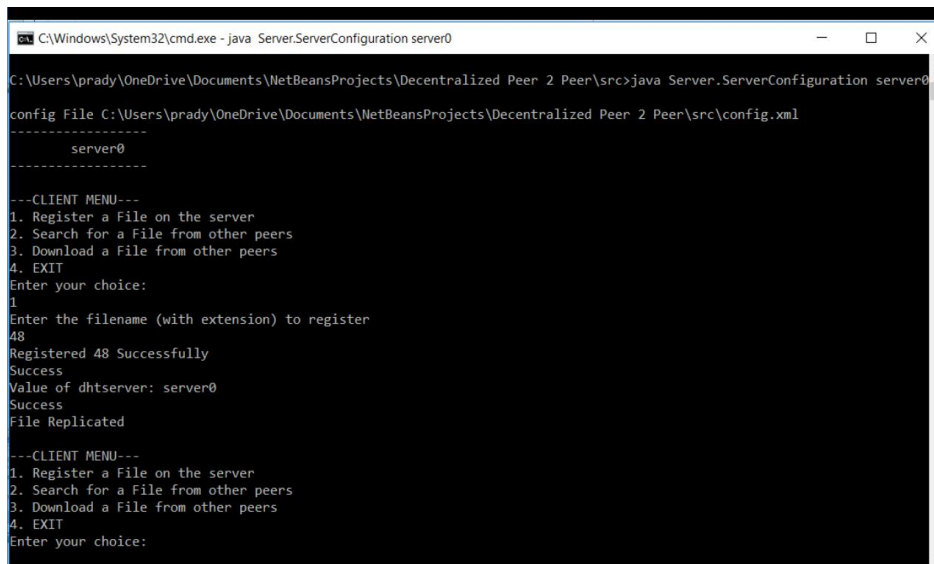# Decentralize Peer to Peer File Sharing System
CS550- Advanced Operating System
Pradyot Mayank (A20405826)

1. Open command prompt and follow the user manual and run batch file one by one. Or you can connect the servers manually by following the instruction in manual. All servers will be connected and running.

Server 0

Server 1

Server 2


```
C:\Windows\System32\cmd.exe - java Server.ServerConfiguration server2

C:\Users\prady\OneDrive\Documents\NetBeansProjects\Decentralized Peer 2 Peer\src>java Server.ServerConfiguration server2

config File C:\Users\prady\OneDrive\Documents\NetBeansProjects\Decentralized Peer 2 Peer\src\config.xml
------------------
        server2
------------------

---CLIENT MENU---
1. Register a File on the server
2. Search for a File from other peers
3. Download a File from other peers
4. EXIT
Enter your choice:
1
Enter the filename (with extension) to register
93
Registered 93 Successfully
Success
Value of dhtserver: server2
Success
File Replicated

---CLIENT MENU---
1. Register a File on the server
2. Search for a File from other peers
3. Download a File from other peers
4. EXIT
Enter your choice:
```
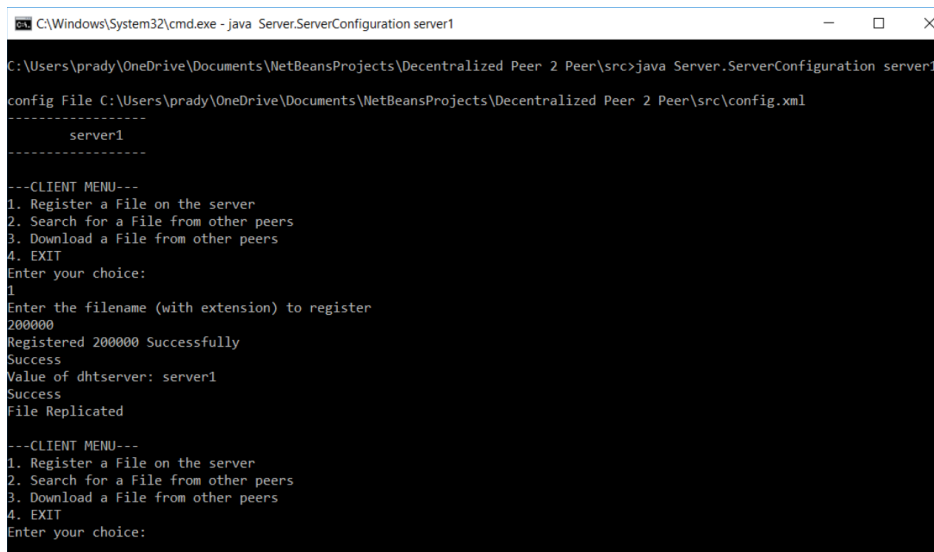
Server 3


```
C:\Windows\System32\cmd.exe - java Server.ServerConfiguration server3

C:\Users\prady\OneDrive\Documents\NetBeansProjects\Decentralized Peer 2 Peer\src>java Server.ServerConfiguration server3

config File C:\Users\prady\OneDrive\Documents\NetBeansProjects\Decentralized Peer 2 Peer\src\config.xml
------------------
        server3
------------------

---CLIENT MENU---
1. Register a File on the server
2. Search for a File from other peers
3. Download a File from other peers
4. EXIT
Enter your choice:
1
Enter the filename (with extension) to register
34
Registered 34 Successfully
Success
Value of dhtserver: server3
Success
File Replicated

---CLIENT MENU---
1. Register a File on the server
2. Search for a File from other peers
3. Download a File from other peers
4. EXIT
Enter your choice:
```

