

**CCS375-WEB TECHNOLOGIES  
CHAT APPLICATION AND WEBSITE**

**A MINI PROJECT REPORT**

*Submitted by*

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## BONAFIDE CERTIFICATE

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## **ABSTRACT**

Convo X is an innovative online communication platform designed to enhance the way users interact. This project focuses on delivering a seamless user experience through key features such as real-time conversations, secure file sharing, and robust privacy controls. It was Built using a modern web development stack comprising HTML, CSS, JavaScript, PHP, and MySQL, Convo X uses the XAMPP environment for efficient local development and backend integration. Convo X aims to redefine online communication by combining functionality, security, and design excellence.

## TABLE OF CONTENTS

CHAPTER NO	CONTENT	PAGE NO
1	INTRODUCTION	5
	1.1 INTRODUCTION TO THE CHAT APPLICATION AND WEBSITE PROJECT	5
	1.2 PROBLEM STATEMENT	5
	1.3 OBJECTIVES	6
2	SYSTEM DESIGN	7
	2.1 ARCHITECTURE DIAGRAM	7
	2.2 USECASE DIAGRAM	8
	2.3 DATABASE DESIGN	9
	2.4 MODULE DESCRIPTION	10
3	IMPLEMENTATION OVERVIEW	15
	3.1 FRONTEND IMPLEMENTATION	15
	3.2 BACKEND IMPLEMENTATION	16
	3.3 DATABASE IMPLEMENTATION	17
4	RESULTS	19
5	CHALLENGES AND LIMITATIONS	27
6	APPENDIX	29
	6.1 CODE SNIPPETS	
7	CONCLUSION	109
8	FUTURE WORK	110
9	REFERENCE LINK	111

# **CHAPTER 1**

## **INTRODUCTION**

### **1.1 INTRODUCTION TO THE CHAT APPLICATION AND WEBSITE PROJECT:**

In today's digital age, communication platforms are essential for connecting people across distances, whether for personal or professional purposes. However, many existing platforms either lack user-friendliness or fail to address key concerns like privacy and secure file sharing. This is where Convo X steps in. Convo X is designed to make online communication simple, engaging, and secure. By leveraging technologies like HTML, CSS, JavaScript, PHP, and MySQL within a XAMPP environment, Convo X offers a seamless experience that prioritizes both usability and functionality. This project reflects the efforts of a dedicated team to create a platform that meets the modern user's expectations for fast, reliable, and secure communication.

### **1.2 PROBLEM STATEMENT:**

In the digital communication space, users often face limitations when trying to access a platform that offers a combination of real-time messaging, secure file sharing, and enhanced privacy. Many existing solutions provide these features in isolation, forcing users to juggle multiple platforms to meet their needs. This fragmentation creates inefficiencies and complicates the user experience. Moreover, some platforms compromise on privacy, leaving users concerned about the safety of their personal and professional data. There is a clear need for a unified solution that integrates these features into a single, easy-to-use interface, ensuring both efficiency and security.

### **1.3 OBJECTIVES:**

The primary aim of Convo X is to develop a robust communication platform that addresses gaps in existing solutions by focusing on simplicity, functionality, and security. The project is guided by the following objectives:

#### **1. Create a User-Friendly Interface:**

- Design an intuitive and visually appealing interface that ensures users of all technical levels can easily navigate the platform. A seamless experience is prioritized, with smooth navigation and accessible layouts.

#### **2. Enable Real-Time Communication:**

- Facilitate instant messaging to ensure seamless and uninterrupted interactions. Real-time features make communication efficient, mirroring the flow of face-to-face conversations.

#### **3. Provide Secure File Sharing:**

- Incorporate a reliable and easy-to-use file-sharing system that ensures the secure and efficient transfer of files. This feature caters to both personal and professional needs, addressing the concerns of modern users.

#### **4. Ensure Robust Privacy and Security:**

- Develop the platform with advanced privacy measures to safeguard user data and protect conversations from unauthorized access, ensuring users can communicate with confidence.

#### **5. Utilize a Scalable and Reliable Tech Stack:**

- Employ a strong foundation with HTML, CSS, JavaScript, PHP, and MySQL, integrated through XAMPP, to ensure the platform is scalable for future growth while maintaining reliability and performance.

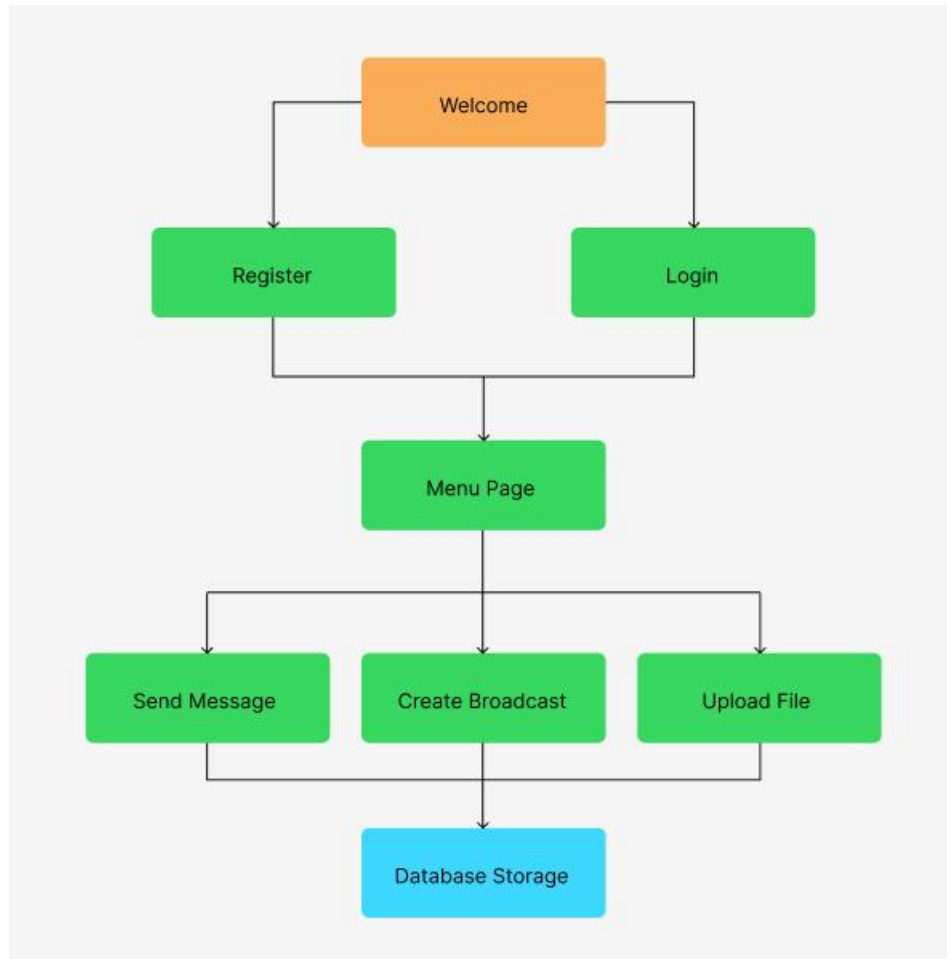
#### **6. Foster Collaboration and Productivity:**

- Combine real-time messaging and secure file sharing to create a collaborative environment that boosts productivity for both teams and individual users, helping them stay organized and efficient.

