

Project 1

GitHub repository: https://github.com/prithishsamanta/CSC573_IP_Project1

1. Serve Start

Command: `java -cp target/classes org.p2p.server.ServerMain`

Screenshot:

```
PS C:\Users\offic\OneDrive\Desktop\CSC573_IP_Project1> java -cp target/classes org.p2p.server.ServerMain
P2P-CI Server listening on port 7734
```

2. Peer Start

Command: `java -cp target/classes org.p2p.peer.PeerMain --serverHost localhost --serverPort 7734 --uploadPort 5001 --rfcDir ./peer1 --os "Windows 10"`

Screenshot:

```
New peer connected: /127.0.0.1:62368
Received from 127.0.0.1: ADD RFC 1001 P2P-CI/1.0
[Server] Peer registered: Nayan_Laptop:5001
[RfcIndex] Added RFC 1001 for host Nayan_Laptop:5001 (Total peers with this RFC: 1)
Received from 127.0.0.1: ADD RFC 123 P2P-CI/1.0
[RfcIndex] Added RFC 123 for host Nayan_Laptop:5001 (Total peers with this RFC: 1)
```

3. ADD RFC Request

Command: `ADD RFC <number> P2P-CI/1.0`

Host: hostname

Port: portnumber

Title: title

Screenshot:

```
> ADD RFC 3001 P2P-CI/1.0
Host: Nayan_Laptop:5003
Port: 5003
Title: RSVP
Found local file: C:\Users\offic\OneDrive\Desktop\CSC573_IP_Project1\.\peer3\RFC_3001_RSVP.txt
[P2SClient] ADD response: P2P-CI/1.0 200 OK
[P2SClient] RFC 3001 RSVP Nayan_Laptop 5003
Successfully registered RFC 3001 with server
> |
```

4. LIST ALL RFC Request

Command: `LIST ALL P2P-CI/1.0`

Host: hostname

Port: port number

Screenshot:

```
> LIST ALL P2P-CI/1.0
Host: Nayan_Laptop:5002
Port: 5002
[P2SClient] LIST response: P2P-CI/1.0 200 OK
All RFCs in network (2 total):
    Nayan_Laptop 5002 RFC2001 UDP
    Nayan_Laptop 5001 RFC1001 TCP
> |
```

5. LOOKUP RFC Request

Command: LOOKUP RFC <number> P2P-CI/1.0

Host: hostname

Port: portnumber

Title: title

Screenshot:

```
> LOOKUP RFC 2001 P2P-CI/1.0
Host: Nayan_Laptop:5002
Port: 5002
Title: UDP
[P2SClient] LOOKUP response: P2P-CI/1.0 200 OK
Found 1 peer(s) with RFC 2001:
    RFC 2001 UDP Nayan_Laptop 5002
> |
```

6. GET RFC Request

Command: GET RFC <number> P2P-CI/1.0

Host: hostname

OS: OS

Screenshot:

```

> GET RFC 2001 P2P-CI/1.0
Host: Nayan_Laptop:5002
OS: Mac OS
Looking up RFC 2001...
[P2SClient] LOOKUP response: P2P-CI/1.0 200 OK
Downloading RFC 2001 from Nayan_Laptop:5002...
P2P-CI/1.0 200 OK
Date: Mon, 01 Dec 2025 06:02:10 GMT
OS: Mac OS 10.4.1
Last-Modified: Mon, 01 Dec 2025 04:54:39 GMT
Content-Length: 0
Content-Type: text/plain
[P2PClient] Saved RFC 2001 to C:\Users\offic\OneDrive\Desktop\CSC573_IP_Project1\.\peer1\RFC_2001_UDP.txt
Successfully downloaded RFC 2001
[P2SClient] ADD response: P2P-CI/1.0 200 OK
[P2SClient] RFC 2001 UDP Nayan_Laptop 5001
Registered RFC 2001 with server

```

7. 200 OK

Screenshot:

```

> LOOKUP RFC 2001 P2P-CI/1.0
Host: Nayan_Laptop:5002
Port: 5002
Title: UDP
[P2SClient] LOOKUP response: P2P-CI/1.0 200 OK

```

8. 400 Bad Request

Screenshot:

```

Registering 4 RFC(s) with server...
[P2SClient] ADD response: P2P-CI/1.0 200 OK
[P2SClient] RFC 1001 RSVP Nayan_Laptop 5001
Registered RFC 1001: RSVP
[P2SClient] ADD response: P2P-CI/1.0 400 Bad Request

```

9. 404 Not Found

Screenshot:

```
> LOOKUP RFC 9999
Usage: LOOKUP RFC <number> P2P-CI/1.0
You will be prompted for Host, Port, and Title
> LOOKUP RFC 9999 P2P-CI/1.0
Host: Nayan_Laptop:5002
Port: 5002
Title: TCP
[P2SClient] LOOKUP response: P2P-CI/1.0 404 Not Found
[P2SClient] RFC 9999 not found
No peers found with RFC 9999
>
```

10. 505 P2P-CI Version Not Supported

Screenshot:

```
> LOOKUP RFC 9999 P2P-CI/2.0
Host: Nayan_Laptop:5002
Port: 5002
Title: TCP
[P2SClient] LOOKUP response: P2P-CI/1.0 505 P2P-CI Version Not Supported
[P2SClient] LOOKUP failed: P2P-CI/1.0 505 P2P-CI Version Not Supported
No peers found with RFC 9999
```