# JAYPEE INSTITUTE OF INFORMATION TECHNOLOGY



# COMPUTER NETWORKS LAB PROJECT SYNOPSIS TCP/IP CHAT ROOM

### SUBMITTED BY:-

Chitrank Mishra (17103103)

Atharva Tripathi (17103127)

Ayush Saxena (17103108)

Trinendra Mehria (17103021)

# Main Objective:

Designing a complete chatting environment, with all the features

- like sending and receiving messages from various clients
- sending files from one client to all
- connecting and disconnecting to the server at our will.
- Sending public as well as private messages among the user.

# Data Structures Required:

We have covered the following grounds under this project :

Sockets: Sockets will provide a path to communicate between various clients.

Arrays: To keep the records of the sockets available at connection.

Structures: Message packages will be sent in the form of structures and connection details will be stored in structures.

Some additional designs to implement an UI to show the current running process.

TCP/IP: knowledge about the TCP/IP connections and port usage.

### **Functionalities:**

- Sending messages on the same loopback using localhost.
- Sending messages over the ethernet using the IP address using TCP/IP connection.
- Sending files over the ethernet from one computer to another by shredding the file into packets.

### Work Distribution:

Designing: Ayush and Trinendra

Algorithm implementation: Chitrank and Atharva

UI: Chitrank and Trinendra

Others: Ayush and Atharva

Expected Date Of Completion: 25<sup>th</sup> November 2019