## CHAPTER 2

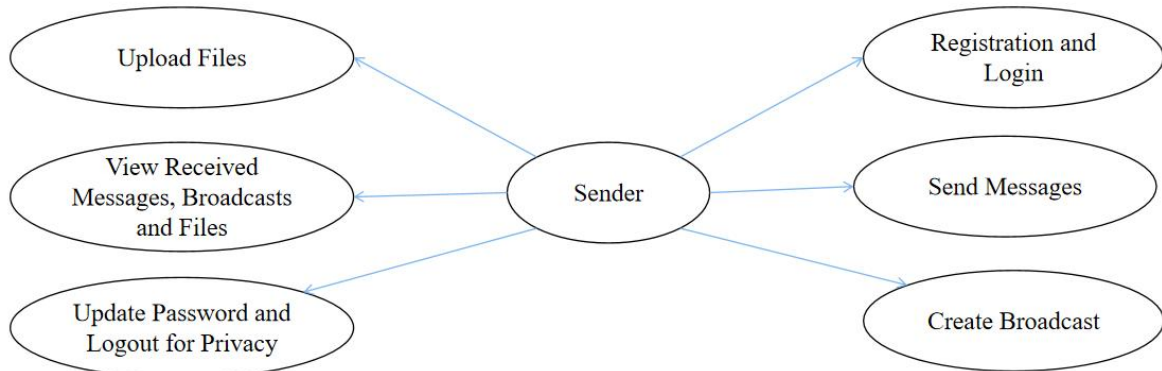
### SYSTEM DESIGN

#### 2.1 ARCHITECTURE DIAGRAM:

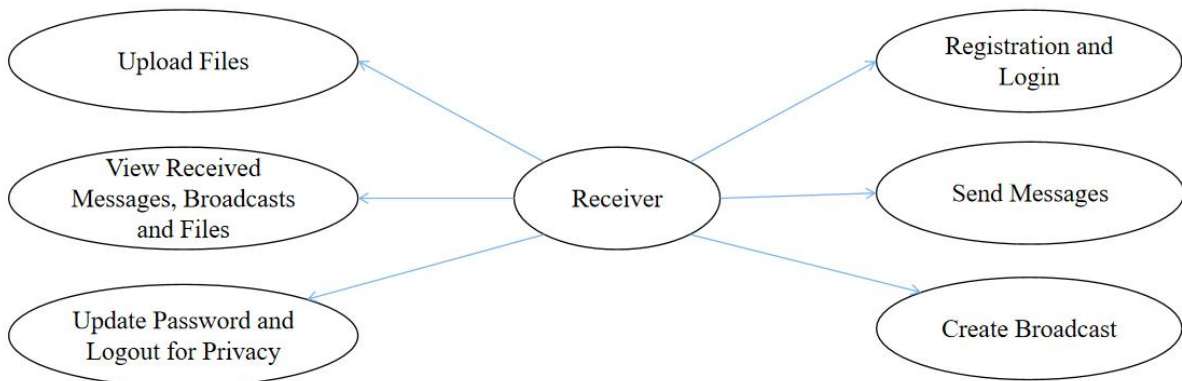


## 2.2 USE CASE DIAGRAM:

### SENDER:

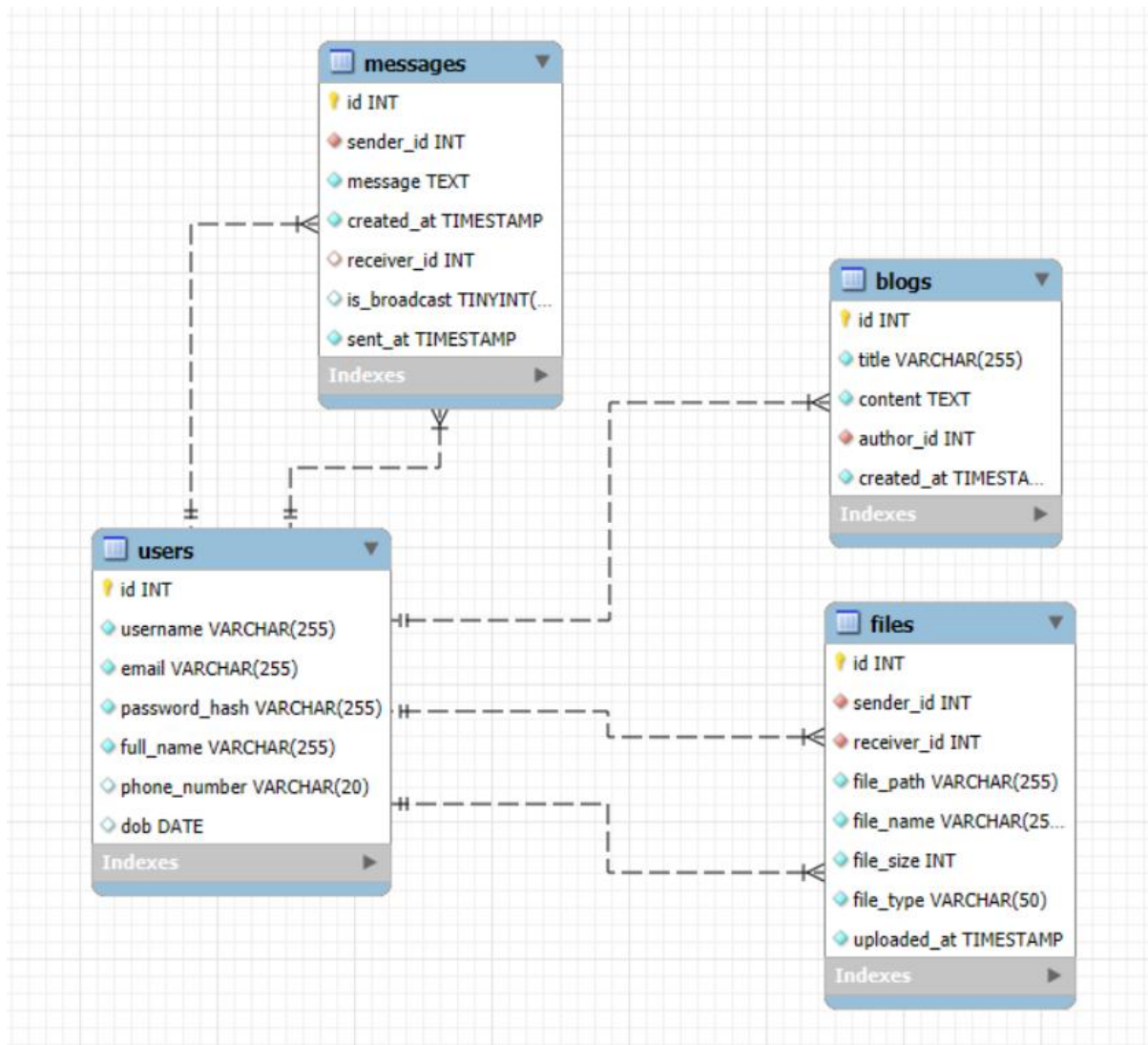


### RECEIVER:





## 2.3 DATABASE DESIGN:



## **2.5 MODULE DESCRIPTION:**

### **1. REGISTRATION MODULE**

#### **Purpose:**

- To enable new users to create an account and store their credentials securely.

#### **Features:**

- User-friendly registration form with fields like username, email, and password.
- Data validation to ensure accurate input (e.g., email format, password strength).
- Secure storage of passwords using hashing/encryption.

#### **Data Flow:**

- **Input:** User enters registration details (username, email, password).
- **Process:** The frontend sends the data to the backend via a POST request.
- **Backend Logic:** Validates input and hashes the password.
- **Database:** Stores the hashed password, username, and email in the users table.
- **Output:** Returns a success message and redirects to the login page.

### **2. LOGIN MODULE**

#### **Purpose:**

- To authenticate users and grant them access to the platform.

#### **Features:**

- Secure login form.
- Authentication using email and password.
- Password comparison with hashed values in the database.
- Session or cookie management for logged-in users.

