



CSE 299.7

Junior Design

**Project Proposal
Of
Real-Time Chat Application**

Submitted by,

Name	ID
Md. Aminul Islam	1721208042
Ismail Bin Suhrwardy	1812628042

Submitted to:

Rifat Ahmed Hassan (RIH)

Submitted on

Date: 28th june

Table of Contents

Topic	Page no.
1. Title Page	1
2. Table of Content	2
3. Abstract	3
4. Introduction	4
5. Problem Statement	5
6. Technology Review	6
7. Project Features and step of the work	7
8. Language and Software	8
9. Roles & Responsibilities	10
10. Time Distribution	11
11. Conclusion	12

Abstract:

A chat application is a feature or a program on the Internet to communicate directly among Internet users online or equally using the Internet. Chat applications allow users to share even though from a great distance. Therefore, this chat application must be real-time and multi-platform, and many users can use it. Information and communication technologies are rapidly developing. It is one of the reasons for Bangladesh, especially Dhaka, to create this chat application. That's because Bangladesh does not always rely on outsiders. Bangladesh needs to develop this chat application for itself. This chat application in the manufacture begins with collecting relevant data in the web and mobile versions. The programming language used to build server in Node.js with the Express framework, Ajax connects frontend and backend, PHP for functions, JavaScript, HTML for the application's skeleton, and Mongo DB for the database.

Keyword: real-time chat

Introduction:

Communication is essential for humans. It is a means for people to exchange messages or thoughts. It has started since the beginning of human creation. Distant communication began as early as the 18th century by introducing television, telegraph, and telephone. Telephone communication stands out as the fastest growing technology among the other devices. It was at the first fixed-line. Then from fixed line to wireless mobile, from a voice call to data transfer. It is evolving at a rapid speed. Computer networks and telecommunication technologies bear the same objective: to allow people to communicate by sharing data.

Chatting is using technology to share data to bring people and ideas together despite distance and geographical barriers. The idea to develop such technology has been available for years, but its acceptance was pretty recent.

Our project is a real-time chat application. It will guarantee our client or user to run this system on their pc and establish communication to share their message privately.

Review of existing solution

There are a lot of existing solutions which are similar to our primary idea.

Among these are messenger, whatsapp, Telegram, And some private chatting websites like ChatzFree, Y99 , discord server etc.

Specifically messenger and private chatting websites, Discord server are similar to our ones.

In messenger there are a lot of functions, we can chat with our friends and we can also send messages to anyone whom we want to message. So sometimes it is irritating that we have to unwillingly see what we don't want to see, though messengers have a message request option for viewing whom message we want to see, but the problem is by using this option we might miss our emergency text.

But in our system we can only message with whom we want to chat by using our website. Basically by giving the server link(LocalHost) we can connect to each other.

We can also use private rooms like discord server, ChatzyFree, Y99 for chat but here we have to make friends online , or we have to give discord server link to join and chat. But in the discord server we are not able to chat in person to person, we can text in a group chat.

So basically by using our own Real-Time Chat Application we will be able to chat privately, and it does not save any data so it is secure to chat through the Real-Time application.

Technology Review:

Many brands and individuals are working tirelessly to bring new, improve messaging apps to the population. But most of them rely on data selling or data sharing with third parties to earn money. It is an illegal act.

The goal of these companies is to earn profit with a less stable system. So the designs are full of bugs, choppy, outdated, and not so user-friendly.

The technology, ideas exist to create a better chatting application to serve its intended purpose. But the lack of commitment, profit earning, and limited data space is hampering creating an ideal chatting application.

The use of our chatting application will reduce the space problem. No third party can share or steal data as there is no connection to the server. The system protects the user's data.

The UI is straightforward and user-friendly. It doesn't have complex or unnecessary functions like other chat apps. As it is easy to use and has less complicated parts, the application is light and can run on a low spec platform. Our project can run on Windows, Linux, and macOS.

Project Feature to be implemented:

- Login Menu (Login / Logout function)
- Register function
- Photo Upload
- Who is Online
- Search Option
- One on One Chat
- Log in from Different Browsers
- Public Host

Step of the Works:

- Gathering information on what we are agreeing to build.
- Designing an overview of what the application/website is doing and how it is sharing the data among cross platform.
- Designing a mock up templet of the website and start developing the database for it.
- Using the mock up start developing the website/application.
- Testing and debugging.

Language will be used:

- MySQL
- PHP
- JavaScript
- HTML
- CSS

Software Tools:

We will use the following software to implement our project:

- Vs code
- Xampp
- PHP

Roles & Responsibility:

Stages /tasks	Roles
Analysis and Design	-----
Requirements Analysis	Group discussion
Work plan creation	Group discussion
Demo of work plan	Group discussion
Implementation	-----
Web design creation	Md Aminul Islam
Database creation	Ismail Bin Suhrwardy
login, user management	Ismail Bin Suhrwardy
Picture upload/delete	Ismail Bin Suhrwardy
Message sending functionality	Md Aminul Islam
Chat heads who is active or not	Md Aminul Islam
Testing and other QA tasks	-----
Testing and bug Fixing	Group discussion
Deployment	-----
Deployment on hosting of client	Group discussion

Time Distribution:

#	Stages /tasks	Man hour
Stage 1	Analysis and Design	-----
1.1	Requirements Analysis	7 days
1.2	Work plan creation	7 days
1.3	Demo of work plan	7 days
Stage 2	Implementation	-----
2.1	Web design creation	7 days
2.2	Database creation	7 days
2.3	login, user management	7 days
2.4	Picture upload/delete	7 days
2.5	Message sending functionality	7 days
2.6	Chat heads who is active or not	7 days
Stage 3	Testing and other QA tasks	-----
3.1	Testing and bug Fixing	7 days
Stage 4	Deployment	-----
4.1	Deployment on hosting of client	7-14 days

Conclusion:

This is a messaging app with a focus on speed and security. The user would be able to chat, see who is online or offline. He has the power to delete his own chat if necessary.

The app, which is free to join, can be used to communicate with your friends. This is a cloud-based messenger. As a result, you can access your messages from several devices at once.