Dharmsinh Desai University, Nadiad

Faculty of Technology

Department of Computer Engineering

B. Tech. CE Semester – VI

Subject: System Design Practice

Project title : <u>ConnectUs –chat App</u>

By:

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Guided by: Prof. Pinkal Chauhan

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This is to certify that the project entitled as "Chat applicattion - ConnectUs" is a Bonafide report of the work carried out by

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of Department of Computer Engineering, semester VI, under the guidance and supervision of Prof. Jigar M. Pandya for the subject System Design Practice during the academic year 2020-2021.

Project Guide	**Head of the Department**
Assistance Professor	**Dr. C.K Bhensdadia**
Prof. Pinkal Chauhan	**Prof. & Head,**
Department of Computer	**Department of Computer**
Engineering,	**Engineering,**
Faculty of Technology,	**Faculty of Technology,**
Dharmsinh Desai University,	**Dharmsinh Desai University,**
Nadiad	**Nadiad**
Date: 1/04/2020	**Date: 1/04/2020**

Contents:

Abstract :

There has been an emerging trend of a vast number of chat applications which are present in the recent years to help people to connect with each other across different mediums, like Hike, WhatsApp, Telegram, etc. The proposed network-based chat application used for chatting purpose with remote clients or users connected to the internet, and it will not let the user send inappropriate messages. This paper proposes to make normal chat application with public conversation too.

Instruction:

This document is the requirements document of a chat application project. The purpose, the scope, the users and stakeholders,the use cases, the functional and nonfunctional requirements, and the milestones of the application.

♦ Purpose and Scope:

The purpose of the chat application is to allow users be able to the chat with each other, like a normal chat application. The users will be able to chat with each other, most likely only from user to user, no group chatting will be developed, unless there is time to do so, But public chat is there. The chat application will be written in Python, with Django framework, while developing the application, practicing techniques with python and working on it as much as possible will help hone some pyhton skills and be more ready to develop the application. For the scope of the project, the project will be tested as the program is being developed. A database for the users registered will be developed and tested, a menu will be developed and tested, a client/server interface will be developed and tested, and GUI's will be developed and tested, for the users' benefits. When the chat application is near completion, more testing will be done in order to make it less buggy or more user friendly.

♦ Target Audience:

The target audience is any person who wants to use a chat application.

Software Requirement Specifications :

      This project is to create a chat application with a server and user to enable users to chat with others.

Purpose:

- Project should be easy even for a novice person to use .
- Instant messaging solution to enable user to communicate with each other

Function required:

- **Registration:**

-valid phone or email with otp verification

-If user enter wrong otp , application should be close

In user info:

-Nickname

-Profile Picture

Add contact/friend:

- -User should be able to search friend via email or username and send them friend Request

Send message:

-Should be able to send an instant message to her/his friend in chat application list.

- notify

Public chat:

-User should be able to send message on public chat

Privacy for user(not required)

-can hide email address

Friend list:

-Remove friend

  -Add friend

Requirement:
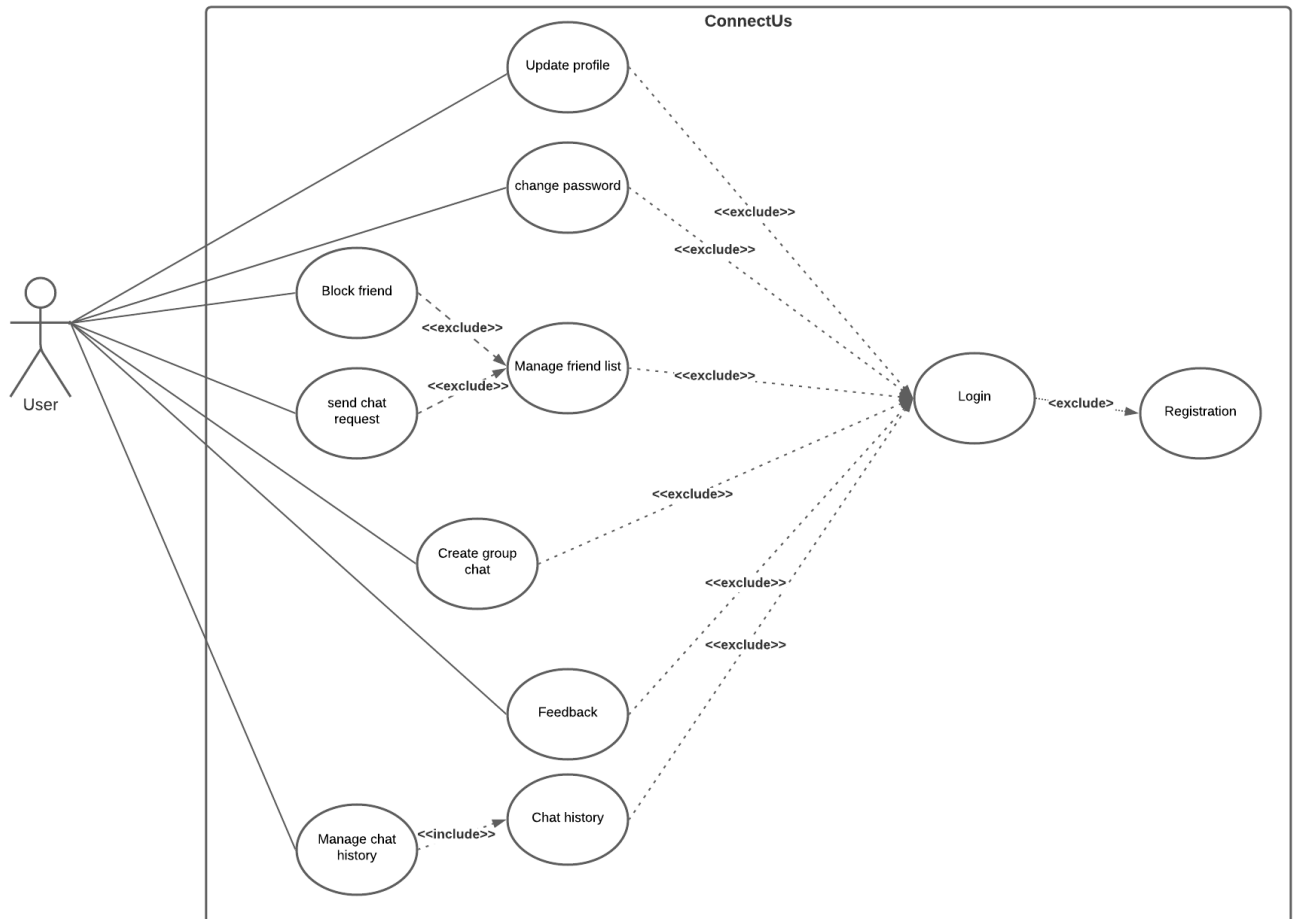
- Network connection

Limitation:

- audio/video calls
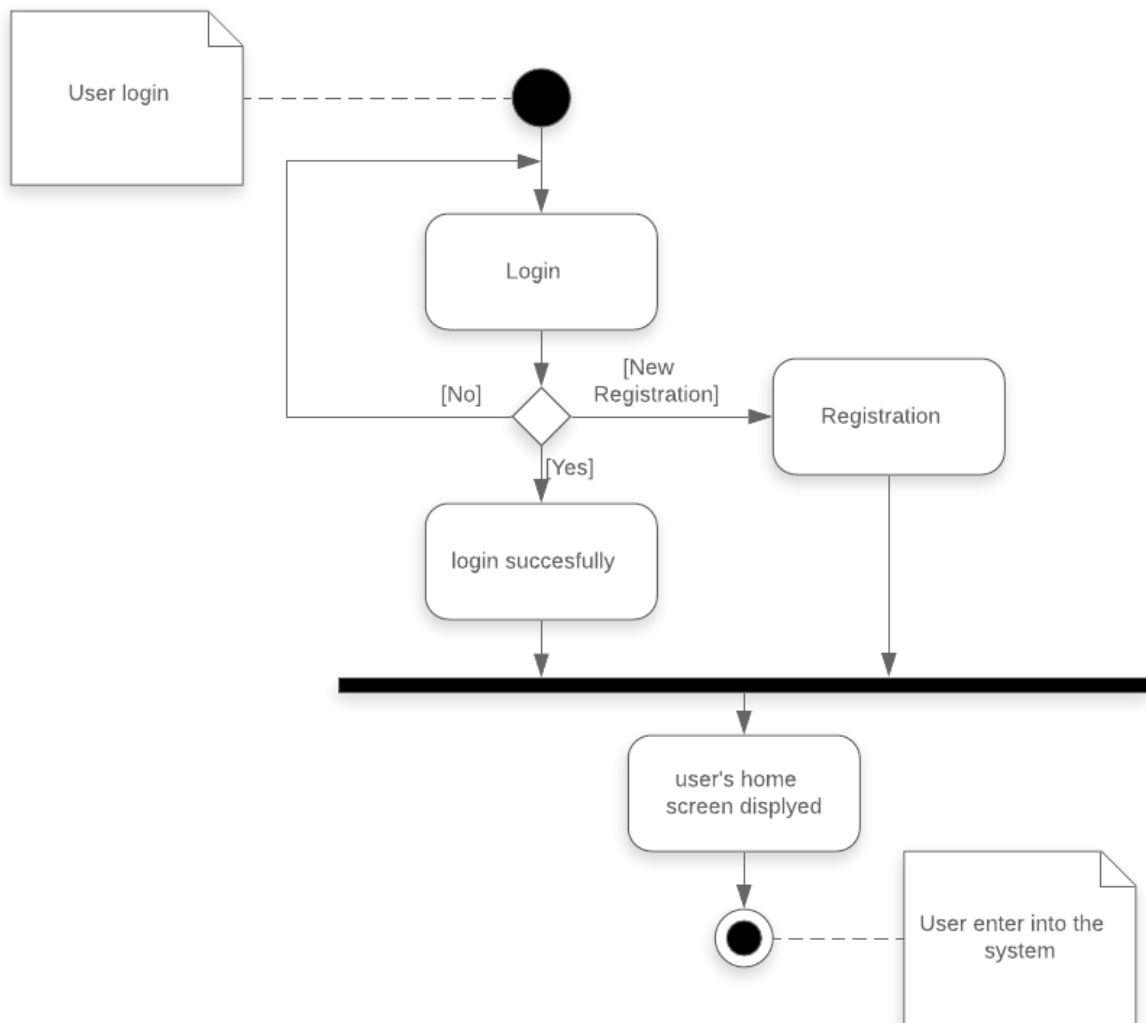- Group chat

Technologies/tools used :

- Platform used: VS Studio 2019
- Platform used: PostgreSQL 9.6 (database)
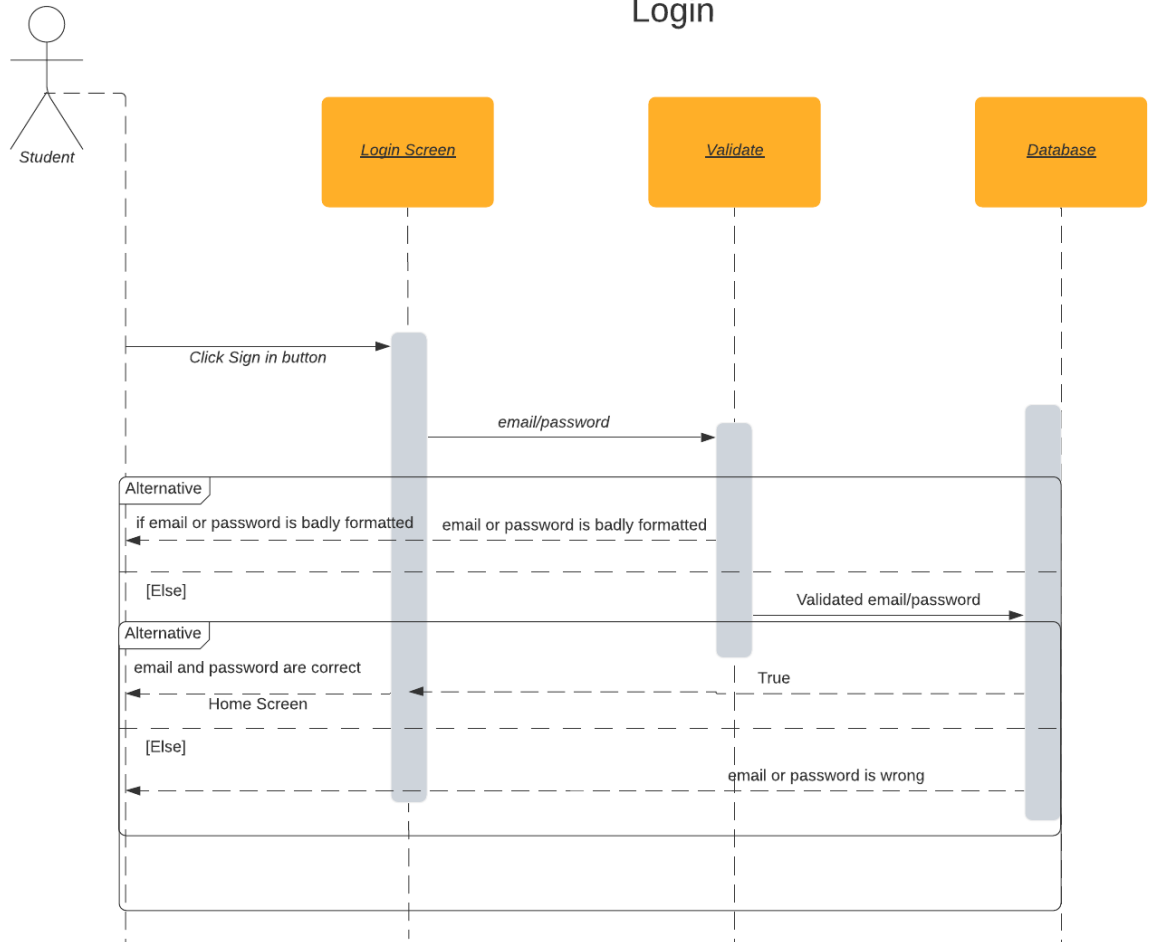- Language: Python with Django framework

