## Shastri 5<sup>th</sup> Semester

### **Computer Science**

Unit: 2<sup>nd</sup>

### **User and Internet Relay Chat**

Internet Relay Chat (IRC) is a protocol for real-time communication over the internet. It allows users to participate in chat rooms, known as channels, where they can exchange messages with other users in real-time.

Users can connect to an IRC server using an IRC client, which is a program designed to interact with the IRC protocol. Once connected, the user can join channels and participate in conversations.

Each user on an IRC network is identified by a unique nickname, which is used to identify the user in chat rooms and private messages.

Users can also register their nickname with the server, which allows them to use the same nickname every time they connect to the network and also enables them to get additional privileges.

In addition to chatting in channels, users can also send private messages to other users, and there are commands to perform different actions such as kicking or banning users from channels, changing the topic of the channels, and more.

IRC is an open protocol and there are many implementations of servers and clients. It's important to note that IRC can be used for both legitimate and malicious purposes, and it's important to be aware of the risks when using it.

#### Concept of chatting and IRC

Chatting refers to the real-time exchange of text-based messages between two or more users. The concept of chatting has been around for decades, and has been implemented in various forms such as instant messaging, SMS, and forums. Internet Relay Chat (IRC) is one of the earliest forms of chatting on the internet.

IRC is a protocol for real-time communication over the internet. It allows users to participate in chat rooms, known as channels, where they can exchange messages with other users in real-time. Each channel is typically dedicated to a specific topic of discussion, and users can join and leave channels as they wish.

Users can connect to an IRC server using an IRC client, which is a program designed to interact with the IRC protocol. Once connected, the user can join channels and participate in conversations. Each user is identified by a unique nickname, which is used to identify the user in the chat rooms and private messages.

IRC also provides several functionalities such as sending private messages, creating and moderating channels, sending files, and more. The protocol also enables users to create and join different networks, which is a group of servers that are connected to each other and allows users to communicate across servers.

IRC is a form of real-time chatting that allows users to participate in multiple channels, and it is based on the open-protocol, which allows for multiple implementations of servers and clients

## **User net-its components:**

An IRC network is made up of multiple servers that are connected to each other. These servers act as a relay for messages between users, allowing them to communicate with each other in real-time. Each user on an IRC network is identified by a unique nickname, which is used to identify the user in chat rooms and private messages. Users can change their nickname by issuing a command to the server. Additionally, users can also register their nickname with the server, which allows them to use the same nickname every time they connect to the network and also enables them to get additional privileges.

### **News Groups:**

Newsgroups are discussion boards on the internet, where users can post and read messages on a particular topic. Newsgroups have been around since the early days of the internet and are similar to IRC channels in that they allow users to participate in discussions on a particular topic. However, unlike IRC, newsgroups are not real-time and are more similar to forums. Messages are posted and can be read at any time. Newsgroups are organized by topic and usually have a specific purpose or theme, such as discussing a hobby or sharing information on a specific topic.

Searching and subscribing to New Groups, New Servers:

Users can search for and subscribe to new groups and new servers on the internet using a newsgroup client. This allows them to stay updated on new discussions and join new communities. It's important to note that not all newsgroups or servers may be accessible to all users, as some may be restricted or moderated.

### **Concept of chatting and IRC:**

Chatting refers to the real-time exchange of text-based messages between two or more users. Internet Relay Chat (IRC) is one of the earliest forms of chatting on the internet. It allows users to participate in chat rooms, known as channels, where they can exchange messages with other users in real-time. Each channel is typically dedicated to a specific topic of discussion, and users can join and leave channels as they wish.

There are many different IRC client software available for users to connect to IRC servers. Some popular IRC clients include mIRC, XChat, and Irssi. These clients provide users with a user-friendly interface to interact with the IRC protocol and participate in discussions. Users can also connect to different IRC servers, depending on their preferences. Additionally, IRC supports the use of emoticons, also known as smileys, which are used to express emotions in text-based communication.

