Project Based Learning-II
Work Book and Report
Course Code: 210258
(2019 Course)

Second Year Engineering

Year 2020 - 2021

Group ID:

0	7

Team Members: 1.   Deepak Bohara(22113)

2.   Abhinav Maindre (22101)

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Project Title   :   Real Time Chat

Name of Mentor :   Prof.Manjusha Tatiya

Preamble

For better learning experience, along with traditional classroom teaching and laboratory learning; project based learning has been introduced with an objective to motivate students to learn by working in group cooperatively to solve a problem, Project-based Learning (PBL) is a student centric pedagogy that involves a dynamic classroom approach in which it is believed that students acquire a deeper knowledge through active exploration of real world challenges and problems. Students learn about a subject by working for an extended period of time to investigate and respond to a complex question, challenge or a problem. It is a style of active learning and inquiry-based learning. Problem based learning will also redefine the role of teacher as mentor in learning process. Along with communicating knowledge to students, often in a lecture setting, the teacher will also to act as an initiator and facilitator in the collaborative process of knowledge transfer and development.

This workbook will reflect accountability, punctuality, technical writing ability and work flow of the work undertaken.

CERTIFICATE

This is to certify that Mr. <u>Deepak Bohara</u>

Group No. <u>07</u> Division <u>A</u> Branch <u>Computer Engineering</u> has successfully completed the

work associated with **Project Based Learning II (210258**) titled as **"Real Time Chat"**

and has submitted the work book associated   under my supervision, in the partial

fulfillment of Second Year Bachelor of Engineering(Choice Based Credit System) (2019

course) of Savitribai Phule Pune University.

Date:

Place:

Guide   Head   Coordinators

(Name & Sign)   (Name & Sign)   (Name & Sign)

CERTIFICATE

This is to certify that Mr. Abhinav Maindre

Group No. 07 Division A Branch Computer Engineering has successfully completed the

work associated with **Project Based Learning II (210258**) titled as **"Real Time Chat"**

and has submitted the work book associated under my supervision, in the partial

fulfillment of Second Year Bachelor of Engineering(Choice Based Credit System) (2019

course) of Savitribai Phule Pune University.

Date:

Place:

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This is to certify that Mr. <u>Vishwajeet Birajdar</u>

Group No. <u>07</u> Division <u>B</u> Branch <u>Computer Engineering</u> has successfully completed the

work associated with **Project Based Learning II (210258)** titled as **"Real Time Chat"**

and has submitted the work book associated under my supervision, in the partial

fulfillment of Second Year Bachelor of Engineering(Choice Based Credit System) (2019

course) of Savitribai Phule Pune University.

Date:

Place:

Guide   Head   Coordinators
(Name & Sign)   (Name & Sign)   (Name & Sign)

CERTIFICATE

This is to certify that Mr. <u>Vikas Dain</u>

Group No. <u>07</u> Division <u> B</u> Branch <u>Computer Engineering</u> has successfully completed the

work associated with **Project Based Learning II (210258**) titled as **"Real Time Chat"**

and has submitted the work book associated under my supervision, in the partial

fulfillment of Second Year Bachelor of Engineering(Choice Based Credit System) (2019

course) of Savitribai Phule Pune University.

Date:

Place:

Guide	Head	Coordinators
(Name & Sign)	(Name & Sign)	(Name & Sign)

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With immense pleasure, I am presenting this Project report as part of the curriculum of S.E. Computer Engineering. I wish to thank all the people who gave me an unending support right from the stage the idea was conceived.

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We are appreciative to our Seminar Coordinator Prof.Uzmamasrat Shaik and Prof. Manjusha Tatiya for their great support throughout the course of our Project Work.

We are grateful to our internal guide Prof. Manjusha Tatiya for her support and guidance throughout the course of our Seminar.

We also thanks all those who have directly or indirectly guided and helped us in implementing this Project.

Last but not the least we thank our beloved parents, friends and well-wishers who helped us to do this Project by their kind help and assistance.

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Project Information Sheet

Project /Group ID	07				
Title	Real Time Chat				
Problem Statement	Real Time Chat is a online chat system where many people can interact with each other without providing private information				
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Group Members	Division	Roll No.	Name	Mobile Number	Email ID
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Name & Signature of Faculty/Mentor:

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1.Problem Statement: Real Time Chat

Introduction:

Chat, also known as online chat or internet chat, is a way of communication and interaction in real time on the Internet. This communication is based on text messages. Two or more people can communicate and also send pictures, videos or audio files.

There are many types of chats – for example, ongoing or scheduled for a certain time. Chat requires a software or messenger application. Some chats require users to registrate or to sign up to join chat groups.

