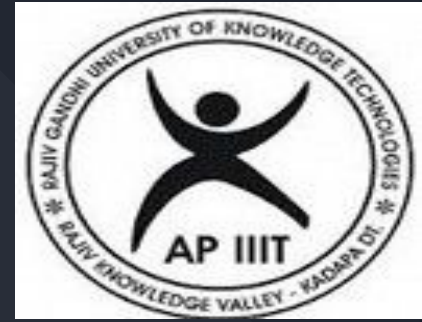


(OCR) OFFLINE-CHAT-ROOM



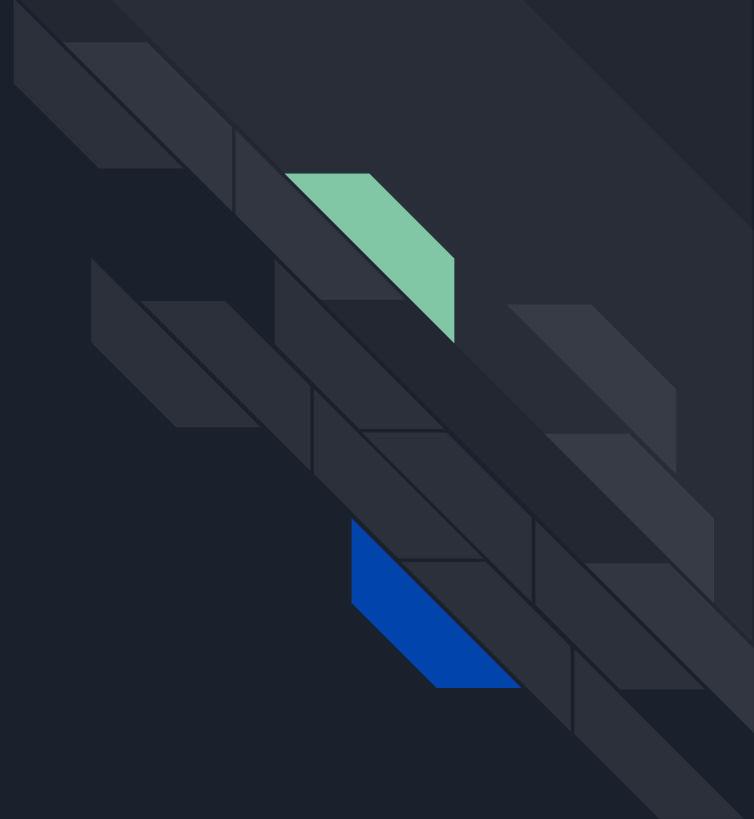
Project Guide : Mr. ABDUL AZIZ

Team:-

- 1.K.Venu kumar (R151239).
- 2.G.Varma (R151291).
- 3.N.Pavan Kumar (R151284).

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Introduction

OCR has become a day-to-day utility for everyone. The reason for choosing OCR is that it provides a good scope for beginners to implement a OFFLINE/ONLINE based system. OCR is a type of chatting application that provides text-transmission over the PROXY SERVER/OFFLINE. OCR operates in a similar way as that of a LAN Messenger over a Local Area Network. Messages are transmitted between two parties i.e. The sender and the receiver, it can also be between more than two parties (group chatting). The messages transmitted are bi-directional in nature. Messaging applications also use push technology to provide real-time transmission of messages as they are composed, character by character. The advanced OCR applications which are available now also offer file transfer, voice calls, video calls. The two protocols applied for the system are Transport Control Protocol(TCP) and User Datagram Protocol(UDP). TCP is for control message and UDP is for chat messaging.

Purpose

The primary use of a chat room is to share information via text with a group of other users. Generally speaking, the ability to converse with multiple people in the same conversation differentiates chat rooms from instant messaging programs, which are more typically designed for one-to-one communication.

And chatting in an offline mode gives more advantages rather than online within an organization/colleges/campuses.

Chatting applications enables us to stay in connected anytime, anywhere from any part of the world. There are many applications which provides chat services, the most popular among them are WhatsApp, Facebook messenger, yahoo IM, emails etc. OCR applications have evolved from being just an another application to send messages. The latest OCR applications have features such as transfer of different types of files, group chat etc. The common disadvantage is that these applications restrict the size of the files being transferred.