# "User and Internet Relay Chat"

# **User net-its components:**

An IRC network is made up of multiple servers that are connected to each other. These servers act as a relay for messages between users, allowing them to communicate with each other in real time. Each user on an IRC network is identified by a unique nickname, which is used to identify the user in chat rooms and private

messages. Users can change their nickname by issuing a command to the server. Additionally, users can also register their nickname with the server, which allows them to use the same nickname every time they connect to the network and also enables them to get additional privileges.

### **News Groups:**

Newsgroups are discussion boards on the internet, where users can post and read messages on a particular topic. Newsgroups have been around since the early days of the internet and are similar to IRC channels in that they allow users to participate in discussions on a particular topic. However, unlike IRC, newsgroups are not real-time and are more similar to forums. Messages are posted and can be read at any time. Newsgroups are organized by topic and usually have a specific purpose or theme, such as discussing a hobby or sharing information on a specific topic.

### **Searching and subscribing to New Groups:**

Users can search for and subscribe to new groups and new servers on the internet using a newsgroup client. This allows them to stay updated on new discussions and join new communities. It's important to note that not all newsgroups or servers may be accessible to all users,

Searching and subscribing to new groups and new servers on the internet can be done using a newsgroup client. Here are the general steps to search and subscribe to new groups and servers:

Install a Newsgroup client on your device: You will need a newsgroup client software installed on your device in order to access and subscribe to new groups and servers. Some popular newsgroup clients include Thunderbird, Outlook, and Unison.

Open the newsgroup client: Open the newsgroup client software on your device.

Search for new groups and servers: Use the search function of the newsgroup client to find new groups and servers based on keywords or specific topics that you're interested in.

Browse the groups and servers: Browse through the groups and servers that the search function returned.

**Subscribe to new groups and servers:** Once you've found a group or server that you're interested in, you can subscribe to it by clicking on the "Subscribe" button or following the instructions provided by the newsgroup client.

**Configure your subscriptions:** Once you've subscribed to a group or server, you can configure your subscriptions by setting filters, creating rules, or organizing them into folders.

**Stay updated:** The newsgroup client will automatically download new messages and notify you of new posts, so you can stay updated on the latest discussions.

It's important to note that some groups or servers may require registration or approval before allowing access, and not all groups or servers may be accessible to all users, as some may be restricted or moderated.

## **Smiley**

Smiley, also known as an emoticon, is a sequence of characters used to represent a facial expression in text-based communication. They are used to convey emotions and feelings in written communication, particularly in instant messaging and online chats.

Smileys are created by using a combination of keyboard characters, such as punctuation marks and letters, to represent a face. For example, the most common smiley is the ":-)" which represents a happy face.

Smileys are widely used in chat and instant messaging applications, such as Internet Relay Chat (IRC), and also in social media platforms. They can be used to express a wide range of emotions such as happiness, sadness, anger, and surprise.

There are many different types of smileys, and some platforms and applications provide built-in support for them, allowing users to insert them easily into their messages. Some also allow users to create custom smileys by combining different characters.

The interpretation of smileys can be ambiguous and may vary depending on the context and the person interpreting it. It's always best to use them in moderation and to clarify if the meaning is not clear.

### Some Questions for practice

- 1. What is IRC?
- 2. How does IRC work?
- 3. What are the main features of IRC?
- 4. How do you connect to an IRC server?
- 5. How do you join an IRC channel?
- 6. What are the main commands used in IRC?
- 7. What are the different types of channels in IRC?
- 8. What are the main differences between IRC and other chat systems?
- 9. What are the potential risks of using IRC?
- 10. How has IRC evolved over the years?
- 11. What are News Groups?
- 12. How does News Group work?
- 13. What are the main features of News Group?
- 14. How do you connect to a News Group server?
- 15. How do you access and read messages in a News Group?
- 16. What are the main commands used in News Group?
- 17. What are the different types of News Groups?
- 18. What are the main differences between News Group and other forums?
- 19. What are the potential risks of using News Group?
- 20. What is Usenet? How is it related to News Group?