**Data Flow:**

- **Input:** User enters email and password.
- **Process:** The frontend sends login credentials to the backend.
- **Backend Logic:** Verifies credentials by matching the email and password hash in the database.
- **Database:** Fetches user information from the users table.
- **Output:** If valid, creates a session or token and redirects the user to the menu page.

**3. MENU MODULE****Purpose:**

- The Menu Module acts as the central hub, providing quick access to the platform's key features like messaging, broadcasting, and file uploading. It ensures seamless navigation and a user-friendly experience.

**Features:**

- **Centralized Navigation:** Quick access to Send Message, Create Broadcast, and Upload File options.
- **Dynamic Personalization:** Displays user-specific data, such as profile and activity history.
- **Session Management:** Ensures only logged-in users can access the menu.
- **Responsive Design:** Adapts to various devices for consistent usability.

**Data Flow:**

- **Input:** User interacts with menu options (e.g., clicks "Send Message").
- **Process:** The frontend triggers navigation to the selected module.
- **Output:** Redirects to the respective feature page (e.g., messaging).

## 4. MESSAGING MODULE

### Purpose:

- To facilitate real-time communication between users.

### Features:

- Send and receive instant messages.
- Display conversation history.
- Real-time notifications for new messages.

### Data Flow:

- **Input:** User types a message and clicks "Send".
- **Process:** The frontend sends the message to the backend via WebSocket or AJAX.
- **Backend Logic:** Stores the message in the messages table and notifies the recipient.
- **Database:** Inserts the message with sender and recipient details into the messages table.
- **Output:** The recipient's frontend displays the new message in real time.

## 5. BROADCAST MODULE

### Purpose:

- To allow users to send messages or announcements to multiple recipients simultaneously.

### Features:

- Compose and send a message to a predefined group.
- Manage broadcast groups.
- View broadcast history.

**Data Flow:**

- **Input:** User selects recipients or a group and composes a broadcast message.
- **Process:** The frontend sends the message details to the backend.
- **Backend Logic:** Splits the message into individual messages for each recipient and stores them in the messages table.
- **Database:** Updates the messages table with broadcast entries.
- **Output:** Sends notifications to all recipients.

**6. FILE UPLOAD MODULE****Purpose:**

- To enable users to share files securely and efficiently.

**Features:**

- Simple file upload form with a drag-and-drop interface.
- Progress bar for upload status.
- File size and format validation.
- Download links for shared files.

**Data Flow:**

- **Input:** User selects a file and clicks "Upload".
- **Process:** The frontend uploads the file to the backend via a POST request.
- **Backend Logic:** Validates the file, moves it to the server's storage directory, and updates the database with file metadata.
- **Database:** Inserts file metadata (e.g., filename, size, upload time) into the files table.
- **Output:** Generates a downloadable link for the file and displays it to the user.

## 7. Security Module

### Purpose:

- To ensure user data and communications are protected against unauthorized access.

### Features:

- User authentication (login/logout).
- Role-based access control.
- End-to-end encryption for sensitive data.
- Secure password storage using hashing algorithms like bcrypt.

### Data Flow:

- **Input:** Login credentials, messages, or files.
- **Process:** Backend encrypts data and ensures secure transmission (e.g., HTTPS).
- **Database:** Stores encrypted sensitive data and hashed passwords.
- **Output:** Ensures only authorized users can access protected resources.

## CHAPTER 3

### IMPLEMENTATION OVERVIEW

#### FULL STACK FRAMEWORK DETAILS:

The **Convo X** platform is built using a carefully chosen stack of technologies to ensure functionality, scalability, and user-friendliness. Here's an overview of the **frontend**, **backend**, and **database** implementations:

#### 3.1 FRONTEND IMPLEMENTATION

##### TECHNOLOGIES USED:

- **HTML:** To structure the web pages, including forms, buttons, and navigation menus.
- **CSS:** For styling the UI components and ensuring a visually appealing, responsive design.
- **JavaScript:** For implementing interactivity and dynamic content updates.

##### KEY FEATURES:

##### 1. Responsive Design:

- CSS media queries ensure compatibility across devices (desktop, tablet, and mobile).
- Elements like buttons and menus adapt dynamically to various screen sizes.

##### 2. Interactive Elements:

- JavaScript enhances user experience by enabling features like real-time messaging, form validation, and dynamic content rendering.

### **3. User-Friendly Navigation:**

- Clean and intuitive layouts ensure that users can quickly access core features (e.g., messaging, broadcasting, file uploads).

### **4. AJAX Integration:**

- Allows seamless, asynchronous communication with the backend, ensuring faster page loading and updates without refreshing the page.

## **3.2 BACKEND IMPLEMENTATION**

### **TECHNOLOGIES USED:**

- **PHP:** The primary backend programming language used to handle server-side logic, session management, and communication with the database.
- **Apache Server (via XAMPP):** Handles HTTP requests and serves the frontend pages dynamically.

### **KEY FEATURES:**

#### **1. Session Management:**

- PHP sessions track authenticated users and restrict access to sensitive features.

#### **2. Real-Time Communication:**

- Uses AJAX and PHP to enable instant messaging by continuously polling or utilizing WebSocket alternatives.

#### **3. File Uploads:**

- PHP handles file validation (e.g., size, type) and securely stores files in the server directory.



#### **4. Security Features:**

- Passwords are hashed using algorithms like bcrypt.
- SQL queries are parameterized to prevent SQL injection attacks.

#### **5. Routing:**

- PHP dynamically serves pages based on user actions, such as login, registration, and accessing messaging features.

### **3.3 DATABASE IMPLEMENTATION**

#### **TECHNOLOGIES USED:**

- **MySQL:** The relational database management system for storing structured data efficiently.

#### **DATABASE DESIGN:**

##### **1. Users Table:**

- Stores user information (e.g., id, username, email, hashed\_password).

##### **2. Messages Table:**

- Tracks messages exchanged between users (e.g., message\_id, sender\_id, receiver\_id, content, timestamp).

##### **3. Files Table:**

- Logs file uploads with metadata (e.g., file\_id, uploaded\_by, file\_name, file\_path, upload\_timestamp).

##### **4. Broadcasts Table:**

- Records group communication details (e.g., broadcast\_id, creator\_id, message, timestamp).

##### **5. Data Flow:**

- Backend uses SQL queries to insert, retrieve, update, and delete data in MySQL.
- MySQL ensures data integrity using relationships, indexing, and constraints.

## **FEATURES:**

### **1. Optimized Queries:**

- Indexing ensures faster retrieval of data, even with increasing records.

### **2. Scalable Design:**

- The database is normalized to reduce redundancy while allowing scalability for future expansions (e.g., adding features like multimedia messages).

### **3. Secure Data Storage:**

- Sensitive data (e.g., passwords) is encrypted, and access to the database is restricted via role-based permissions.

## **INTEGRATION OF FRONTEND, BACKEND, AND DATABASE**

### **Frontend to Backend:**

- Data (e.g., login credentials, messages) is sent from the frontend to the backend via HTTP POST/GET requests.
- The backend processes the requests and communicates with the database for data retrieval or storage.

### **Backend to Database:**

- The backend uses PHP's MySQL integration to query the database securely.
- Results are sent back to the frontend, where they are displayed to the user.

