Programming Project 2

Napster-style peer-to-peer (P2P) file sharing system

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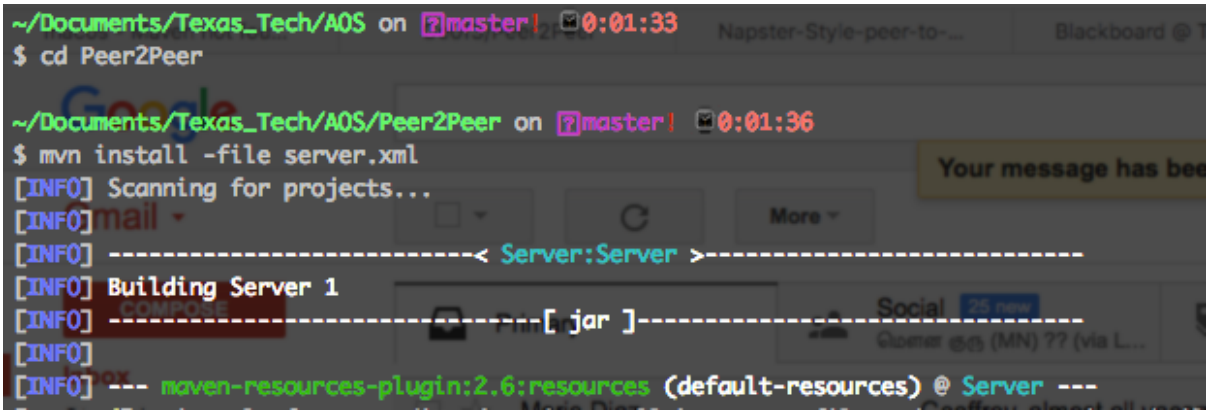
Testing

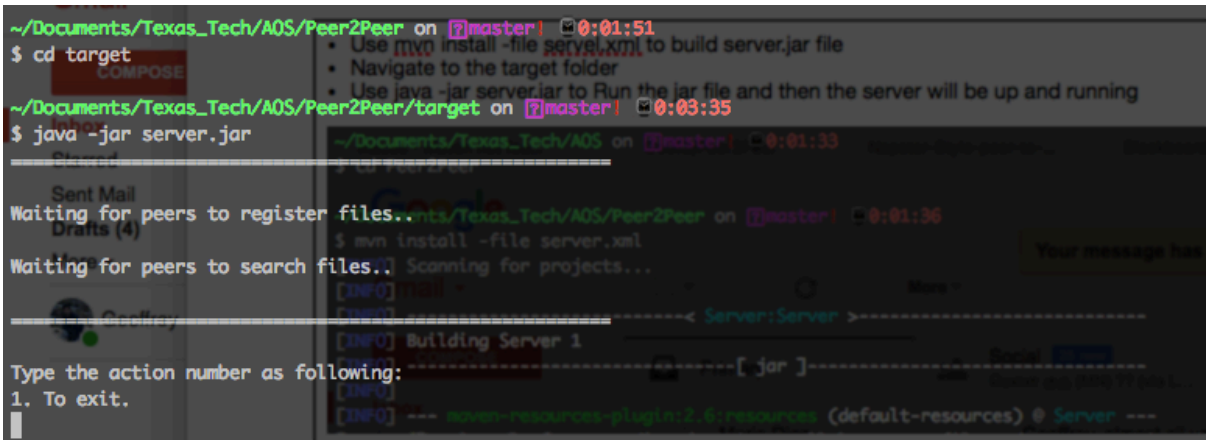
RUNNING THE PROJECT :-

-First Unzip the project Folder (Peer2Peer)
-Navigate inside the project folder
-Then Follow the 4 separate process to run server,peer1,peer2,peer3

Server

- Use mvn install -file servel.xml to build server.jar file
- Navigate to the target folder
- Use java -jar server.jar to Run the jar file and then the server will be up and running





Peer1 Building and Running:

- Use mvn install -file peer1.xml to build peer.jar file
- Navigate to the target folder
- Use java -jar server.jar to Run the jar file and then the peer1 request for user input