Scope

The most important features of OCR are

- Easy and quick communication.
- Unlimited data transfer without the size restriction.
- Group chat

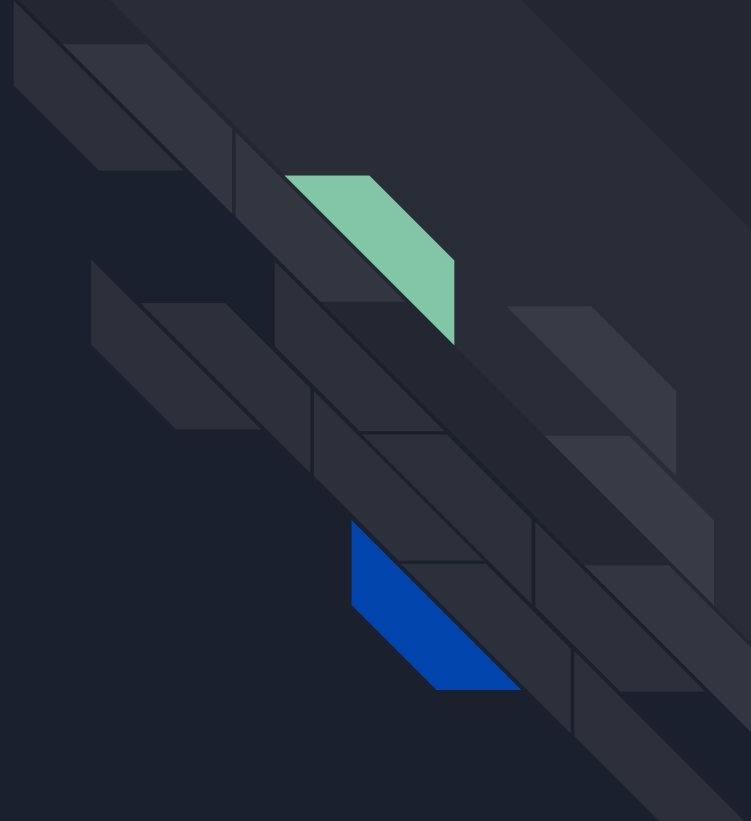


Front-End:

- ❖ HTML
- ❖ CSS
- ❖ JavaScript
- ❖ JQuery
- ❖ Boot-Strap

Back-End:

- ❖ Nodejs
- ❖ Express Frame-Work
- ❖ Socket.io
- ❖ Npm Modules





↓ THREAD ⌚ WAITING

TRADITIONAL



↓ THREAD

NODE.JS

Key Points for why we use node instead of PHP and ASP.NET:

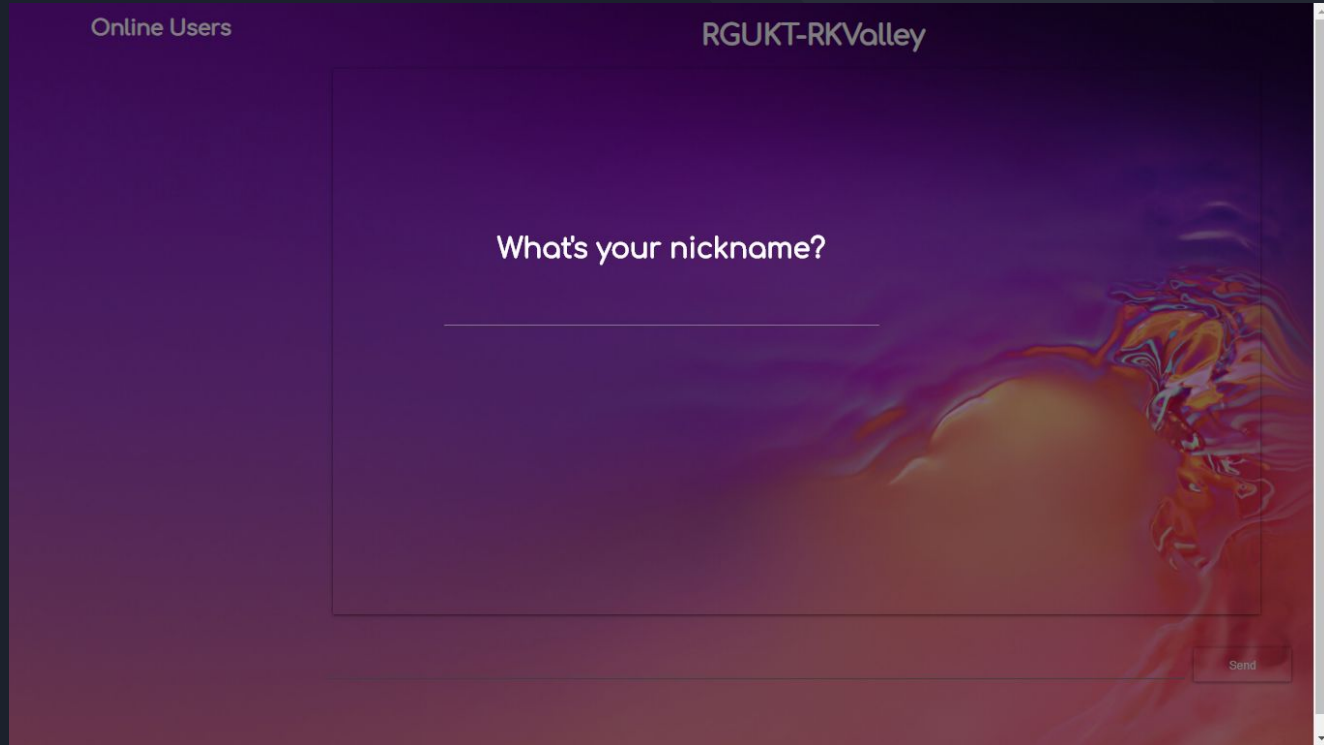
- ★ Node is used to liberate javascript file from browser and to make the programmers directly interact system with (low-level-technology).
- Here is how PHP//ASP.NET handles a file request:
 - 1.Send the task to the computers file system.
 - 2.Wait while the file system opens and reads the file.
 - 3.Returns the content to the client.
 - 4.Ready to handle the next request.
- **Here is how Node handles:**
 - 1.Send the task to the computers file system.
 - 2.Ready to handle the next request.
 - 3.when the filesystem has opened and read the file,the server returns the content to the client.

Advantages

- ❖ Offline-based chatting(No Need of Internet).
- ❖ Asynchronous data sending using Socket.io.
- ❖ Easy to maintain ,flexible and smooth user interface.
- ❖ User friendly and Easy to chat.

Results(Screen-Shots)

1. Home-Page:



Online Users

RGUKT-RKValley

What's your nickname?

