shared Dir /home/ajegarka/Project 3/Files/Peer1
File F13.txt Registred from Peer 1 Shared Dir /home/ajegarka/Project 3/Files/Peer1
File F38.txt Registred from Peer 1 Shared Dir /home/ajegarka/Project 3/Files/Peer1
File F17.txt Registred from Peer 1 Shared Dir /home/ajegarka/Project 3/Files/Peer1
File F14.txt Registred from Peer 1 Shared Dir /home/ajegarka/Project 3/Files/Peer1
File F15.txt Registred from Peer 1 Shared Dir /home/ajegarka/Project 3/Files/Peer1
File F18.txt Registred from Peer 1 Shared Dir /home/ajegarka/Project 3/Files/Peer1

```

Start the Peer2

```
disci:$ cd Project\ 3
disci:/Project 3$ make
java main
Select you Option
1 to Run as Server
2 to Run as Client
2
Connecting to Server 127.0.0.1 on Port number 8888
Just Connected to client on port no /127.0.0.1:8008
Enter Peer Id of this Client
2
Enter the Shared Directory Path
/home/ajegarka/Project 3/Files/Peer2
Enter the port number of the peer to act as the server
8081
Client server created
Registering File F30.txt from /home/ajegarka/Project 3/Files/Peer2 to server
Registering File F28.txt from /home/ajegarka/Project 3/Files/Peer2 to server
Registering File F22.txt from /home/ajegarka/Project 3/Files/Peer2 to server
Registering File F38.txt from /home/ajegarka/Project 3/Files/Peer2 to server
Registering File F23.txt from /home/ajegarka/Project 3/Files/Peer2 to server
Registering File F26.txt from /home/ajegarka/Project 3/Files/Peer2 to server
Registering File F27.txt from /home/ajegarka/Project 3/Files/Peer2 to server
Registering File F24.txt from /home/ajegarka/Project 3/Files/Peer2 to server
Registering File F21.txt from /home/ajegarka/Project 3/Files/Peer2 to server
Registering File F25.txt from /home/ajegarka/Project 3/Files/Peer2 to server
Registering File F29.txt from /home/ajegarka/Project 3/Files/Peer2 to server
Enter 1 to search for a file 2 to exit
```

Peer2 file registered at the server

```
Waiting for Client...
Connected to Client on port /127.0.0.1:35577
File F30.txt Registred from Peer 2 Shared Dir /home/ajegarka/Project 3/Files/Peer2
File F28.txt Registred from Peer 2 Shared Dir /home/ajegarka/Project 3/Files/Peer2
File F22.txt Registred from Peer 2 Shared Dir /home/ajegarka/Project 3/Files/Peer2
File F38.txt Registred from Peer 2 Shared Dir /home/ajegarka/Project 3/Files/Peer2
File F23.txt Registred from Peer 2 Shared Dir /home/ajegarka/Project 3/Files/Peer2
File F26.txt Registred from Peer 2 Shared Dir /home/ajegarka/Project 3/Files/Peer2
File F27.txt Registred from Peer 2 Shared Dir /home/ajegarka/Project 3/Files/Peer2
File F24.txt Registred from Peer 2 Shared Dir /home/ajegarka/Project 3/Files/Peer2
File F21.txt Registred from Peer 2 Shared Dir /home/ajegarka/Project 3/Files/Peer2
File F25.txt Registred from Peer 2 Shared Dir /home/ajegarka/Project 3/Files/Peer2
File F29.txt Registred from Peer 2 Shared Dir /home/ajegarka/Project 3/Files/Peer2
```

Start the Peer3