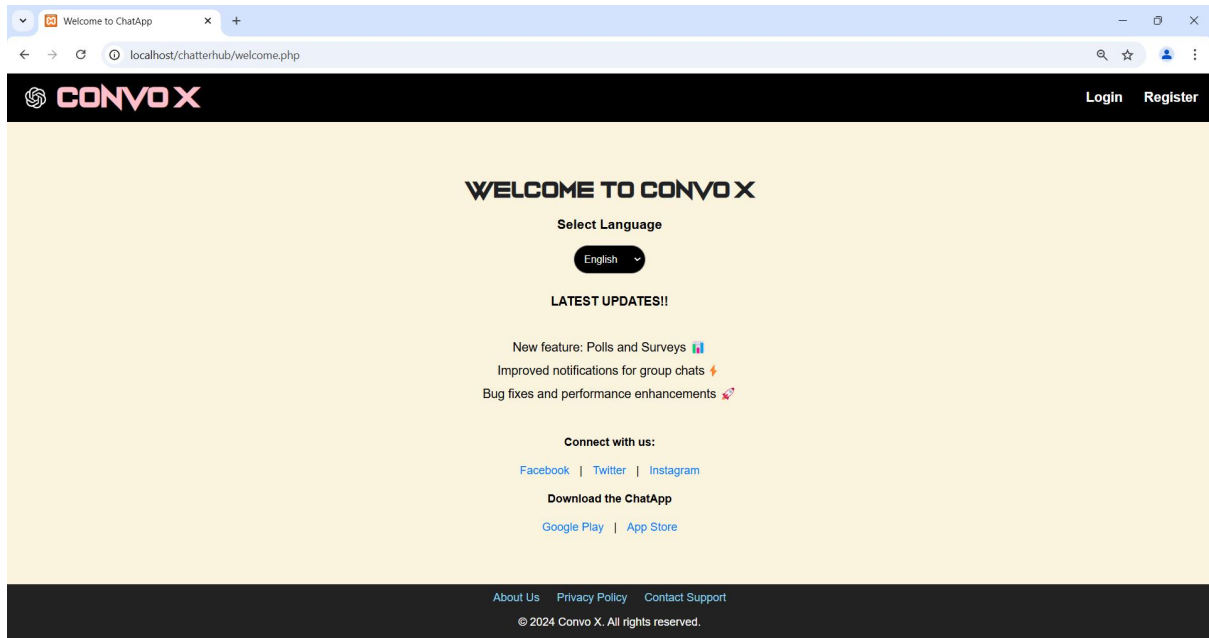
### **Database to Frontend:**

- Dynamic data (e.g., user messages, files) fetched from the database is rendered on the frontend using JavaScript for interactivity.

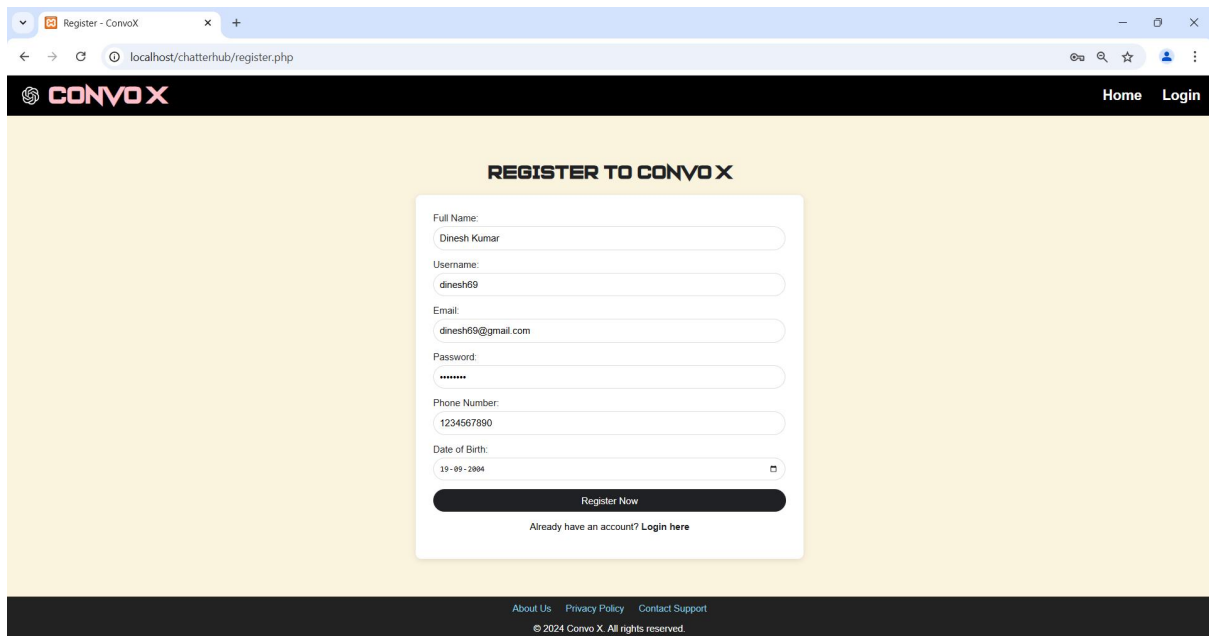
## CHAPTER 4

### RESULTS

#### 4.1 WELCOME PAGE:



#### 4.2 REGISTRATION PAGE:



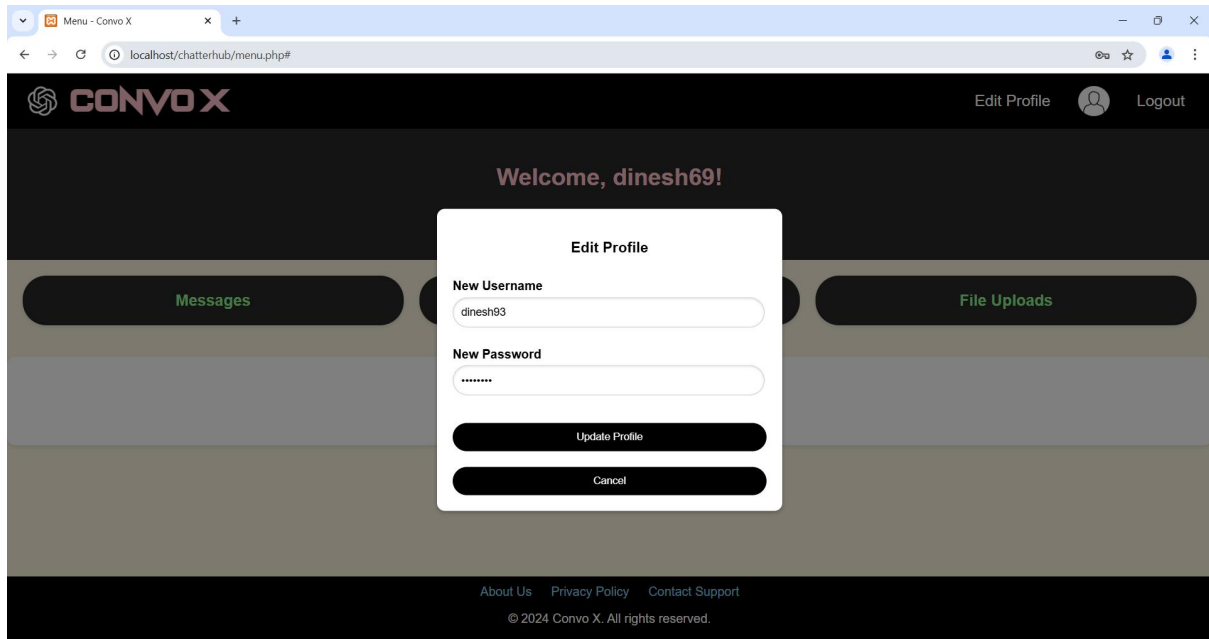
## 4.3 LOGIN PAGE:

The screenshot shows a web browser window with the address bar displaying 'localhost/chatterhub/login.php'. The page features a dark header with the 'CONVO X' logo on the left and 'Home' and 'Register' links on the right. The main content area has a light yellow background with the heading 'LOGIN TO CONVO X'. Below this is a white login form containing two input fields: 'Email or Username:' with the value 'dinesh69' and 'Password:' with masked characters. A dark 'Login' button is positioned below the fields. Underneath the button is a link that reads 'Don't have an account? [Sign up](#)'. At the bottom of the page, a dark footer contains links for 'About Us', 'Privacy Policy', and 'Contact Support', along with the copyright notice '© 2024 Convo X. All rights reserved.'