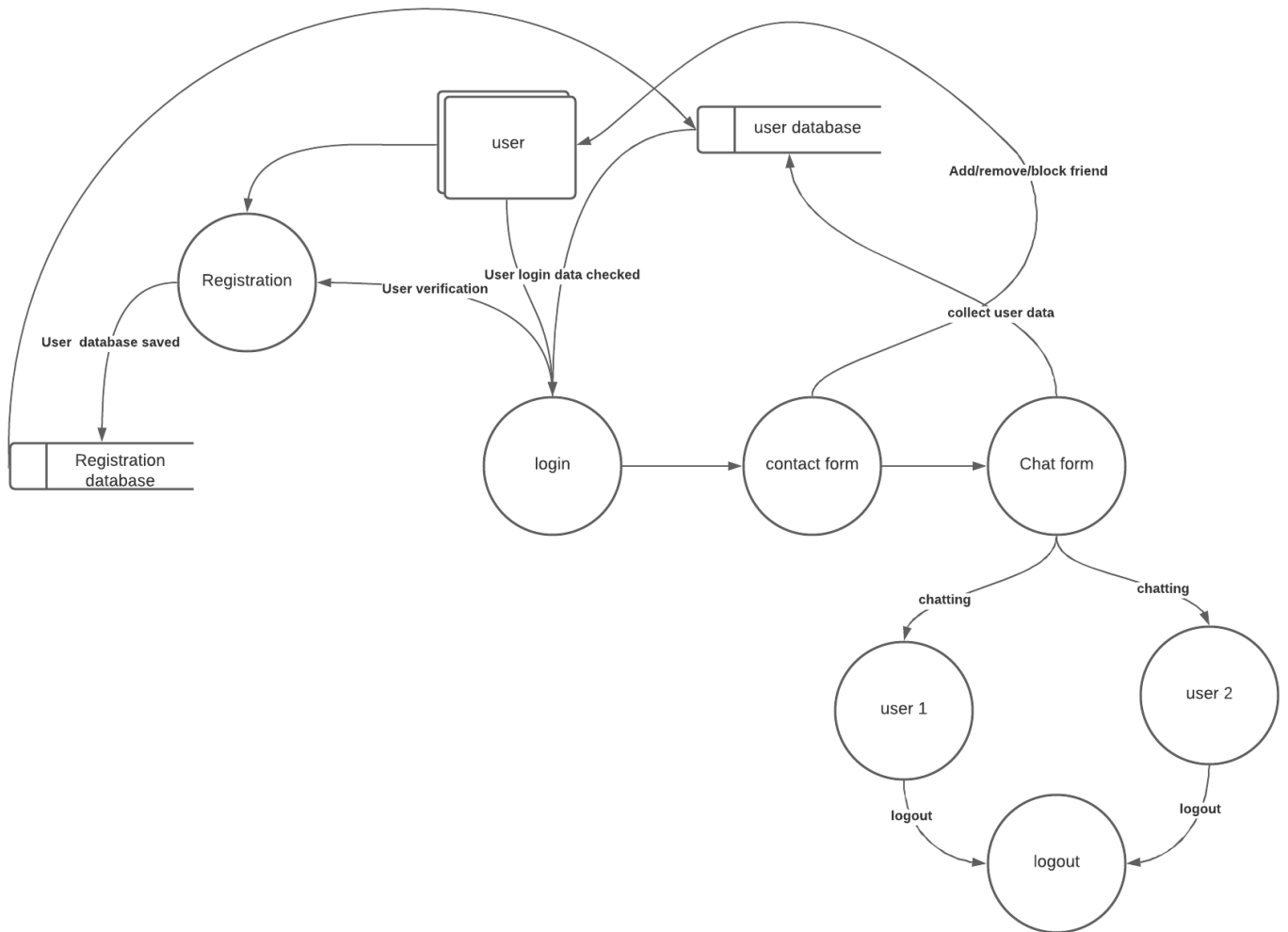# Design :

