

Manual

Start Server and Peer:

1. Open a command windows, go to the IndexServer code direction.
2. Run: `java IndexServer`

```
C:\Users\Chao>f :  
  
F:\>cd F:\IIT course\CS 550\P2P\P2P\IndexServer  
  
F:\IIT course\CS 550\P2P\P2P\IndexServer>java IndexServer  
start Index Server ...  
RMI registry at port 1099.  
Bind Succussfully.  
Waitting calls for clients...
```

3. Open a command windows, go to the Peer code direction.
4. Run: `java Peer`

```
C:\Users\Chao>f :  
  
F:\>cd F:\IIT course\CS 550\P2P\P2P\Peer1  
  
F:\IIT course\CS 550\P2P\P2P\Peer1>java Peer  
start Peer ...  
RMI registry at port 1001.  
Bind Succussfully.  
Notice: Peer <rmi://127.0.1.1:1001/Peer> automatically update registry.  
  
-----  
The menu options for user:  
1.Set loop times <now is: 1>  
2.Lookup <and download> files  
3.Set a timer to call Lookup <So as to run with other peer simultaneously>  
4.Exit  
-----  
Please select a option number:
```

5. Start other 2 Peers in the same way.

Lookup and download:

1. Choose one Peer command window.
2. Input number 2 and Enter:

```
Please select a option number:  
2  
Please enter the file name:
```

3. Input the name of file you want to lookup, for example, k.txt. Press Enter:

```

Please enter the file name:
k.txt
The avg time for 1 sequence loopup is: 3.757 ms

There are all address of the peers keeping file k.txt:
1. rmi://127.0.1.3:1003/Peer
2. rmi://127.0.1.2:1002/Peer

You can choose one to download the file: <Or you can enter 0 to cancel>

```

- Now the server return which peer keep this file. Input one option number and Press. If you do not want to download, input 0. For example, now we choose 2:

```

There are all address of the peers keeping file k.txt:
1. rmi://127.0.1.3:1003/Peer
2. rmi://127.0.1.2:1002/Peer

You can choose one to download the file: <Or you can enter 0 to cancel>
2
The file k.txt has been saved in the path: files/ Successfully.
The download speed is: 0.169 MB/s

```

- It will download the k.txt, and when you see the notice of save successfully, you can find the file in the local directory "files/".

Other options

Set loop time:

- You can choose option 1 in menu and set the loop time:

```

Please select a option number:
1
Please enter the loop time number:

```

- Enter the times of loop you want, for example, 1000:

```

Please enter the loop time number:
1000
The loop time has been set as: 1000.

-----

The menu options for user:
1.Set loop times <now is: 1000>
2.Lookup <and download> files
3.Set a timer to call Lookup <So as to run with other peer simultaneously>
4.Exit
-----

```

- You can see in the option 1 of menu, the default loop time is 1000.
- If you run lookup or download again, you can see it give average time of the request.

```

Please select a option number:
2
Please enter the file name:
m.txt
The avg time for 1000 sequence lookup is: 1.266 ms

```

Set a timer:

- Select option 3 of menu to set a timer.

```
Please select a option number:  
3  
Please input the timer in format HH MM SS <ex. 11 30 00 means 11:30:00>
```

2. Input the timer in format, for example, 8 30 00.

```
Please input the timer in format HH MM SS <ex. 11 30 00 means 11:30:00>  
8 30 00  
Please enter the searching file name:
```

3. Input a file name.

```
Please enter the searching file name:  
b.txt  
You create a lookup task for b.txt  
It will start at Mon Jan 30 08:30:00 CST 2017
```

4. It will show that the task will start at today's 08:30:00 (the millisecond is 000).
5. When reaching the time, the task will automatically start:

```
Timer for execting lookup b.txt start!  
The avg time for 1000 sequence lookup is: 1.958 ms
```