## 4.4 MENU PAGE:

The screenshot shows a web browser window with the address bar displaying 'localhost/chatterhub/menu.php'. The page features a dark header with the 'CONVO X' logo on the left and 'Edit Profile' (with a user icon) and 'Logout' links on the right. The main content area has a dark background with the heading 'Welcome, dinesh69!' and the text 'What would you like to do today?'. Below this are three dark buttons with green text: 'Messages', 'Broadcasting', and 'File Uploads'. Further down, on a light yellow background, is the text 'No messages received yet.' followed by a dark 'Send Message' button. At the bottom of the page, a dark footer contains links for 'About Us', 'Privacy Policy', and 'Contact Support', along with the copyright notice '© 2024 Convo X. All rights reserved.'

## 4.5 EDIT PROFILE:



The screenshot shows a web browser window with the URL `localhost/chatterhub/menu.php#`. The page features the Convo X logo and navigation links for 'Edit Profile' and 'Logout'. A central modal titled 'Edit Profile' is displayed, containing input fields for 'New Username' (with the value 'dinesh93') and 'New Password' (masked with dots). Below these fields are 'Update Profile' and 'Cancel' buttons. The background shows a 'Welcome, dinesh69!' message and buttons for 'Messages' and 'File Uploads'.

**Edit Profile**

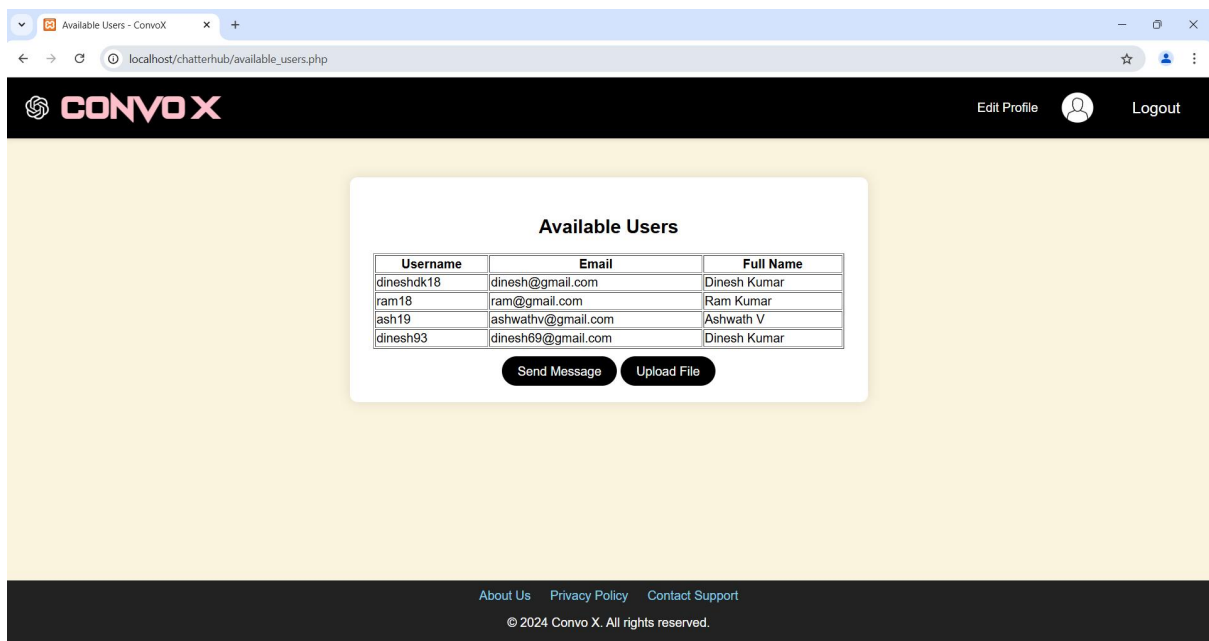
New Username  
dinesh93

New Password  
\*\*\*\*\*

Update Profile

Cancel

## 4.6 AVAILABLE USERS PAGE:



The screenshot shows a web browser window with the URL `localhost/chatterhub/available_users.php`. The page features the Convo X logo and navigation links for 'Edit Profile' and 'Logout'. A central modal titled 'Available Users' is displayed, containing a table with columns 'Username', 'Email', and 'Full Name'. Below the table are 'Send Message' and 'Upload File' buttons. The background is a solid light yellow color.

**Available Users**

Username	Email	Full Name
dineshdk18	dinesh@gmail.com	Dinesh Kumar
ram18	ram@gmail.com	Ram Kumar
ash19	ashwathv@gmail.com	Ashwath V
dinesh93	dinesh69@gmail.com	Dinesh Kumar

Send Message Upload File

## 4.7 SEND MESSAGE PAGE:

The screenshot shows a web browser window with the title 'Send Message - Convo X'. The address bar shows 'localhost/chatterhub/send\_message.php'. The page features a black header with the 'CONVO X' logo, 'Edit Profile', a user profile icon, and 'Logout'. The main content area has a light yellow background. In the center is a white card titled 'SEND MESSAGE'. Inside the card, there is a 'Message:' label above a text input field containing 'Hi there am Dinesh 931!'. Below this is a 'Receiver:' label above a dropdown menu showing 'ash19'. At the bottom of the card are two black buttons: 'Send Message' and 'Back to Menu'. A black footer at the bottom of the page contains the text '© 2024 Convo X. All rights reserved.'

## 4.8 CREATE BROADCAST PAGE:

The screenshot shows a web browser window with the title 'Create Blog - Convo X'. The address bar shows 'localhost/chatterhub/create\_blog.php'. The page features a black header with the 'CONVO X' logo, 'Edit Profile', a user profile icon, and 'Logout'. The main content area has a light yellow background. In the center is a white card titled 'Create and Broadcast Blog'. Inside the card, there is a 'Title:' label above a text input field containing 'This is dinesh93 first broadcast'. Below this is a 'Content:' label above a text input field containing 'Hello everyone am Dinesh93'. At the bottom of the card are two black buttons: 'Create Blog' and 'Back to Menu'. A black footer at the bottom of the page contains the text '© 2024 Convo X. All rights reserved.' and links for 'About Us', 'Privacy Policy', and 'Contact Support'.

## 4.9 UPLOAD FILE PAGE:

The screenshot shows the 'Upload File' page of the Convo X application. The browser address bar indicates the URL is `localhost/chatterhub/upload_file.php`. The page features a dark header with the Convo X logo and user options: 'Edit Profile' and 'Logout'. The main content area has a light yellow background and contains the following elements:

- Upload File** (Section Header)
- Select receiver's username** (Label)
- ash19** (Selected username in a dropdown menu)
- Choose file** (Text label)
- Chatppt.pptx** (Selected file name)
- Upload File** (Primary button)
- Back to Menu** (Secondary button)

The footer contains links for 'About Us', 'Privacy Policy', and 'Contact Support', along with the copyright notice: '© 2024 Convo X. All rights reserved.'