- **UML Diagram:**

Activity diagram for login

User login

Login

[No] [New Registration]

Registration

[Yes]

login succesfully

user's home screen displyed

User enter into the system

Sequence Diagram for
Login

Student

Login Screen

Validate

Database

Click Sign in button

email/password

Alternative

if email or password is badly formatted | email or password is badly formatted

[Else]

Validated email/password

Alternative

email and password are correct

True

Home Screen

[Else]

email or password is wrong

- DFD MODEL

user

user database

Registration

Add/remove/block friend

User login data checked

User verification

User database saved

collect user data

Registration
database

login

contact form

Chat form

chatting

chatting

user 1

user 2

logout

logout

logout

Testing :

Test-Id	Test Case Objective	Input Date	Expected Date	Actual output	Status
TC_01	Registration	User data – with same username	Username already exist	Username already exist	pass
TC_02	Login	Registered data	Direct to home	Direct to home	pass
TC_03	Login – with wrong info	Wrong data	User not valid	User not valid	Pass
TC_04	Public chat – chat history	-	Display old chat history	Display old chat history	Pass
TC_05	Public chat – Send message	Any data	Succesfully send to all user of system	Succesfully send to all user of system	Pass
TC_06	Self_Account	-	Display user details	Displayed user details	Pass
TC_07	Edit pfp	Profile pic able to crop	Succesfully updated pfp	Succesfully updated php	Pass
TC_08	Hide email	Enable hide email	Succesfully hide	Succesfully hide	Pass
TC_09	Search friend	Username of email	Display account if exist	Display account if exist	Pass
TC_10	Send friend Request	-	Succesfully send Request	Succesfully send Request	Pass

| TC_11	Accept Friend Request	-	Succesfully Accept friend Request	Succesfully accept friend request	Pass
TC_12	Friend list	-	Friend list of that user	Friend list of that user	Pass
TC_13	Personal chat with friend	Message to friend	Send message to perticular friend	Send message to Perticular friend	Pass
TC_14	Remove friend	-	Succesfully Removed friend	Succesfully Removed friend	Pass

Screenshots:

Login
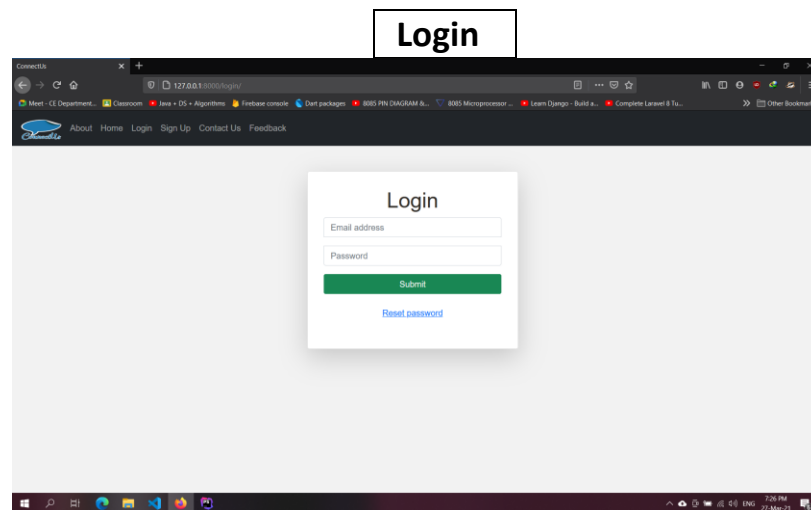
Home
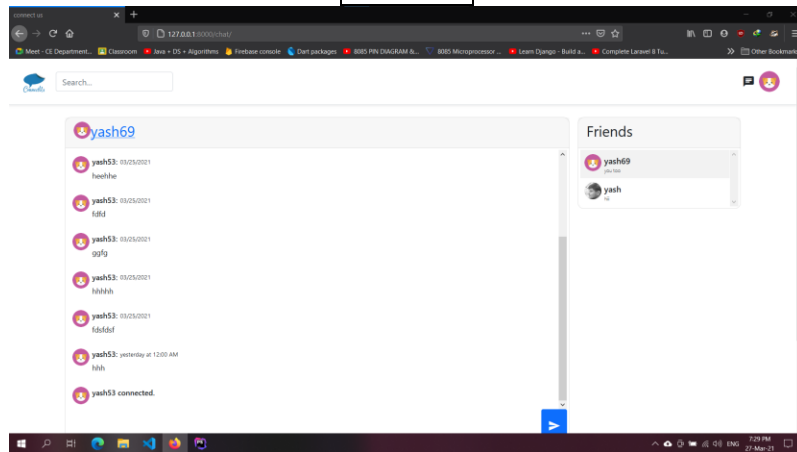
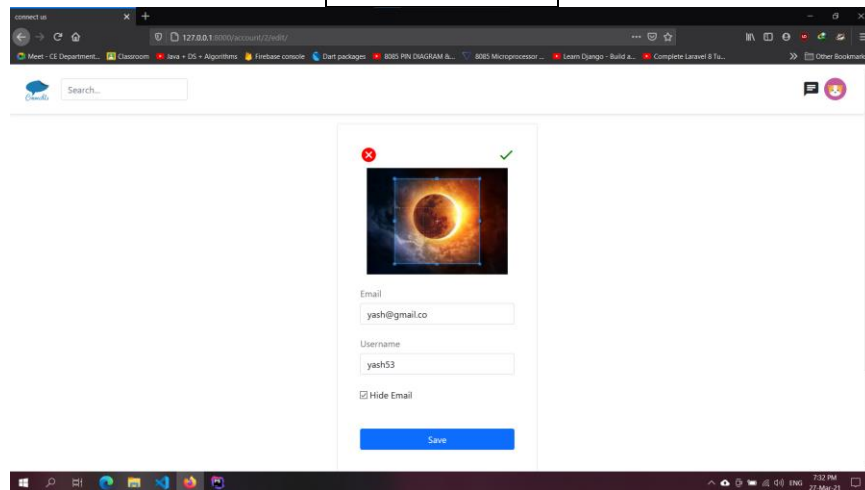## Sign in
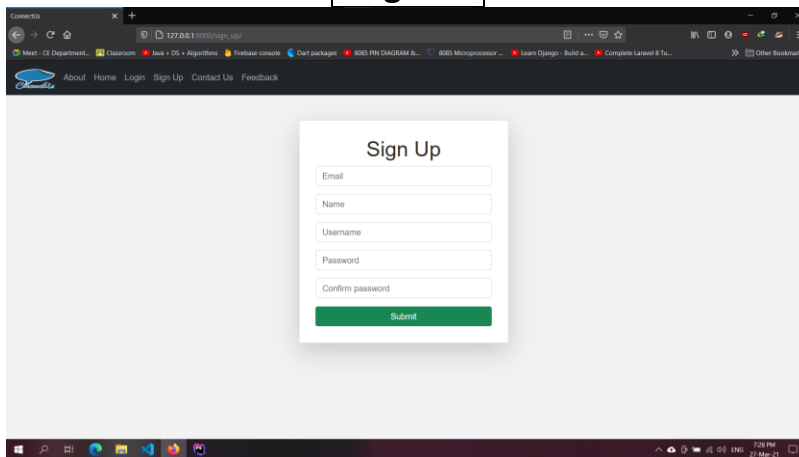