Server 4

Server 5

Server 6

Server 7

```
C:\Windows\System32\cmd.exe - java  Server.ServerConfiguration server7                                          —     □     ×

C:\Users\prady\OneDrive\Documents\NetBeansProjects\Decentralized Peer 2 Peer\src>java Server.ServerConfiguration server7

config File C:\Users\prady\OneDrive\Documents\NetBeansProjects\Decentralized Peer 2 Peer\src\config.xml
-----------------
        server7
-----------------

---CLIENT MENU---
1. Register a File on the server
2. Search for a File from other peers
3. Download a File from other peers
4. EXIT
Enter your choice:
1
Enter the filename (with extension) to register
45
Registered 45 Successfully
Success
Value of dhtserver: server7
Success
File Replicated

---CLIENT MENU---
1. Register a File on the server
2. Search for a File from other peers
3. Download a File from other peers
4. EXIT
Enter your choice:
```
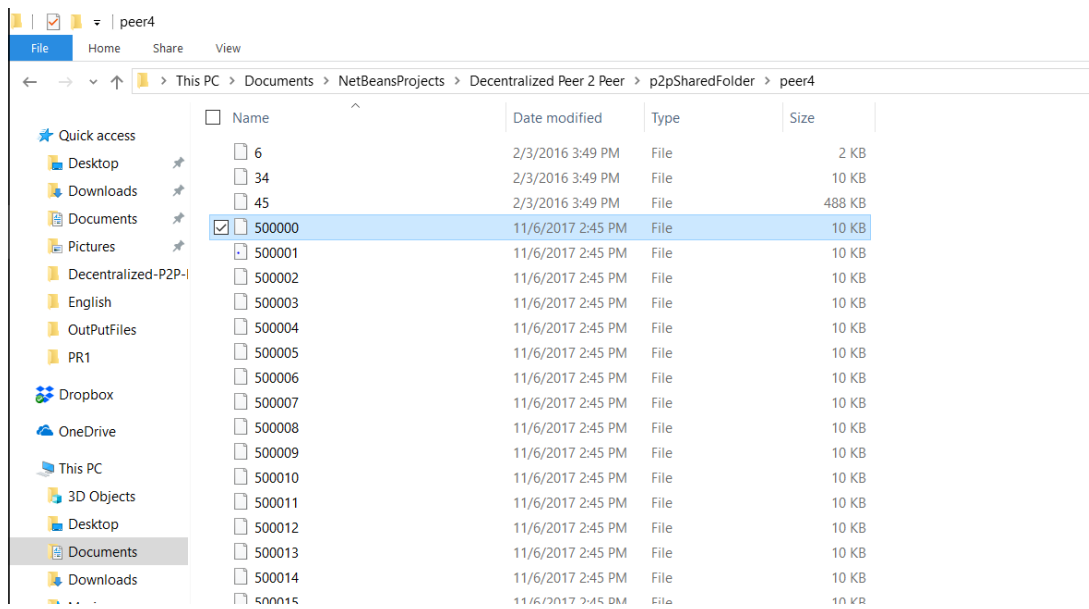
2. As soon as all the servers are registered the servers will behave as peers as well as server for all the other clients.
3. To register a file hit 1 and follow the instruction. Now all the other servers/peers will be able to find that file and search for it.
4. To search a file, enter the choice 2 from the menu and follow the instruction.


```
C:\Windows\System32\cmd.exe - java  Server.ServerConfiguration Server4                                          —     □     ×
