| Sr No | Description | Expected Results | Actual Results | Status |
|---|---|---|---|---|
| 1 | Super Peer Initialization via property file | Super peer should ask its Peer id and all details are fetched from property files | Super peer fetches all details from property file using assigned Super Peer Id | Pass |
| 2 | Leaf Node Initialization via property file | Leaf Node should ask its Peer id and all details should be fetched from property files | Leaf Node fetches all details from property file using assigned Leaf Node Id | Pass |
| 3 | Registeration of Peers at Indexing Server<br><br>Peer registerying port number, directory path containing the files, the Peer id and its super peer id | Leaf Node should get registered in Indexing server(Super Peer). | Leaf Node's Indexing Server/Super Peer registers all the provided details in Index. | Pass |
| 4 | Leaf Node entering random text when prompted Search,Delete or Exit input | It should throw an message for selecting a proper input | Message is being displayed when wrong input given "Please select appropriate choice" | Pass |
| 5 | If leaf node didnt enter the file name or enter wrong file name which is not present its own super peer and any other neighbouring peer | It should return an message specifying "No files found" | An Error message is not being shown for this testing scenario. There is a Bug. | Fail |
| 6 | When searching a file or sending a query request to a super peer (In case of Query Hit) | Super Peer should return a list of its Leaf nodes along with neighbouring super peer's leaf nodes having that specified file. | Super Peer calls Leaf node Query hit() and returns the details of its own leaf nodes and also leaf nodes details of other super peers | Pass |
| 7 | When searching a file or sending a query request to a super peer (In case of query miss) | If no super peers have the specified file, they should return nothing and does not call QueryHit() | After Searching, super peer doesn't do any thing. | Pass |
| 8 | In All to All Topology, requesting Super Peer forwarding query() | In All-to-All topology, requesting Super Peer should forward query() to all super peers | Super Peer fetches all its neighbouring details from property file and forwards query() to all super peers. It also make sure that neighbouring super peer will not broadcast query() again in loop. | Pass |

| | | | | |
|---|---|---|---|---|
| 9 | In linear Topology, requesting Super Peer forwarding query() | In linear topology, requesting Super Peer should forward query() to only one neighbouring super peer | Super Peer forwards the query request only to one super peer. It also make sure the request super peer wont get the query() from other super peer(loop) | Pass |
| 10 | Entering wrong name from the Leaf Node list having the requested file | It should return an error message for not selecting proper leaf node id | An error message is displayed where it asks user to re-enter the searching choice. | Pass |
| 11 | After downloading a file, updating the index server/Super peer | Leaf node should automatically update its super peer index about new downloaded file | Leaf Node does an entry at its super peer and updates the Index. | Pass |
| 12 | For Deletion, Leaf node didn't enter the file name or enter wrong file name which is not present in that Leaf node | It should return an error message | An Error message is being thrown saying "Sorry, File which you are searching doesn't exist in our Server" | Pass |
| 13 | If Leaf Node 3 is selecting Leaf node 5 for downloading the requested file and at the same time Leaf node 5 is deleting the file | Error message should be shown. | An message is thrown saying "File is not present in remote location" | Pass |
| 14 | Leaf Node deleting a file from its directory | Leaf Node should automatically update the index server about the deletion | Leaf Node initiates an request to its super peer to remove the file entry from the Index | Pass |
| 15 | One Leaf node crashes down abruptly and another Leaf node wants to download the file from that Leaf node | An Exception should occur while downloading the file | A Java Connection Refuse exception occurred. " Connection refused to host: " | Pass |