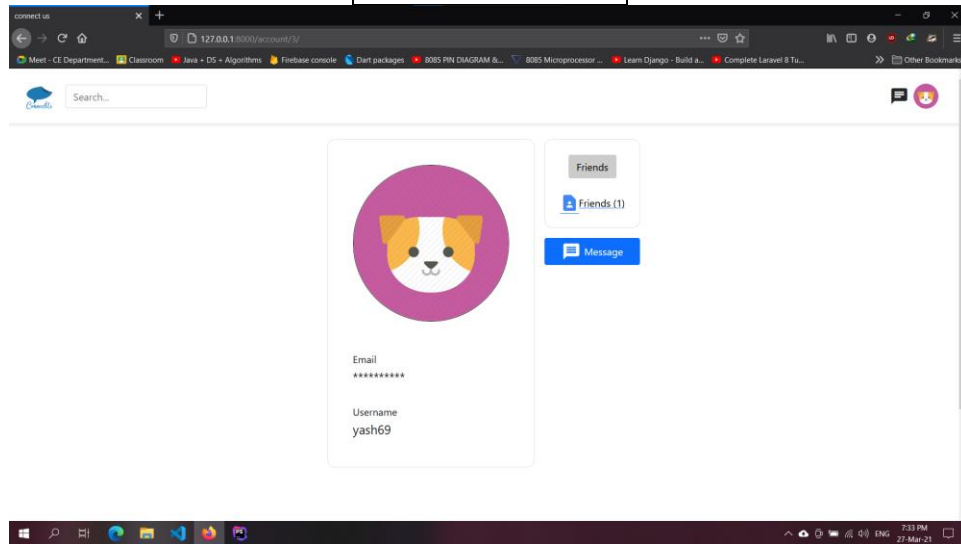## Self account
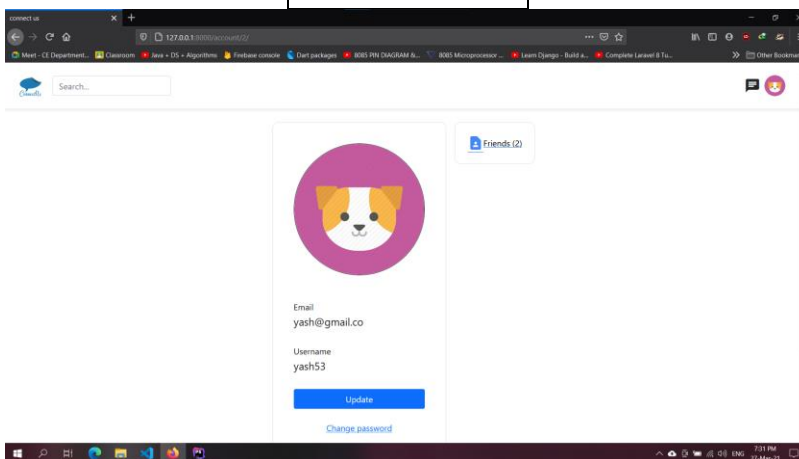
Search Result
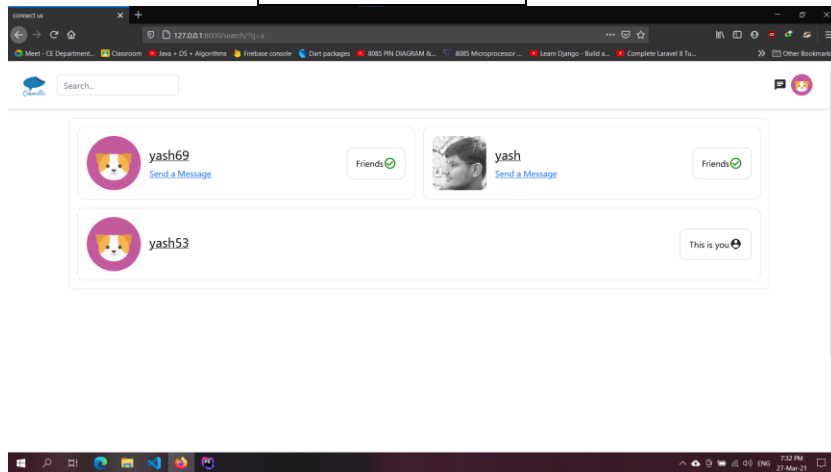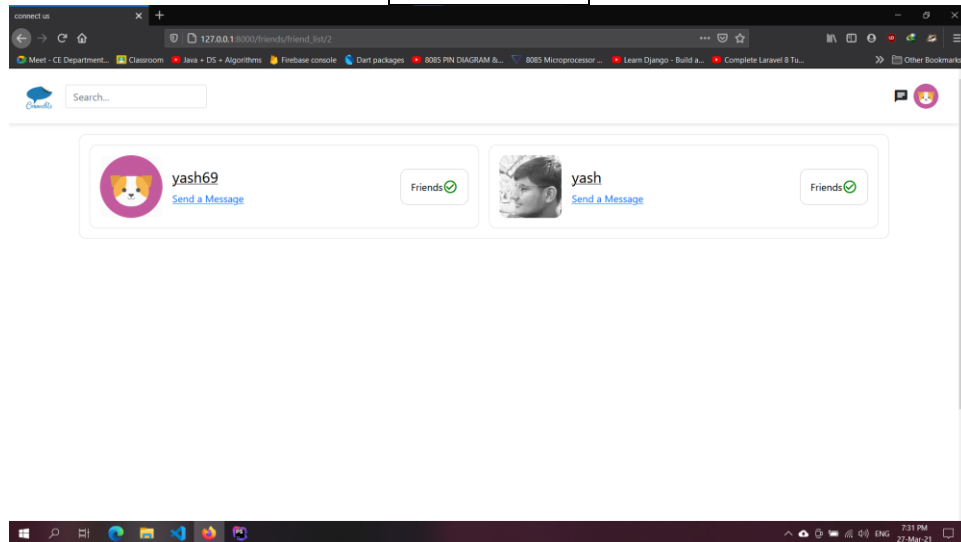