Send

2. Entering -Nickname:

Online Users

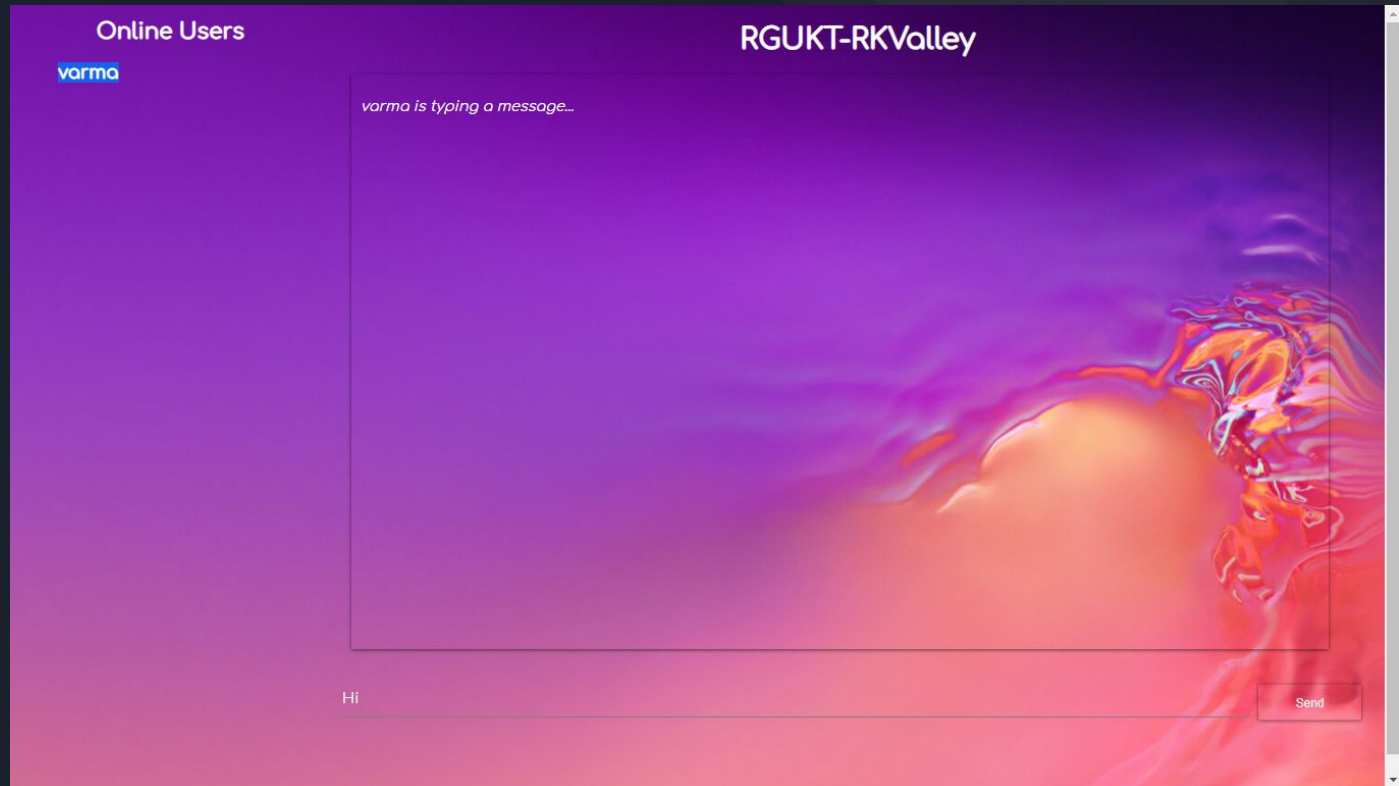
RGUKT-RKValley

What's your nickname?