Proposed system:

The proposed system is creating Real Time Chat that allows everyone using it. No matter where they are or when they use it. From now on, there is no need to go anywhere to participate in real time chat .They can stay at home and join it. At any time, they are wish to participate in it. The only thing that users don't need any sign up or registrations here as this a real time chat it will just ask you for your name(you can also put your dummy name) to enter and start chatting it is available to global.You just need a device with internet connection that's it.It will not store any backup so that if anyone is sharing any personal details like debit card details mobile number etc ,so no one have access to it. Whenever you refresh it will start the chat from the beginning and people who joined at that time can only be able to chat with the another person.Hackers will not get any chance of hacking.

2.Motivation:

Real Time Chat is basically for chatting purpose but the main advantage of this is that user backup is not stored anywhere and it is for global and this chatting is only for short period of time.There are already various chatting applications like whatsapp , facebook and instagram but there we are connected to private chats like one to one .So we decided to make a new chatting system which will connect globally , it is only for friendly purpose so that globally you will be able to know about different types of people around and you can chat without feeling any hesitation,fear that who is in front of you and whom you are talking too.And now a days the today's generation is not much friendly minded like they suffer a lot from many things and they feel sharing to there nearby friends or close ones will judge them or take them in wrong way .Here in the real time chat the person can talk freely and no one will judge because everyone will have their different opinions.And here it will not ask any registeration or signup which will let person put a dummy name and talk freely and no one can contact each other after the conversation.

3.Objectives:

· To design user friendly real time chat.
· To make users participate in chat without any fear and hesitation.
  To connect one person to globally.

START

ENTER NAME

o

IF ENTERED NAME
START
ELSE
ENTER NAME AGAIN

END
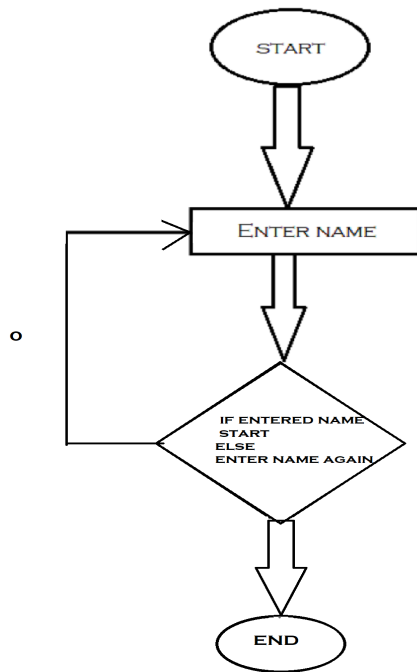
4.Methodology/Proposed system block diagram:

We selected the topic of our project with the help of all team-members. Discussion & communication about the project was done amongst the team-members.
We implemented this project and developed Real Time Chat using html ,css ,javascript and socket.io .

Fig.1 Block Diagram

Tools and Technology:

1.Java Script

JavaScript is a high-level programming language; It was originally designed as a scripting language for websites but became widely adopted as a general-purpose programming language, and is currently the most popular programming language in use JavaScript is usually found running in a web browser as interactive or automated content, ranging from popup messages and live clocks to large web applications; JavaScript is also commonly used in server-side programming through platforms like Node.js, or "embedded" in non-JavaScript applications where the base programming language lacks the high-level functionality that JavaScript offers.

2.Html

The **HyperText Markup Language**, or **HTML** is the standard markup language for documents designed to be displayed in a web browser. It can be assisted by technologies such as Cascading Style Sheets (CSS) and scripting languages such as JavaScript.

Web browsers receive HTML documents from a web server or from local storage and render the documents into multimedia web pages. HTML describes the structure of a web page semantically and originally included cues for the appearance of the document.

3.CSS

Cascading Style Sheets (**CSS**) is a style sheet language used for describing the presentation of a document written in a markup language such as HTML. CSS is a cornerstone technology of the World Wide Web, alongside HTML and JavaScript.

CSS is designed to enable the separation of presentation and content, including layout, colors, and fonts. This separation can improve content accessibility, provide more flexibility and control in the specification of presentation characteristics, enable multiple web pages to share formatting by specifying the relevant CSS in a separate .css file which reduces complexity and repetition in the structural content as well as enabling the .css file to be cached to improve the page load speed between the pages that share the file and its formatting.

4.Socket.io

Socket.IO is a JavaScript library for realtime web applications. It enables realtime, bi-directional communication between web clients and servers. It has two parts: a client-side library that runs in

the browser, and a server-side library for Node.js. Both components have a nearly identical API. Like Node.js, it is event-driven.

Socket.IO primarily uses the WebSocket protocol with polling as a fallback option, while providing the same interface. Although it can be used as simply a wrapper for WebSocket, it provides many more features, including broadcasting to multiple sockets, storing data associated with each client, and asynchronous I/O

5.Software and Hardware Requirements:

1.Any device having web browser and a internet connection.(Mobile/PCs/Laptops)

2.Application software   : Any browser(chrome , Mozilla ,etc)

Prerequisite:

The prerequisite of this project is the basic knowledge of **JavaScript ,CSS , socket io and HTML**.