## 4.10 RECENT MESSAGES RECEIVED:

The screenshot shows the 'Menu' page of the Convo X application. The browser address bar indicates the URL is `localhost/chatterhub/menu.php`. The page features a dark header with the Convo X logo and user options: 'Edit Profile' and 'Logout'. The main content area has a light yellow background and contains the following elements:

- Welcome, ash19!** (Greeting)
- What would you like to do today?** (Prompt)
- Messages** (Highlighted menu item)
- Broadcasting** (Menu item)
- File Uploads** (Menu item)

Below the menu items, there is a section titled **RECEIVED MESSAGES** containing a table of recent messages:

From	Message	Time Sent
dinesh93	Hi there iam Dinesh 93!!	December 14, 2024, 3:04 pm

Below the table, there is a **Send Message** button.

The footer contains links for 'About Us', 'Privacy Policy', and 'Contact Support', along with the copyright notice: '© 2024 Convo X. All rights reserved.'

## 4.11 RECENT BROADCASTS:

The screenshot shows a web browser window with the URL `localhost/chatterhub/menu.php`. The page has a dark header with the 'CONVO X' logo and user links 'Edit Profile' and 'Logout'. A welcome message 'Welcome, ash19!' is displayed. Below the header are three buttons: 'Messages', 'Broadcasting', and 'File Uploads'. The 'Broadcasting' button is highlighted. The main content area is titled 'RECENT BROADCASTS' and contains a table with two rows of broadcast data. Below the table is a 'Create Broadcast' button. The footer includes links for 'About Us', 'Privacy Policy', and 'Contact Support', along with a copyright notice for 2024 Convo X.

Author	Broadcast Message	Time Sent
dinesh93	Hello everyone am Dinesh93	December 14, 2024, 3:09 pm
dineshdk18	this is my first broadcast	December 13, 2024, 12:39 am

## 4.12 RECENT FILES RECEIVED:

The screenshot shows the same web browser window as the previous one, but with the 'File Uploads' button highlighted. The main content area is titled 'RECEIVED FILES' and contains a table with one row of file data. Below the table is an 'Upload Files' button. The footer is identical to the previous screenshot.

File Name	Sender	File Size	Time Sent	Action
Chatppt.pptx	dinesh93	220.58 KB	December 14, 2024, 3:11 pm	<button>Download</button>



## 4.13 DATABASE VALUES:

### 4.13.1 USERS TABLE:

localhost / 127.0.0.1 : chatterhub +

← → ↺

localhost/phpmyadmin/index.php?route=/sql&pos=0&db=chatterhub&table=users

☆

👤

⋮

phpMyAdmin

Recent

Favourites

New

chatterhub

New

blogs

files

messages

users

Information\_schema

mysql

new

performance\_schema

phpmyadmin

test

Server: 127.0.0.1:3307

Database: chatterhub

Table: users

Browse

Structure

SQL

Search

Insert

Export

Import

Privileges

Operations

Tracking

Triggers

Showing rows 0 - 3 (4 total, Query took 0.0006 seconds.)

SELECT \* FROM `users`

☐ Profiling

[\[ Edit inline \]](#)

[\[ Edit \]](#)

[\[ Explain SQL \]](#)

[\[ Create PHP code \]](#)

[\[ Refresh \]](#)

☐ Show all

Number of rows: 25

Filter rows:

Sort by key: None

Extra options

⏮

⏪

⏩

⏭

		id	username	email	password_hash	full_name	phone_number	dob							
<input type="checkbox"/>	<a href="#">Edit</a>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1	dineshdk18	dinesh@gmail.com	\$2y\$10\$K7Y6VDB2WWqeG8nukDQBuj8xNO9Aj25vOmMpTnHLSW...	Dinesh Kumar	1234567890	2004-09-19
<input type="checkbox"/>	<a href="#">Edit</a>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2	ram18	ram@gmail.com	\$2y\$10\$CtkpVTpGj_9AkwwTl0QJge1q4D8DWZlHsICfSYWC9Q...	Ram Kumar	1234509876	2004-09-19
<input type="checkbox"/>	<a href="#">Edit</a>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	3	ash19	ashwath@gmail.com	\$2y\$10\$_.whTuuPhR9lu2k2c0qUru6cswYzVLQbF070i5m693y...	Ashwath V	1234509876	2004-08-06
<input type="checkbox"/>	<a href="#">Edit</a>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	4	dinesh93	dinesh93@gmail.com	\$2y\$10\$FSf1mD0PxrMBzh4Z.H4e77LTsdck1Jrg1IGR7GQ2...	Dinesh Kumar	1234567890	2004-09-19

⏮

☐ Check all

With selected:

[Edit](#)

[Copy](#)

[Delete](#)

[Export](#)

☐ Show all

Number of rows: 25

Filter rows:

Sort by key: None

Query results operations

[Print](#)

[Copy to clipboard](#)

[Export](#)

[Display chart](#)

[Create view](#)

[Bookmark this SQL query](#)

Label:

☐ Let every user access this bookmark

### 4.13.2 MESSAGES TABLE:

localhost / 127.0.0.1 / chatterhub

localhost/phpmyadmin/index.php?route=/sql&pos=0&db=chatterhub&table=messages

phpMyAdmin

Recent Favourites

New chatterhub

New blogs

files

messages

users

information\_schema

mysql

new

performance\_schema

phpmyadmin

test

Server: 127.0.0.1:3307 Database: chatterhub Table: messages

Browse

Structure

SQL

Search

Insert

Export

Import

Privileges

Operations

Tracking

Triggers

Showing rows 0 - 8 (9 total, Query took 0.0004 seconds)

SELECT \* FROM `messages`

Profiling

Edit inline

Explain SQL

Create PHP code

Refresh

Show all

Number of rows: 25

Filter rows: Search this table

Sort by key: None

Extra options

id

sender\_id

message

created\_at

receiver\_id

is\_broadcast

sent\_at

group\_chat\_id

☐

Edit

Copy

Delete

18

1

New blog posted: first broadcast - this is my fir...

2024-12-13 00:39:50

NULL

1

2024-12-13 00:39:50

NULL

☐

Edit

Copy

Delete

19

1

New blog posted: first broadcast - this is my fir...

2024-12-13 00:39:50

NULL

1

2024-12-13 00:39:50

NULL

☐

Edit

Copy

Delete

20

1

New blog posted: first broadcast - this is my fir...

2024-12-13 00:39:50

NULL

1

2024-12-13 00:39:50

NULL

☐

Edit

Copy

Delete

21

1

hi there this is dinesh!!

2024-12-13 00:40:08

2

0

2024-12-13 00:40:08

NULL

☐

Edit

Copy

Delete

22

4

Hi there iam Dinesh 93!!

2024-12-14 15:04:33

3

0

2024-12-14 15:04:33

NULL

☐

Edit

Copy

Delete

23

4

New blog posted: This is dinesh93 first broadcast...

2024-12-14 15:09:31

NULL

1

2024-12-14 15:09:31

NULL

☐

Edit

Copy

Delete

24

4

New blog posted: This is dinesh93 first broadcast...

2024-12-14 15:09:31

NULL

1

2024-12-14 15:09:31

NULL

☐

Edit

Copy

Delete

25

4

New blog posted: This is dinesh93 first broadcast...

2024-12-14 15:09:31

NULL

1

2024-12-14 15:09:31

NULL

☐

Edit

Copy

Delete

26

4

New blog posted: This is dinesh93 first broadcast...