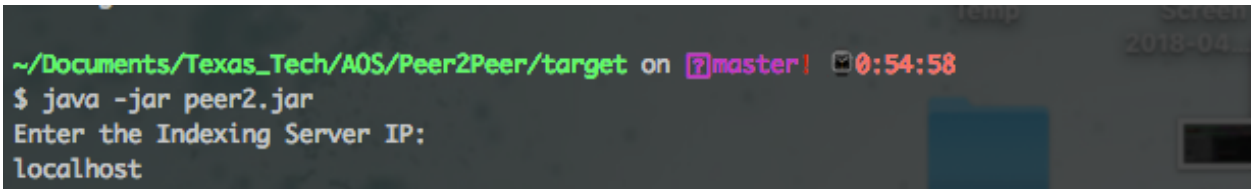
```
~/Documents/Texas_Tech/AOS/Peer2Peer/target on ?master! 0:24:45
$ java -jar peer1.jar
Enter the Indexing Server IP:
localhost
```

- Type the server Ip address
- Then the First peer is running and waiting for the user's instruction

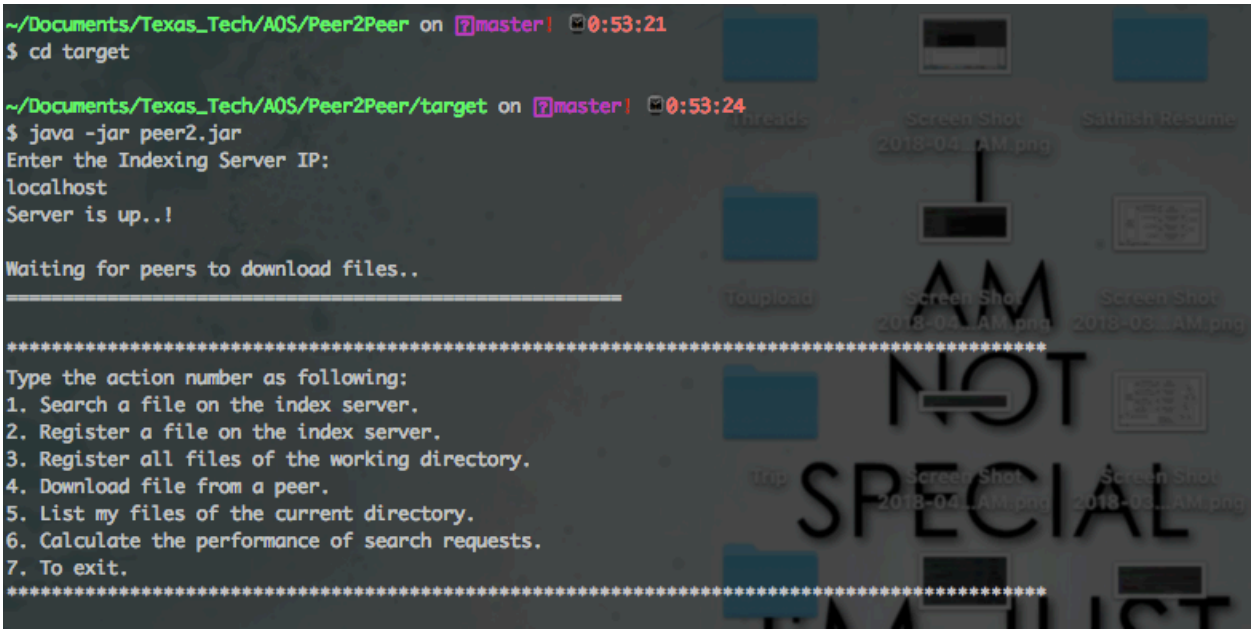
```
[4]  + 21616 suspended  mvn install -file peer1.xml

~/Documents/Texas_Tech/AOS/Peer2Peer on ?master! 0:24:36
$ cd target

~/Documents/Texas_Tech/AOS/Peer2Peer/target on ?master! 0:24:45
$ java -jar peer1.jar
Enter the Indexing Server IP:
localhost
Server is up..!

Waiting for peers to download files..
================================================

********************************************************************************************
Type the action number as following:
1. Search a file on the index server.
2. Register a file on the index server.
3. Register all files of the working directory.
4. Download file from a peer.
5. List my files of the current directory.
6. Calculate the performance of search requests.
7. To exit.
********************************************************************************************
```