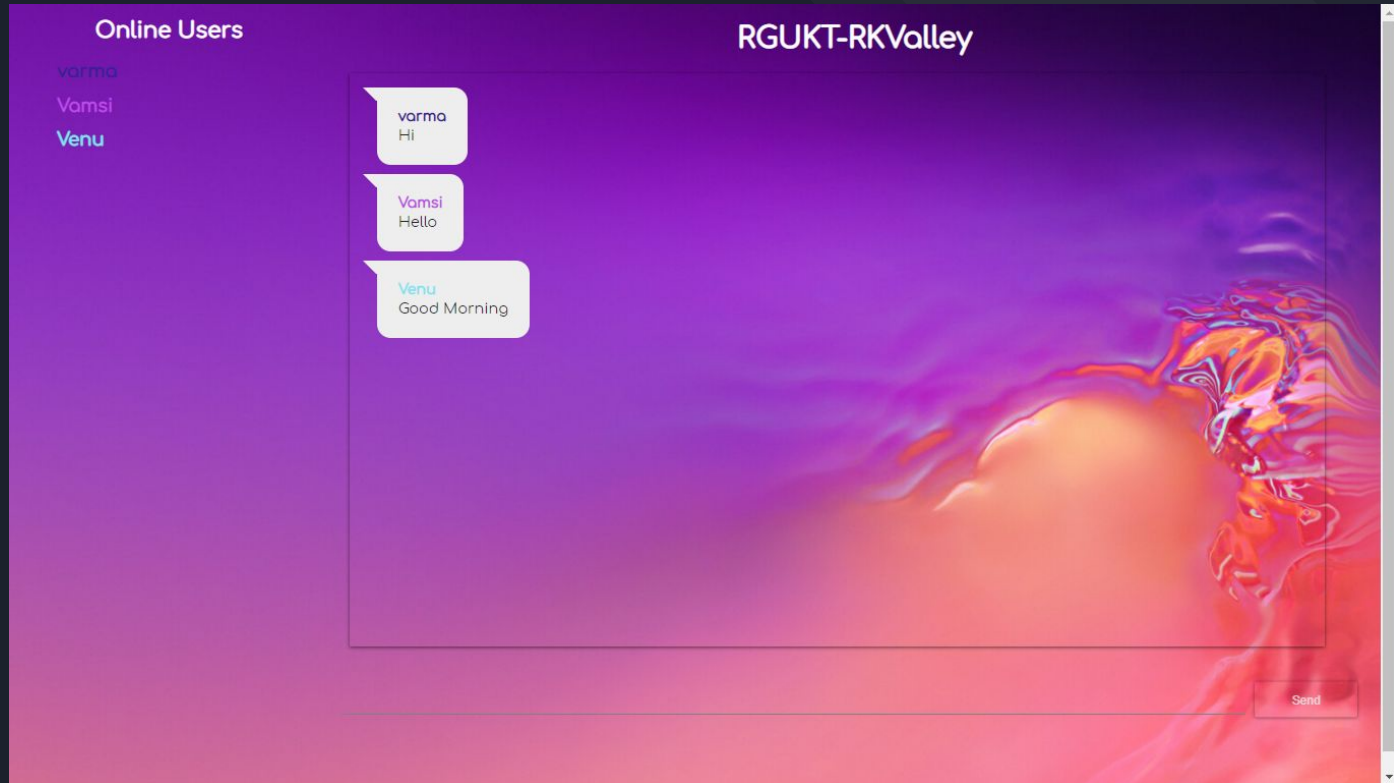
varma

Send

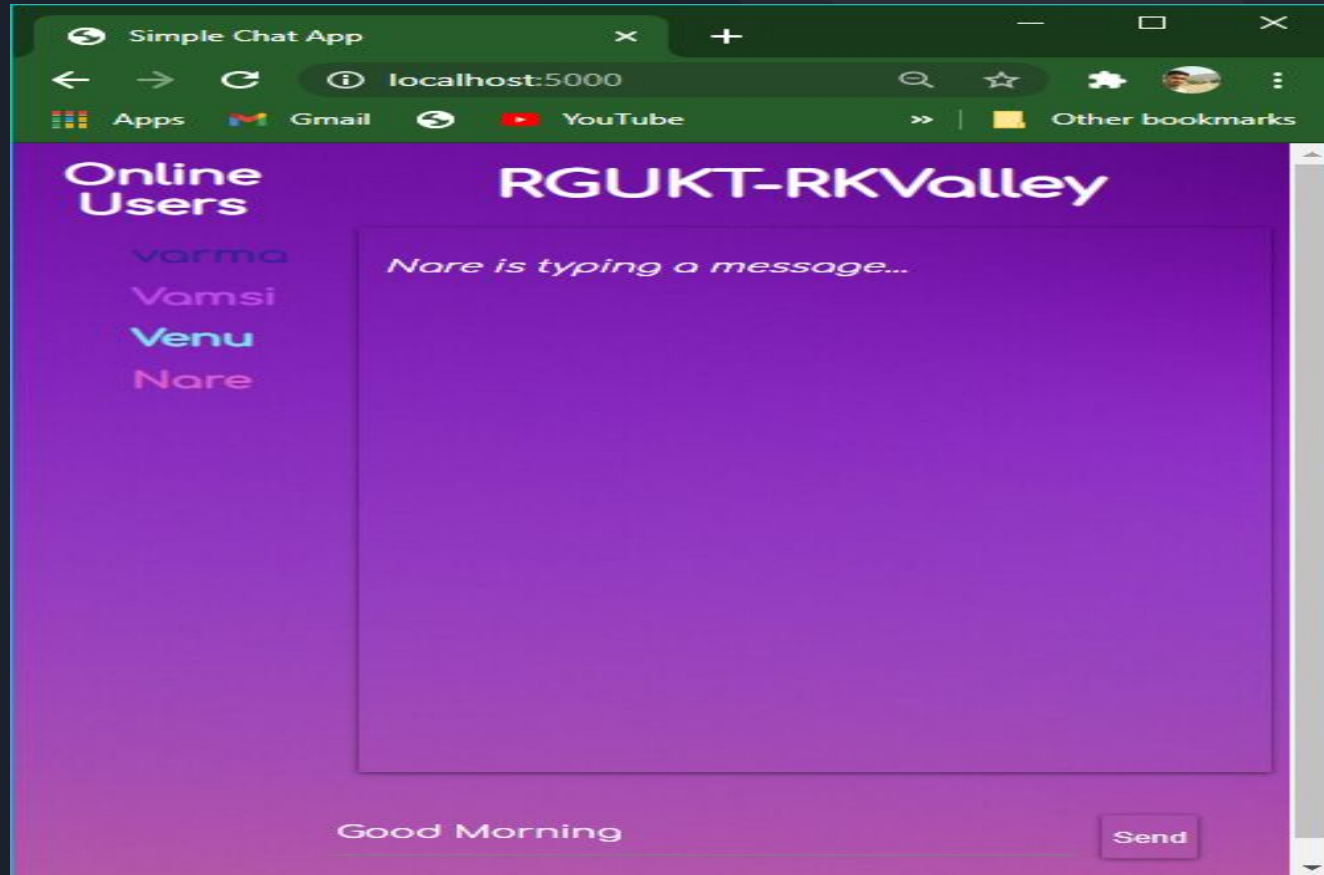
3.Chat-Room HomePage Person Texting Broad Casting user typing:



4.Three Members in a Chat Room:



4.Fourth member is add to the Chat Room,so for himself the previous chat doesnt show now on the messages will shown to him:



5. After venu is disconnected From the Chat room the online users section removes the name of the venu and updates:



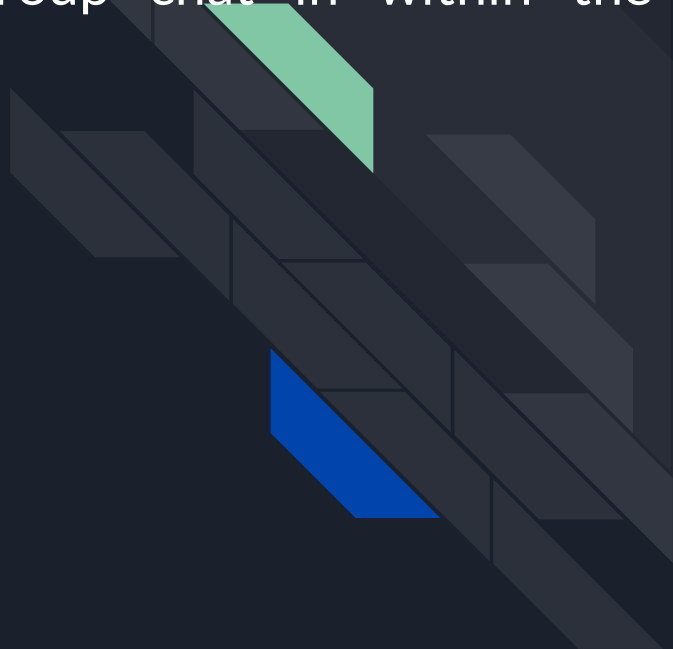
Future-Enhancements

OCR can be further implemented in the area of voice and video calling and can be used in the large organizations by hosting the application. OCR can be further implemented by providing security algorithms to encrypt the data transfer without the size restrictions for a larger scale.



Conclusion

OCR has dealt with implementing a chatting application on small scale using latest technology in web development. OCR has features such as text messaging, group chat, data transfer. The main objective of OCR was to develop an application which provides the group chat in within the organization in an offline mode.



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Thank you