```

disci:/Project 3$ make
java main
Select you Option
1 to Run as Server
2 to Run as Client
2
Connecting to Server 127.0.0.1 on Port number 8888
Just Connected to client on port no /127.0.0.1:8008
Enter Peer Id of this Client
3
Enter the Shared Directory Path
/home/ajegarka/Project 3/Files/Peer3
Enter the port number of the peer to act as the server
8082
Client server created
Registering File F33.txt from /home/ajegarka/Project 3/Files/Peer3 to server
Registering File F31.txt from /home/ajegarka/Project 3/Files/Peer3 to server
Registering File F40.txt from /home/ajegarka/Project 3/Files/Peer3 to server
Registering File F39.txt from /home/ajegarka/Project 3/Files/Peer3 to server
Registering File F36.txt from /home/ajegarka/Project 3/Files/Peer3 to server
Registering File F13.txt from /home/ajegarka/Project 3/Files/Peer3 to server
Registering File F37.txt from /home/ajegarka/Project 3/Files/Peer3 to server
Registering File F38.txt from /home/ajegarka/Project 3/Files/Peer3 to server
Registering File F35.txt from /home/ajegarka/Project 3/Files/Peer3 to server
Registering File F34.txt from /home/ajegarka/Project 3/Files/Peer3 to server
Registering File F32.txt from /home/ajegarka/Project 3/Files/Peer3 to server
Enter 1 to search for a file 2 to exit

```

Peer3 File are registered at the server

```

Waiting for Client...
Connected to Client on port /127.0.0.1:35604
File F33.txt Registred from Peer 3 Shared Dir /home/ajegarka/Project 3/Files/Peer3
File F31.txt Registred from Peer 3 Shared Dir /home/ajegarka/Project 3/Files/Peer3
File F40.txt Registred from Peer 3 Shared Dir /home/ajegarka/Project 3/Files/Peer3
File F39.txt Registred from Peer 3 Shared Dir /home/ajegarka/Project 3/Files/Peer3
File F36.txt Registred from Peer 3 Shared Dir /home/ajegarka/Project 3/Files/Peer3
File F13.txt Registred from Peer 3 Shared Dir /home/ajegarka/Project 3/Files/Peer3
File F37.txt Registred from Peer 3 Shared Dir /home/ajegarka/Project 3/Files/Peer3
File F38.txt Registred from Peer 3 Shared Dir /home/ajegarka/Project 3/Files/Peer3
File F35.txt Registred from Peer 3 Shared Dir /home/ajegarka/Project 3/Files/Peer3
File F34.txt Registred from Peer 3 Shared Dir /home/ajegarka/Project 3/Files/Peer3
File F32.txt Registred from Peer 3 Shared Dir /home/ajegarka/Project 3/Files/Peer3

```

Search the file from Peer1

Enter the file name and port number of the selected peer's server

```

Enter 1 to search for a file 2 to exit
1
Enter the file name you need
F31.txt
F31.txt is present in
Peer 3
Select the peer#
3
Enter the port number of selected peer which is acting as a server
8082

```

File downloaded

```

Select the peer#
3
Enter the port number of selected peer which is acting as a server
8082
bytes transferred: 1724
F31.txt file has be downloaded /home/ajegarka/Project 3/Files/Peer3
F31.txt Downloaded from peer 3
Client Disconnected from server.

```

Peer1 Files before downloading file

```

disci:/Project 3/Files/Peer1$ ls
F11.txt  F13.txt  F15.txt  F17.txt  F19.txt  F38.txt
F12.txt  F14.txt  F16.txt  F18.txt  F20.txt

```

Peer1 files after downloading file

```

disci:/Project 3/Files/Peer1$ ls
F11.txt  F13.txt  F15.txt  F17.txt  F19.txt  F31.txt  F38.txt
F12.txt  F14.txt  F16.txt  F18.txt  F20.txt

```

Exception case

Starting Peer with starting the server

```

disci:/Project 3$ make
java main
Select you Option
1 to Run as Server
2 to Run as Client
2
Connecting to Server 127.0.0.1 on Port number 8008

*****Start the server first*****

```

Searching a file which does not exists

```
Enter 1 to search for a file 2 to exit
1
Enter the file name you need
File.tx
File not found in any peer
Client Disconnected from server.
```

Selecting the wrong peer

```
Enter 1 to search for a file 2 to exit
1
Enter the file name you need
F31.txt
F31.txt is present in
Peer 3
Peer 4
Peer 5
Select the peer#
6
Invalided Peer
Client Disconnected from server.
```