---CLIENT MENU---
1. Register a File on the server
2. Search for a File from other peers
3. Download a File from other peers
4. EXIT
Enter your choice:
2
Enter the File Name to be searched:
700000
null

---CLIENT MENU---
1. Register a File on the server
2. Search for a File from other peers
3. Download a File from other peers
4. EXIT
Enter your choice:
500000

---CLIENT MENU---
1. Register a File on the server
2. Search for a File from other peers
3. Download a File from other peers
4. EXIT
Enter your choice:
2
Enter the File Name to be searched:
500000
[Server4, server7]
```
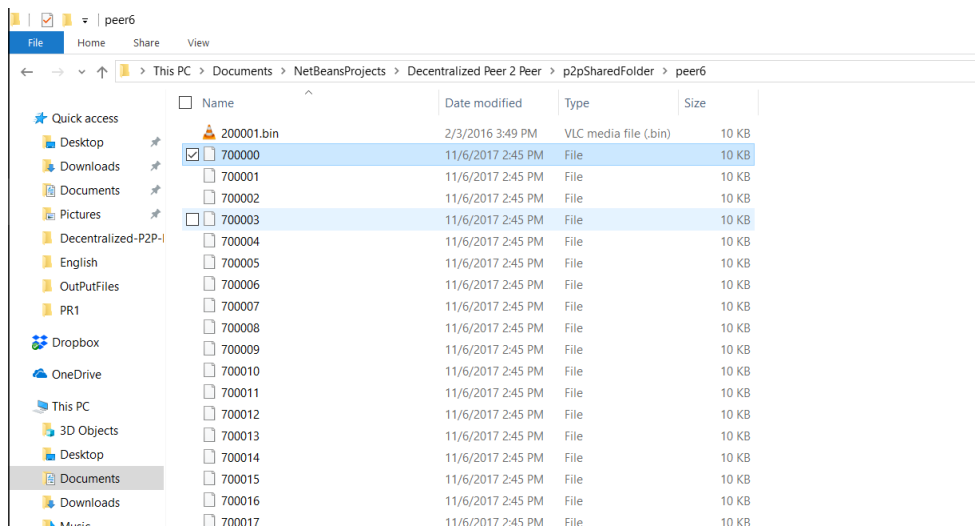
Command prompt window:

```
C:\Windows\System32\cmd.exe - java  Server.ServerConfiguration server6

3. Download a File from other peers
4. EXIT
Enter your choice:
1
Enter the filename (with extension) to register
700000
Registered 700000 Successfully
Success
Value of dhtserver: server6
Success
File Replicated

---CLIENT MENU---
1. Register a File on the server
2. Search for a File from other peers
3. Download a File from other peers
4. EXIT
Enter your choice:
2
Enter the File Name to be searched:
700000
[server6, server7]

---CLIENT MENU---
1. Register a File on the server
2. Search for a File from other peers
3. Download a File from other peers
4. EXIT
Enter your choice:
```

