Testing Verification Document

Following Test cases were run against the system which worked correctly.
System Details: No. of peers: 10 (Amazon EC2 t2.micro instances)
Operating System: Amazon Linux distrib
Java Rutime Env.: v1.7

Peer Test cases:

Sr. No.	Description	Input	Expected O/p	Actual o/p	Result
1.	Normal lookup and download of file (present in only 1 peer)	./run_peer.sh	The system should return only 1 host (peer). After user select that host, the file should get downloaded in its shared directory.	The system shows IP of only peer 1. After user select that IP, the file id downloaded on peer 2.	PASS
2.	Normal lookup and download of file (present in 2 or more peers)	./run_peer.sh	The system should return the hosts (peers). After user select any host, the file should get downloaded from that peer to peer1's shared directory.	The system prints all the hosts where file is present. After user selects any host, the file gets downloaded from that peer to peer1's shared directory.	PASS
3.	Lookup for file not present in any of the peers	./run_peer.sh	The system should return 0 results for the hosts (peers) where file is	system returns 0 results (peers) and peer prints error message *"No peer found for the file named abc.txt.*	PASS

			available and the peer should print appropriate message.	*Please try again!*"	
4.	User enters an incorrect option (number) while asked for the host number to select.	./run_peer.sh	The peer should show an error message and ask to select appropriate option.	The peer shows an error message "*Incorrect choice. Please try again.* "	PASS
5.a.	Star Topology: Try to look up and download multiple files of varying sizes from another peer in star topology. (1kb -10 kb)	./run_peer.sh	All files should get downloaded and the time taken should increase linearly.	All files get downloaded and the time increases linearly. Please see performance testing doc for details.	PASS
5.b.	Linear Topology: Try to look up and download multiple files of varying sizes from another peer in Linear topology. (1kb -10 kb)	./run_peer.sh	All files should get downloaded and the time taken should increase linearly. The time taken for linear topology should be more than start topology.	All files get downloaded and the time increases linearly. Please see performance testing doc for details. Takes more time than star topology.	PASS
6.a.	Star topology: Send 200	./run_peer _performance.sh	All the 1000 requests should be	All 1000 requests are successful and the files get	PASS

	consecutive request (using 1 peer). File getting downloaded from all other peers.		successful and the files should get downloaded.	downloaded. The total time taken is also displayed.	
6.b.	Linear topology: Send 200 consecutive request (using 1 peer). File getting downloaded from all other peers.	./run_peer _performance.sh	All the 200 requests should be successful and the files should get downloaded.	All 200 requests are successful and the files get downloaded. The total time taken is also displayed.	PASS
7.a.	Star Topology: Send 200 consecutive request (using 2 peers). Both peers are downloading files from each other and sending simultaneous requests to the system.	./run_peer _performance.sh	All the 200 requests on both peers should be successful and the files should get downloaded.	All 200 requests on both peers are successful and the files get downloaded. The total time taken is also displayed.	PASS
7.b.	Linear Topology: Send 200 consecutive request (using 2 peer). Both peers are downloading files from	./run_peer _performance.sh	All the 200 requests on both peers should be successful and the files should get downloaded.	All 200 requests on both peers are successful and the files get downloaded. The total time taken is also displayed.	PASS

	each other and sending simultaneous requests to the system.				
8.a.	Star Topology: Send 200 consecutive request (using 3 peers). All peers are downloading files from each other and sending simultaneous requests to the system.	./run_peer _performance.sh	All the 200 requests on both peers should be successful and the files should get downloaded.	All 200 requests on both peers are successful and the files get downloaded. The total time taken is also displayed.	PASS
8.b.	Linear Topology: Send 200 consecutive request (using 3 peer). All peers are downloading files from each other and sending simultaneous requests to the system.	./run_peer _performance.sh	All the 200 requests on both peers should be successful and the files should get downloaded.	All 200 requests on both peers are successful and the files get downloaded. The total time taken is also displayed.	PASS
9.a.	Star Topology: Send 200 consecutive request (using 4 peers). All peers are downloading	./run_peer _performance.sh	All the 200 requests on both peers should be successful and the files should get downloaded.	All 200 requests on both peers are successful and the files get downloaded. The total time taken is also displayed.	PASS

	files from each other and sending simultaneous requests to the system.				
9.b.	Linear Topology: Send 200 consecutive request (using 4 peers). All peers are downloading files from each other and sending simultaneous requests to the system.	./run_peer _performance.sh	All the 200 requests on both peers should be successful and the files should get downloaded.	All 200 requests on both peers are successful and the files get downloaded. The total time taken is also displayed.	PASS