

## Manual :

### System Environment Setup :

#### FileGenerator.java

- This class is to creating text files for any size which you want. Just change in sizeof file variable o=in class.

#### Config.properties

List all peer's ip address and port number on config.properties file.

### Execution of System:

--Goto execution directory and run p2pClient.jar

```
$ java -jar p2pClient.jar
```

```
Enter server_port : <Enter port number for server to start>
```

```
Enter server IP Address : <Enter IP address for server/client to start>
```

- It display below message after successfully starting of server

```
Trying to connect.....
```

```
Connection establashed from/127.0.0.1and port8089
```

- After connection established with all other peers in network it will provide below options.

Note : Always select Shared directory like pee1,pee2,peer3 ...in sequence.

First Start all 8 servers.

```
Please enter Shared Directory Name : peer1
```

```
PeerID: 8880
```

```
Options:
```

```
1 - Register File into DHT
```

```
2 - Search File into DHT
```

```
3 - Obtain File
```

```
4 - Exit
```

```
<select option> : "1"
```

```
Enter Filename :
```

```
abcd.txt
```

- It will register file into Distributed hash table using hash function and replicate that file into another peer.

- Now for search operation

```
PeerID: 8880
```

```
Options:
```

*Options:*

*1 - Register File into DHT*

*2 - Search File into DHT*

*3 - Obtain File*

*4 - Exit*

*2*

*Enter File Name to search for available peers :*

*abcd.txt*

- It will provide list of peers which have files with their IP and port number
- Below Peer have 2000.txt in their shared directory :
- 192.168.0.23:8870
- 192.168.0.23:8871
- Lookup Response time: 4616000 ns

- Now for obtain operation

*PeerID: 8880*

*Options:*

*1 - Register File into DHT*

*2 - Search File into DHT*

*3 - Obtain File*

*4 - Exit*

*3*

*Enter File Name to Download from available peers :*

*abcd.txt*

- It will download file from another peer if that's peer not available in network then it will try to locate replication and download it.