Public chat
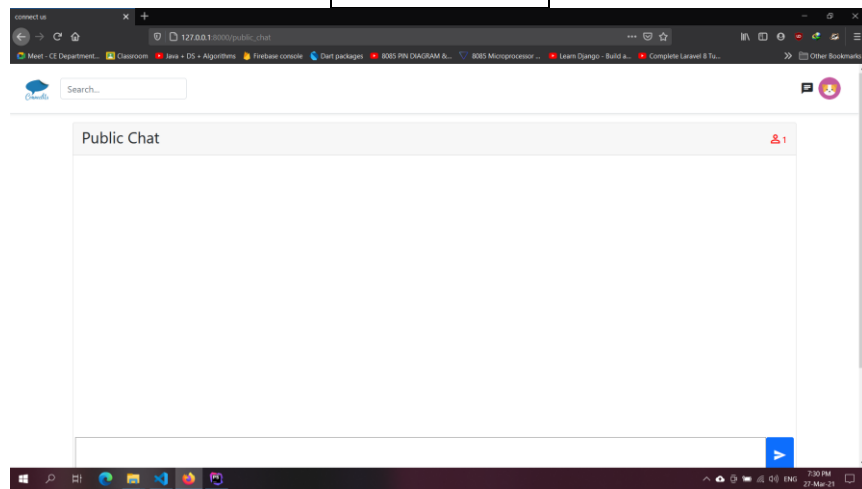
Edit account

Friend Account

Friend list

Conclusion:

Person with internet provide can chat with their friends In addition they can use Public chat as an group discussion. User can add friend Remove Friends .

Limitations and Future Extensions.

- Group chat
- Send image / Document
- Voice message
- Audio call
- Video Call
- Status/Story
- Notification

Bibliography

- Google
- Bootstrap
- Material icons
- Youtube channels
- Django channels Documentations
- W3school