5. To download a file select 3 and enter the file name with extension you want to download. Enter the peer name from which you want to download the file.
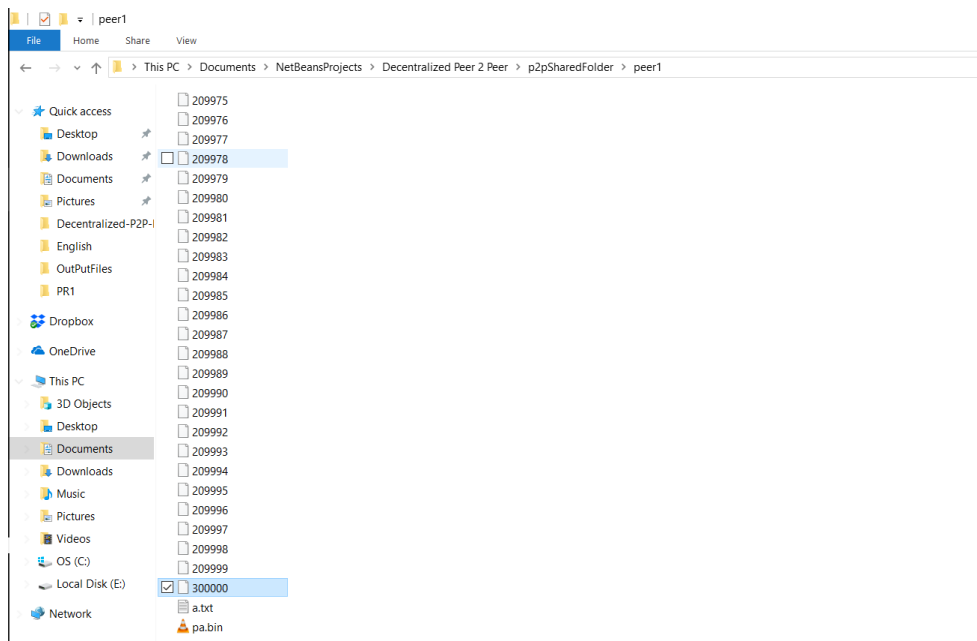
Example: Peer1 is downloading from server2

Example: Peer2 is downloading file from server 4

Example: Peer 5 is downloading file form server 6

C:\Windows\System32\cmd.exe - java Server.ServerConfiguration server5

```
C:\Users\prady\OneDrive\Documents\NetBeansProjects\Decentralized Peer 2 Peer\src\S
erver>javac *.java

C:\Users\prady\OneDrive\Documents\NetBeansProjects\Decentralized Peer 2 Peer\src\S
erver>cd..

C:\Users\prady\OneDrive\Documents\NetBeansProjects\Decentralized Peer 2 Peer\src>j
ava Server.ServerConfiguration server5
config File C:\Users\prady\OneDrive\Documents\NetBeansProjects\Decentralized Peer
2 Peer\src\config.xml
-----------------
        server5
-----------------

---CLIENT MENU---
1. Register a File on the server
2. Search for a File from other peers
3. Download a File from other peers
4. EXIT
Enter your choice:
3
Enter the Filename:
70000
From where you wish to obtain 70000 :
Server6
Downloading File Please wait ...

File Downloaded
Avarage Response time  5.691 ms
```

C:\Windows\System32\cmd.exe - java Server.ServerConfiguration Server6

```
Drive\Documents\NetBeansProjects\Decentralized Peer 2 Peer\src>java Server.ServerConf
iguration Server6
config File C:\Users\prady\OneDrive\Documents\NetBeansProjects\Decentralized Peer 2 P
eer\src\config.xml
-----------------
        Server6
-----------------

---CLIENT MENU---
1. Register a File on the server
2. Search for a File from other peers
3. Download a File from other peers
4. EXIT
Enter your choice:
1
Enter the filename (with extension) to register
700000
Registered 700000 Successfully
Success
Value of dhtserver: Server6
Success
File Replicated

---CLIENT MENU---
1. Register a File on the server
2. Search for a File from other peers
3. Download a File from other peers
4. EXIT
Enter your choice:
```

peer5

File   Home   Share   View

This PC > Documents > NetBeansProjects > Decentralized Peer 2 Peer > p2pSharedFolder > peer5

Quick access
Desktop
Downloads
Documents
Pictures
Decentralized-P2P-
English
OutPutFiles
PR1
Dropbox
OneDrive
This PC
3D Objects
Desktop
Documents
Downloads
Music
Pictures
Videos
OS (C:)
Local Disk (E:)
Network

609974
609975
609976
609977
609978
609979
609980
609981
609982
609983
609984
609985
609986
609987
609988
609989
609990
609991
609992
609993
609994
609995
609996
609997
609998
609999
700000