

Running the Program –

Use the makefile to generate the programs. Once compiled you run the server with the desired port and amount of peers you would like(2 or higher). This will display an hostname which is used on the client program.

```
[dwp9@cs-ssh4 Proj1]$ ./bbserver 60010 3  
This Server's Hostname: cs-ssh4.cs.uwf.edu
```

Using that IP(hostname), you will then run the clients with the option -new and their ports.

```
[dwp9@cs-ssh4 Proj1]$ ./bbclient -new 60005 cs-ssh4.cs.uwf.edu 60010 bbfile.txt  
Connecting to server...
```

You see it says connecting to server, on the server end you will see the client connecting.

```
This Server's Hostname: cs-ssh4.cs.uwf.edu  
Client Connected IP: 143.88.64.154 Port: 60005 Listen Port: join
```

Continue with the other two connections (or amount put) till you see the startup client menu.

```
Connecting to server...  
Message RECV: Ip-143.88.64.154 Port-60004  
My Token: 299  
Token set to 1  
:  
Please enter the corresponding number of the action you wish to do.  
1) Write - Allows you to write to the board.  
2) Read - Will ask for a valid number on the board to read.  
3) List - Will display the entire board to the screen.  
4) Exit - Leaves the program.
```

Now you can Write/Read/List/Exit from the program by simply entering a number you wish to do. For example writing is action 1.

```
Please enter the corresponding number of the action you wish to do.  
1) Write - Allows you to write to the board.  
2) Read - Will ask for a valid number on the board to read.  
3) List - Will display the entire board to the screen.  
4) Exit - Leaves the program.  
  
Enter a response: 1  
Enter your post(100char): hello there
```

You can then enter your response. Due to multithreading, you can also enter the next response before receiving the token again. This same style is used for Read, hit 2 then the message number you want to read(it will check for message amount etc.). Lastly if you wish to join a current session it's like connecting to the server, however just don't use the -new option and use a peer's IP(hostname) E.G. cs-ssh3.cs.uwf.edu. You will get a stdout "connecting to ring" instead of server.

```
[dwp9@cs-ssh4 Proj1]$ ./bbclient 60021 cs-ssh4.cs.uwf.edu 60005 bbfile.txt  
Connecting to ring...  
Recv - IP:[143.88.64.153] Port:[60006]
```