

## Manual :

### System Directories and contents:

- Source: Contains all source file for server and client  
Contains Ant build file
- execution: execution files including ClientFinal.jar and ServerFinal.jar  
Shared directory includes FileGenerator.java for creating txt files.
- OutputFile: Outputfiles of server and peer execution log
- run.sh: run bash script to execute system

### Source Code Import

Import Prog\_Ass\_1 directory from Source folder into Eclipse IDE .  
Then build project using Ant build

### Setup System Environment:

- Go to execution directory.
- Run FileGenerator.java from peer1, peer2, peer3 directory to create 1000 txt files of different size.

```
$ javac FileGenerator.java  
$ java FileGenerator
```

### Execution of System:

#### For Server

- Run run.sh bash script for execution

```
$ bash run.sh
```

- It will prompt you to select 1 for server and 2 for client  
*'Enter 1 to start server'*  
  
*Please enter Port No : <Enter port number for server to start>*
- It display below message after successfully starting of server

```
Server running on IP : 192.168.0.23..... Port No : 8888Trying to connect
```

#### For Peer

- Run run.sh bash script for execution

```
$ bash run.sh
```

- It will prompt you to select 1 for server and 2 for client  
*'Enter 2 to start server'*

<Display Client IP Address>

Please enter Port No for Peer to Peer connection :

<Enter Port for Peer Server for P2P>

Please enter Shared Directory Name :

<Enter directory to share>

Please enter Ip Address For socket connection :

<Enter Indexing Server IP address>

Waiting...

Please enter Port No for Socket connection :

<Enter Indexing Server port to connect>

<Display NO of Files Registered>

Register Response time: 41210000ns

PeerID: 8880

Options:

1 - Search for filename

2 - Obtain filename from peer

3 - List files in shared directory

4 - Exit

<select option> : "1"

Enter filename: <Enter Filename to lookup>

Below Peer have 2000.txt in their shared directory :

192.168.0.23:8870

Lookup Response time: 4616000 ns

PeerID: 8880

Options:

1 - Search for filename

2 - Obtain filename from peer

3 - List files in shared directory

4 - Exit

<select option> : "2"

Enter filename:

<Enter Filename to obtain>

Enter Peer Server IP Address:

<Enter Peer IP from where file will be downloaded>

Enter Peer Server Port No:

<Enter port no of peer server>

*Connecting...*  
*File 2990.txt downloaded (1100 bytes read)*  
*Download Response time: 5948000ns*

*PeerID: 8880*  
*Options:*  
*1 - Search for filename*  
*2 - Obtain filename from peer*  
*3 - List files in shared directory*  
*4 - Exit*

*4: Average Lookup Response time for this session: 4616000*

## Run From jar files

--Goto execution directory and run ServerFinal.jar

*\$ java -jar ServerFinal.jar*

-Run ClieFinal.jar as many times you want # of Peers

*\$ java -jar ClientFinal.jar*