Peer2 Building and Running

- Use mvn install -file peer1.xml to build peer.jar file
- Navigate to the target folder
- Use java -jar server.jar to Run the jar file and then the peer1 request for user input
- Type the server Ip address

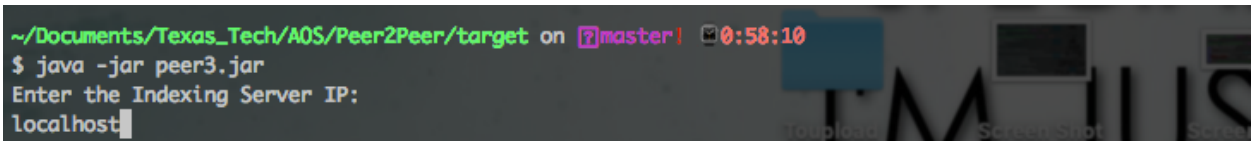


- Then the second peer is running and waiting for the user's instruction

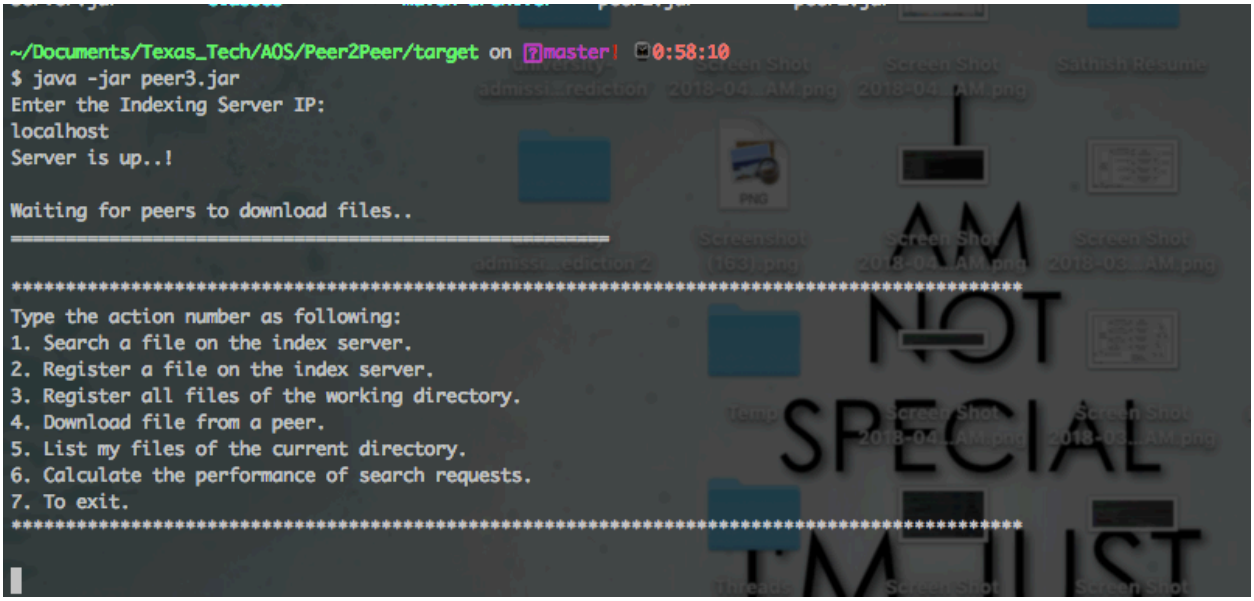


Peer3 Building and Running

- Use mvn install -file peer1.xml to build peer.jar file
- Navigate to the target folder
- Use java -jar server.jar to Run the jar file and then the peer1 request for user input
- Type the server Ip address

