

CS550 Programming Assignment 3 (PA#3)

Maintaining File Consistency in the Hierarchical Gnutella-style P2P File Sharing System

Output File

1. Screenshot of the Super Peer

Console

```
Peer (2) [Java Application] C:\Program Files\Java\jdk1.8.0_161\bin\javaw.exe (14-Oct-2018, 9:26:00 PM)
Please enter the Peer ID as configured in the Configuration Properties File
1
Session for peer id: 1 started...
Acting as super peer
```

2. Screenshot of a Leaf node with push based approach configured

Console

```
Peer (2) [Java Application] C:\Program Files\Java\jdk1.8.0_161\bin\javaw.exe (14-Oct-2018, 9:26:35 PM)
Please enter the Peer ID as configured in the Configuration Properties File
2
Session for peer id: 2 started...
Welcome to search and download:
Options available:
1. Search/download file
2. Test the Average Response Time for a single client performing multiple sequential search Requests
```

3. Screenshot of a leaf node with pull based approach configured

Console

```
Peer (3) [Java Application] C:\Program Files\Java\jdk1.8.0_161\bin\javaw.exe (01-Nov-2018, 3:52:13 AM)
Please enter the Peer ID as configured in the Configuration Properties File
2
Session for peer id: 2 started...
Welcome to search and download:
Options available:
1. Search/download file
2. Test the Average Response Time for a leaf node performing multiple sequential search Requests
3. Refresh downloaded files
```

4. Screenshot of Super Peer after the leaf node is registered.

```
Console
Peer (2) [Java Application] C:\Program Files\Java\jdk1.8.0_161\bin\javaw.exe (14-Oct-2018, 9:26:00 PM)
Please enter the Peer ID as configured in the Configuration Properties File
1
Session for peer id: 1 started...
Acting as super peer

File Added: a - Copy (3).txt | Peer ID: 2 | IP:Port Number: 2000

File Added: a - Copy - Copy.txt | Peer ID: 2 | IP:Port Number: 2000

File Added: a - Copy.txt | Peer ID: 2 | IP:Port Number: 2000
```

5. Screenshot of the leaf node demonstrating file download

```
Console
Peer (2) [Java Application] C:\Program Files\Java\jdk1.8.0_161\bin\javaw.exe (14-Oct-2018, 9:26:35 PM)
Please enter the Peer ID as configured in the Configuration Properties File
2
Session for peer id: 2 started...
Welcome to search and download:
Options available:
1. Search/download file
2. Test the Average Response Time for a single client performing multiple sequential search Requests
1
Enter file name to search:
a.txt
Message id for search: Peer2.Search1
Paths searched are:
a.txt File found in the network at below peers
Found at Peer with peer ID: 2 , running on port:2000
Enter peer ID to download the file from:
2
Downloading from localhost:2000
file a.txt
File copied
```

6. Screenshot of the leaf node demonstrating the calculation of average response time for a single client performing multiple sequential search requests

```
Console
Peer (2) [Java Application] C:\Program Files\Java\jdk1.8.0_161\bin\javaw.exe (14-Oct-2018, 9:26:40 PM)
Please enter the Peer ID as configured in the Configuration Properties File
3
Session for peer id: 3 started...
Welcome to search and download:
Options available:
1. Search/download file
2. Test the Average Response Time for a single client performing multiple sequential search Requests
2
How many iterations??
500
Enter file name to search:
a.txt
Message id for search: Peer3.Search1
average response time taken in nano seconds:216
```

7. Screenshot of a stale file deleted using push based approach:

```
Welcome to search and download:
Options available:
1. Search/download file
2. Test the Average Response Time for a leaf node performing multiple sequential search Requests

filename:file8.txt
dubDir:C:\Users\Chetan\Google Drive\My_PC\OS\HW\HW3\test\AOSP3-Gnutella\src\downpeer8
Deleting stale file
C:\Users\Chetan\Google Drive\My_PC\OS\HW\HW3\test\AOSP3-Gnutella\src\downpeer8\file8.txt discarded using push approach
File modified
Server1
display names:file8.txt
filenamefile8.txtdirectory file namefile8.txt
file8.txt
File not found in the parent super peer-- Proceeding to search in other super peers
Valid/Invalid percentage:0
File Deleted watch thread
filename:file8.txt
```

8. Screenshot of a stale file deleted using pull based approach:

```
Paths searched are:
file2.txt File found in the network at below peers
Found at Peer with peer ID: 6 , running on port:6000
Found at Peer with peer ID: 7 , running on port:7000
Found at Peer with peer ID: 8 , running on port:8000
Enter peer ID to download the file from:
6
Downloading from localhost:6000
file file2.txt
Welcome to search and download:
Options available:
1. Search/download file
2. Test the Average Response Time for a leaf node performing multiple sequential search Requests
3. Refresh downloaded files
File copied
C:\Users\Chetan\Google Drive\My_PC\OS\HW\HW3\test\AOSP3-Gnutella\src\downpeer8\file2.txt discarded using pull approach
File Deleted watch thread
```