2024-12-14 15:09:31

NULL

1

2024-12-14 15:09:31

NULL

Check all

With selected:

Copy

Delete

Export

Show all

Number of rows: 25

Filter rows: Search this table

Sort by key: None

Query results operations

### 4.13.3 BLOGS TABLE:

The screenshot shows the phpMyAdmin interface for the 'chatterhub' database. The 'blogs' table is selected, and the 'Structure' tab is active. The table has the following structure:

id	title	content	author_id	created_at
7	first broadcast	this is my first broadcast	1	2024-12-13 00:39:50
8	This is dinesh93 first broadcast	Hello everyone am Dinesh93	4	2024-12-14 15:09:31

The interface also shows the 'Query results operations' section with options like Print, Copy to clipboard, Export, Display chart, and Create view. The 'Bookmark this SQL query' section is also visible.

### 4.13.4 FILES TABLE:

The screenshot shows the phpMyAdmin interface for the 'chatterhub' database. The 'files' table is selected, and the 'Structure' tab is active. The table has the following structure:

id	sender_id	receiver_id	file_path	file_name	file_size	file_type	uploaded_at
5	1	2	uploads/photo-1568605117036-5fe5e7bab0b7.jpg	photo-1568605117036-5fe5e7bab0b7.jpg	961286	image/jpeg	2024-12-13 00:40:23
6	4	3	uploads/Chatppt.pptx	Chatppt.pptx	225872	application/vnd.openxmlformats-officedocument.presentationml.presentation	2024-12-14 15:11:29

The interface also shows the 'Query results operations' section with options like Print, Copy to clipboard, Export, Display chart, and Create view. The 'Bookmark this SQL query' section is also visible.

## **CHAPTER 5**

### **CHALLENGES AND LIMITATIONS**

#### **5.1 CHALLENGES:**

##### **1. Real-Time Communication Implementation:**

- Ensuring seamless real-time messaging was technically challenging, especially when managing delays caused by server response time and network latency.
- Balancing real-time updates without overwhelming the server or increasing bandwidth consumption.

##### **2. Secure File Sharing:**

- Validating and securely handling files to prevent potential exploits, such as uploading malicious files.
- Managing storage limitations and scalability for large file transfers.

##### **3. Session Management:**

- Maintaining active user sessions securely and preventing unauthorized access posed challenges, especially in preventing session hijacking.
- Implementing session timeouts to balance security and user convenience.

##### **4. Scalability:**

- Designing the platform to handle an increasing number of users without performance degradation.
- Optimizing database queries and server-side operations for high traffic.

##### **5. User-Friendly Design:**

- Balancing functionality and simplicity in the user interface design to cater to both novice and tech-savvy users.
- Testing the UI/UX across multiple devices and browsers for consistent performance.

## **5.2 LIMITATIONS:**

### **1. Lack of Advanced Features:**

- The platform, in its current state, does not support advanced functionalities like video calls, group chats with multiple admin roles, or AI-based recommendations.

### **2. Dependency on Internet Connection:**

- The platform requires a stable internet connection for real-time communication and file sharing, limiting usability in offline scenarios.

### **3. Limited Scalability:**

- While the tech stack supports moderate scalability, the current architecture may face challenges in handling a very high number of concurrent users without additional optimizations or infrastructure upgrades.

### **4. File Storage Constraints:**

- File storage is limited to server capacity, making it unsuitable for sharing large or unlimited files without implementing cloud storage integration.

### **5. No Mobile Application:**

- Currently, Convo X is a web-based platform, lacking a dedicated mobile application, which may restrict user accessibility and convenience on mobile devices.

### **6. Reliance on Basic Technologies:**

- The use of technologies like PHP and MySQL, while effective, may face limitations in performance compared to modern alternatives like Node.js, MongoDB, or cloud-native solutions.

### **7. Limited Security Measures:**

- While security features like password hashing and session management are implemented, advanced measures such as two-factor authentication (2FA) and full encryption protocols are not yet integrated.

## CHAPTER 6

### APPENDIX

#### 6.1 CODE SNIPPETS:

##### welcome.php:

```
<?php
session_start();
?>
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Welcome to ChatApp</title>
  <style>
    body, html {
      margin: 0;
      padding: 0;
      font-family: Arial, sans-serif;
      height: 100%;
      width: 100%;
      background-color: #f7f7f7;
      display: flex;
      flex-direction: column;
      justify-content: space-between;
    }
    header {
      display: flex;
      justify-content: space-between;
      align-items: center;
```

```
padding: 10px 20px;
background-color:black;
color: white;
}
header h1 {
font-size: 2.5em;
margin: 0;
color:pink;
cursor: pointer;
font-family:'Venite Adoremus Straight';
}
header nav {
display: flex;
align-items: center;
}
header nav a {
color: white;
text-decoration: none;
margin-left: 30px;
font-size: 1.2em;
font-weight: bold;
}
header nav a:hover {
text-decoration: underline;
}
main {
flex-grow: 1;
text-align: center;
padding: 50px 20px;
background-color: #FAF3DD;
```

```

}
h2 {
    font-size: 2.0em;
    margin-bottom: 20px;
    color: #202124;
}
.role-options form {
    display: flex;
    justify-content: center;
    gap: 20px;
}
.role-button {
    padding: 15px 30px;
    font-size: 1.2em;
    background-color: #202124;
    color: white;
    border: none;
    border-radius: 100px;
    cursor: pointer;
    width: 200px;
}
.role-button:hover {
    background-color: #FFD700;
    color: #202124;
}
.language-selection {
    margin-top: 20px;
}
.language-selection select {
    padding: 10px;

```

```
    font-size: 0.9em;
    border-radius: 30px;
    color:white;
    background-color: black;
}

.news-section {
    margin-top: 30px;
    font-size: 1.1em;
    text-align: center;
}

.news-section ul {
    list-style: none;
    padding-left: 0;
    text-align: left;
    display: inline-block;
}

.news-section li {
    margin-bottom: 10px;
}

.social-media a {
    color: #007bff;
    text-decoration: none;
    margin: 0 10px;
}

.social-media a:hover {
    text-decoration: underline;
}

.app-download a {
    color: #007bff;
    text-decoration: none;
```



```
    margin: 0 10px;
}
.app-download a:hover {
    text-decoration: underline;
}
footer {
    background-color: #222;
    color: white;
    text-align: center;
    padding: 10px 20px;
    font-size: 1em;
}
.footer-links a {
    color: skyblue;
    text-decoration: none;
    margin: 0 10px;
}
.footer-links a:hover {
    text-decoration: underline;
}
.logo {
    height: 40px;
    width: auto;
    margin-right: 10px;
}
.logo-title {
    display: flex;
    align-items: center;
}
</style>
```

```

<script>
const translations = {
  en: {
    header: "Convo X",
    welcomeNew: "Welcome to Convo X",
    selectLanguage: "Select Language",
    latestUpdates: "LATEST UPDATES!!",
    updates: [
      "New feature: Polls and Surveys  ",
      "Improved notifications for group chats ✂ ",
      "Bug fixes and performance enhancements  "
    ],
    connectWithUs: "Connect with us:",
    downloadApp: "Download the ChatApp",
  },
  es: {
    header: "Convo X",
    welcomeNew: "Bienvenido a Convo X",
    selectLanguage: "Seleccionar idioma",
    latestUpdates: "¡ÚLTIMAS ACTUALIZACIONES!",
    updates: [
      "Nueva función: Encuestas y Sondeos  ",
      "Notificaciones mejoradas para chats grupales ✂ ",
      "Corrección de errores y mejoras de rendimiento  "
    ],
    connectWithUs: "Conéctate con nosotros:",
    downloadApp: "Descarga la aplicación ChatApp",
  },
  fr: {
    header: "Convo X",