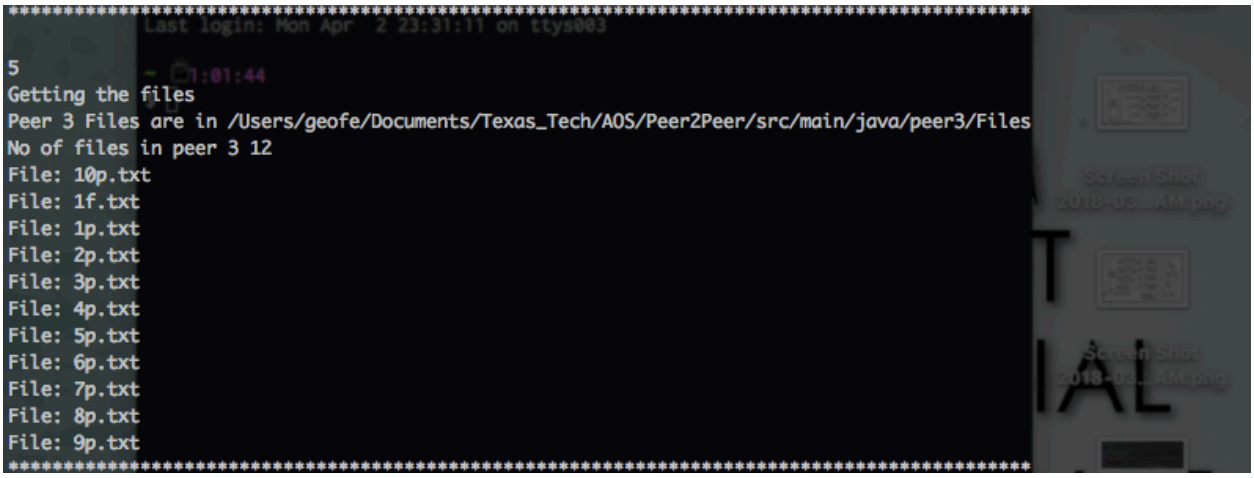


- Then the Third peer is running and waiting for the user's instruction



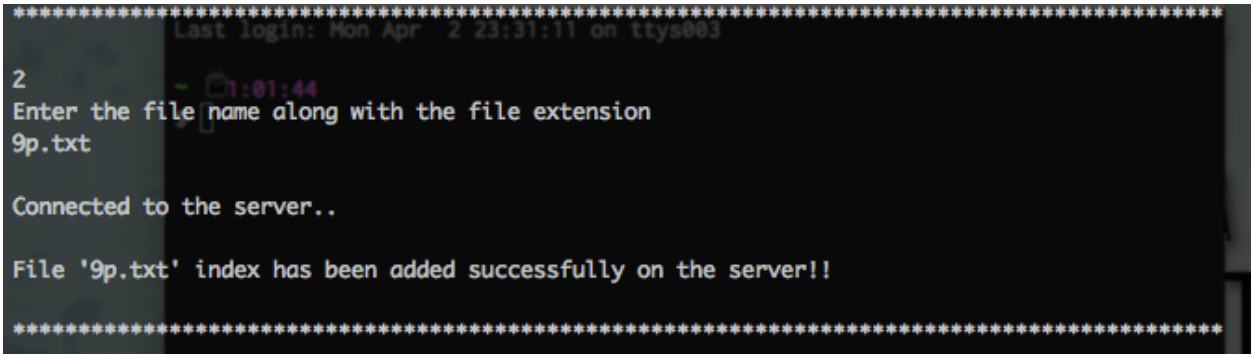
List all file

Type 5 to list all the files from the current directory



Register one file

Type 2 to register a file with the server from the current peer



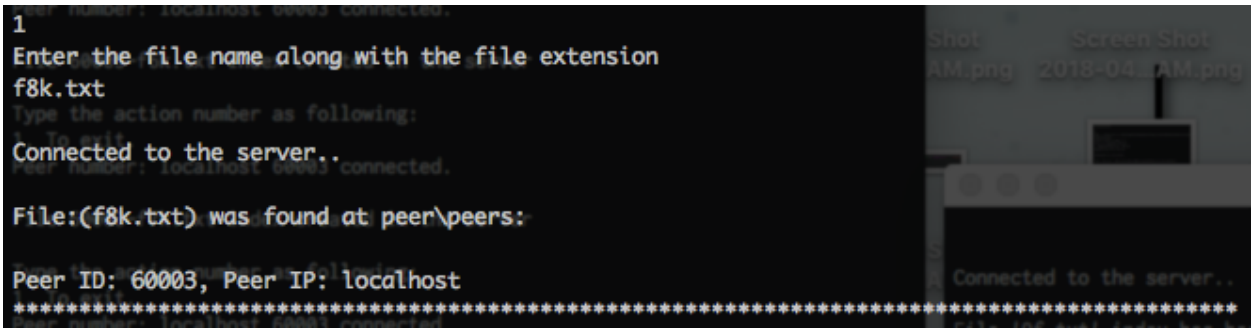
Register all files

Type 3 to register all the files from the current director with the server

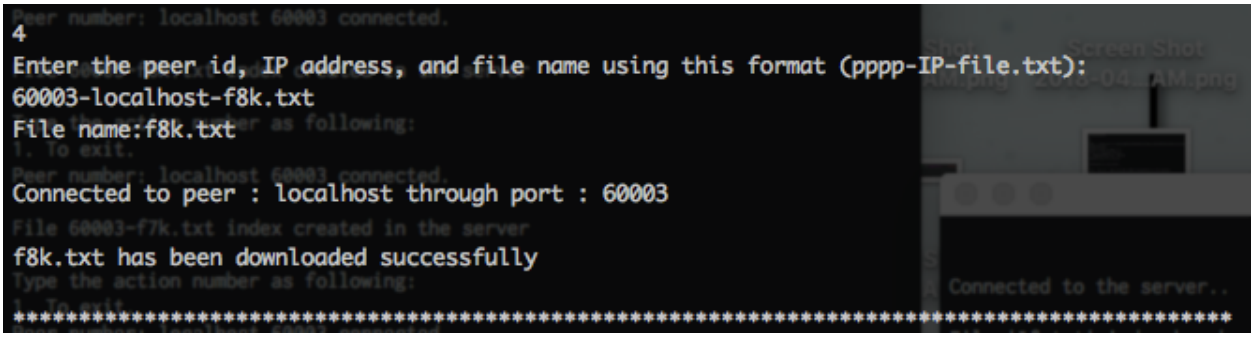
```
*************

3
Peer 1 Files are in /Users/geofe/Documents/Texas_Tech/AOS/Peer2Peer/src/ma
a/peer2/Files
 No of files in peer 2 11
Tryin to register 10k.txt
 1 Registering file  10k.txt
Registering file 10k.txt

Connected to the server..

File '10k.txt' index has been added successfully on the server!!

Tryin to register 4f.txt
 1 Registering file  4f.txt
Registering file 4f.txt

Connected to the server..

File '4f.txt' index has been added successfully on the server!!