6.Implementation:

Created a public folder which will contain images(for icon,title icon), client.js and css file
Inside main folder create index.html, server.js
server.js will contain socket.io definition
client.js will contain backend work for handling for user chats, different functions for handling the chats and interface
style.css shows how the website will look and react with different width of
   device
index.html contains all import of script file, css file as well as different
image file
For hosting the website , we used Heroku which provides free hosting
     for lifetime
We just need to have Git for heroku

7.Results:

Output images of our project:
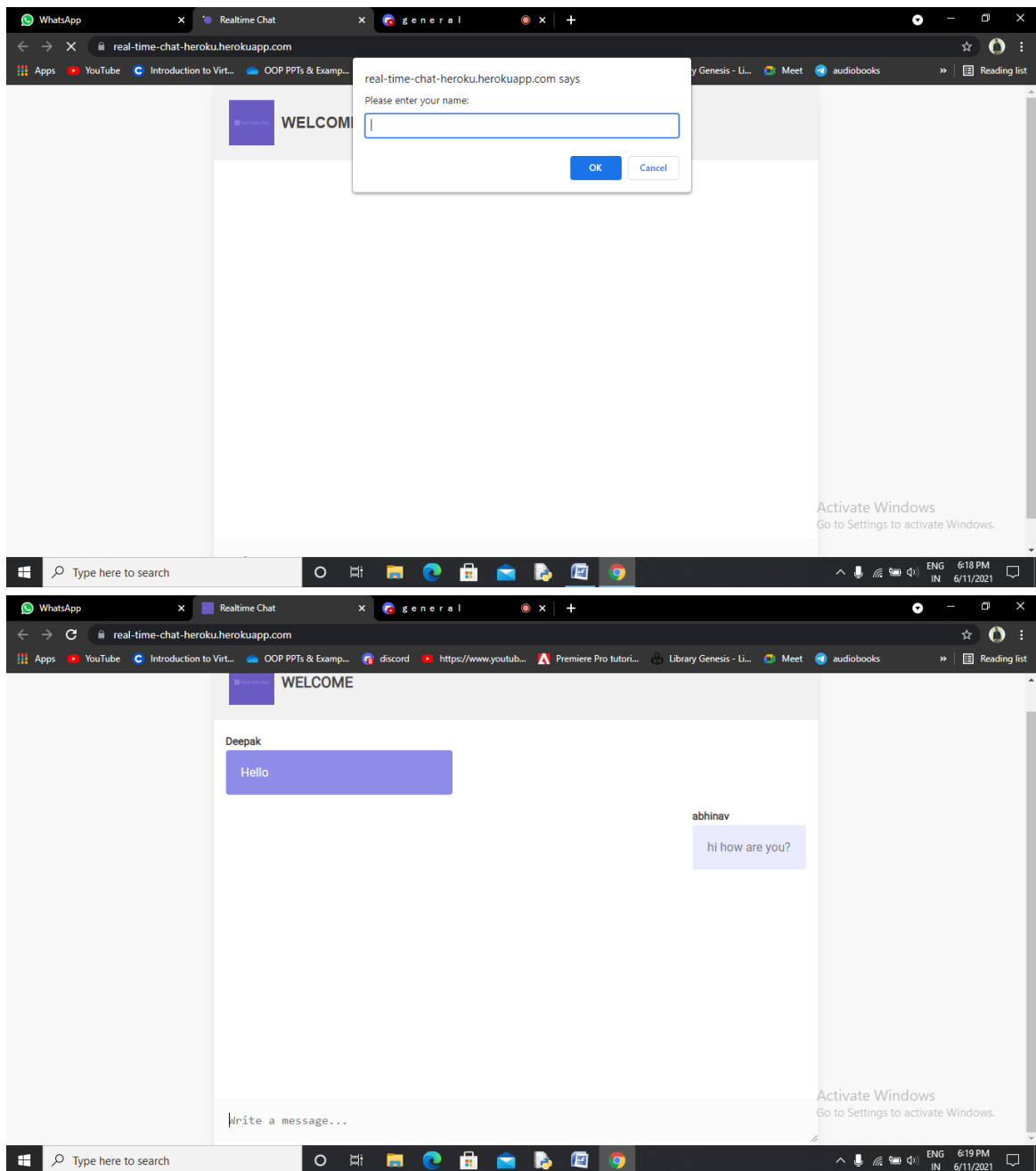
8.Conclusion and Future scope:

Our main aim was to connect people globally and make a user friendly platform. As now a days, privacy is a main concern. Since, so many websites has privacy issue with them. So, this type of platform is a must for future as everything is becoming online so that privacy is maintained.