Tryin to register 9k.txt
 1 Registering file  9k.txt
Registering file 9k.txt
```

Download file from a peer

- First search for the file ex:f8k.txt Enter 1 to search

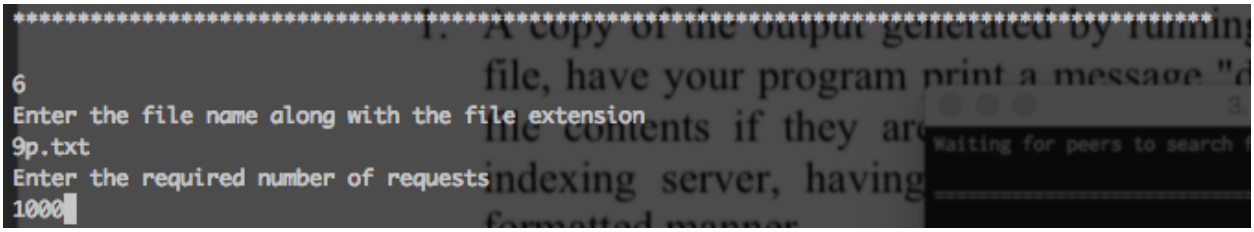


- Then type 4 to download the file



Performance

- Type 6 to measure the performance
- After that it will prompt you to enter the file name and then the number of request



- Then you will get the result in *'msec'*

Finally To exit the peer 1, peer2, peer3 type 7

To exit the server enter 1

Note:

- The system does not allow to download a file from the same peer that you are currently running. In other word, peer can not download from itself. If you did so, it will notify you by
  a message.

- To exit from the server, press '1' then 'enter'.

- Index Server located port ‘60000’ and ‘60001’.
- Ports ‘60002’, ’60003’, and ‘60004’ are reserved for the peers.
- The mentioned ports must not be reserved on the system that you are going to run the system on.