```

```

welcomeNew: "Bienvenue sur Convo X",
selectLanguage: "Choisir la langue",
latestUpdates: "DERNIÈRES MISES À JOUR !!",
updates: [
    "Nouvelle fonctionnalité : Sondages et enquêtes ",
    "Notifications améliorées pour les discussions de groupe ✂ ",
    "Corrections de bugs et améliorations des performances "
],
connectWithUs: "Connectez-vous avec nous :",
downloadApp: "Téléchargez l'application ChatApp",
},
de: {
    header: "Convo X",
    welcomeNew: "Willkommen bei Convo X",
    selectLanguage: "Sprache wählen",
    latestUpdates: "NEUESTE UPDATES!!",
    updates: [
        "Neue Funktion: Umfragen und Abstimmungen ",
        "Verbesserte Benachrichtigungen für Gruppenchats ✂ ",
        "Fehlerbehebungen und Leistungsverbesserungen "
    ],
    connectWithUs: "Verbinde dich mit uns:",
    downloadApp: "Laden Sie die ChatApp herunter",
}
};

function changeLanguage() {
    const selectedLanguage = document.getElementById("language-select").value;
    const translation = translations[selectedLanguage];
    document.getElementById("header-title").textContent = translation.header;
    document.getElementById("welcome").textContent = translation.welcomeNew;

```

```

        document.getElementById("select-language").textContent =
translation.selectLanguage;

        document.getElementById("latest-updates").textContent =
translation.latestUpdates;

        const updatesList = document.getElementById("updates-list");
        updatesList.innerHTML = "";
        translation.updates.forEach(update => {
            const li = document.createElement("li");
            li.textContent = update;
            updatesList.appendChild(li);
        });

        document.getElementById("connect-with-us").textContent =
translation.connectWithUs;

        document.getElementById("download-app").textContent =
translation.downloadApp;
    }
</script>
</head>
<body>
    <header>
        <div class="logo-title">
            
            <h1 id="header-title" >Convo X</h1>
        </div>
        <nav>
            <a href="login.php">Login</a>
            <a href="register.php">Register</a>
        </nav>
    </header>
    <main>

```

```
<h2 id="welcome" style="font-family:'Venite Adoremus Straight'">Welcome to  
Convo X</h2>
```

```
<div class="language-selection">
```

```
<h3 id="select-language">Select Language</h3>
```

```
<select id="language-select" onchange="changeLanguage()">
```

```
<option value="en">English</option>
```

```
<option value="es">Español</option>
```

```
<option value="fr">Français</option>
```

```
<option value="de">Deutsch</option>
```

```
</select>
```

```
</div>
```

```
<section class="news-section">
```

```
<h4 id="latest-updates">LATEST UPDATES!!</h4>
```

```
<ul id="updates-list">
```

```
<li style="text-align:center";>New feature: Polls and Surveys </li>
```

```
<li style="text-align:center";>Improved notifications for group chats</li>
```

```
<li style="text-align:center";>Bug fixes and performance enhancements </li>
```

```
</ul>
```

```
</section>
```

```
<section class="social-media">
```

```
<h4 id="connect-with-us">Connect with us:</h4>
```

```
<a href="https://facebook.com" target="_blank">Facebook</a> |
```

```
<a href="https://twitter.com" target="_blank">Twitter</a> |
```

```
<a href="https://instagram.com" target="_blank">Instagram</a>
```

```
</section>
```

```
<section class="app-download">
```

```
<h4 id="download-app">Download the ChatApp</h4>
```

```
<a href="https://play.google.com/store" target="_blank">Google Play</a> |
```

```
<a href="https://apps.apple.com" target="_blank">App Store</a>
```

```
</section>
```

```

</main>

<footer>

<div class="footer-links">

    <a href="#">About Us</a>

    <a href="#">Privacy Policy</a>

    <a href="#">Contact Support</a>

</div>

    <p>&copy; 2024 Convo X. All rights reserved.</p>

</footer>

</body>

</html>

```

### **register.php:**

```

<?php
if ($_SERVER['REQUEST_METHOD'] == 'POST') {
    $username = $_POST['username'];
    $email = $_POST['email'];
    $password = $_POST['password'];
    $full_name = $_POST['full_name'];
    $phone_number = $_POST['phone_number'];
    $dob = $_POST['dob'];
    $password_hash = password_hash($password, PASSWORD_BCRYPT);
    $conn = new mysqli("localhost:3307", "root", "", "chatterhub");
    if ($conn->connect_error) {
        die("Connection failed: " . $conn->connect_error);
    }
    $sql = "INSERT INTO users (username, email, password_hash, full_name,
phone_number, dob)
        VALUES ('$username', '$email', '$password_hash', '$full_name', '$phone_number',
'$dob')";

    if ($conn->query($sql) === TRUE) {

```

```

        header("Location: register.php?success=1");
        exit();
    } else {
        echo "Error: " . $sql . "<br>" . $conn->error;
    }
    $conn->close();
}
?>
<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title>Register - ConvoX</title>
    <style>
        body {
            font-family: Arial, sans-serif;
            background-color: #FAF3DD;
            margin: 0;
            display: flex;
            flex-direction: column;
            justify-content: space-between;
            height: 100vh;
        }
        header {
            display: flex;
            justify-content: space-between;
            align-items: center;
            padding: 10px 20px;
            background-color: black;
            color: white;
        }
    </style>

```

```
header h1 {
  font-size: 2.5em;
  margin: 0;
  color: pink;
  cursor: pointer;
  font-family:'Venite Adoremus Straight';
}
header nav a {
  color: white;
  text-decoration: none;
  margin-left: 30px;
  font-size: 24px;
  font-weight: bold;
}
header nav a:hover {
  text-decoration: underline;
}
.logo {
  height: 40px;
  margin-right: 10px;
}
.logo-title {
  display: flex;
  align-items: center;
}
main {
  text-align: center;
  padding: 50px 20px;
  flex-grow: 1;
}
h2 {
  font-size: 2.0em;
```



```

        color: #202124;
        margin-bottom: 20px;
    }
    .container {
        max-width: 600px;
        margin: 0 auto;
        background: #fff;
        padding: 30px;
        border-radius: 10px;
        box-shadow: 0 2px 10px rgba(0, 0, 0, 0.1);
    }
    form {
        display: inline-block;
        text-align: left;
        width: 100%;
    }
    label {
        font-size: 1em;
        color: #202124;
        display: block;
        margin-bottom: 5px;
    }
    input[type="text"], input[type="email"], input[type="password"], input[type="tel"],
    input[type="date"] {
        width: 96%;
        padding: 10px;
        margin-bottom: 15px;
        border: 1px solid #ddd;
        border-radius: 30px;
        font-size: 1em;
    }
    input[type="submit"] {

```

```

width: 100%;
padding: 10px;
background-color: #202124;
color: white;
border: none;
border-radius: 5px;
font-size: 1em;
cursor: pointer;
border-radius: 30px;
}
input[type="submit"]:hover {
background-color: #FFD700;
color: #202124;
}
.error {
color: red;
font-size: 0.9em;
margin-top: -10px;
margin-bottom: 10px;
}
.login-redirect {
margin-top: 15px;
text-align: center;
font-size: 1em;
}
.login-redirect a {
color: #202124;
font-weight: bold;
text-decoration: none;
}
.login-redirect a:hover {
text-decoration: underline;
}

```

```

    }
    .success-message {
      color: green;
      font-size: 1em;
      margin-top: 10px;
    }
    footer {
      background-color: #222;
      color: white;
      text-align: center;
      padding: 10px 20px;
    }
    .footer-links a {
      color: skyblue;
      text-decoration: none;
      margin: 0 10px;
    }
    .footer-links a:hover {
      text-decoration: underline;
    }
</style>
<script>
  document.addEventListener('DOMContentLoaded', () => {
    const fields = [
      {
        field: document.getElementById('full_name'),
        regex: /^[a-zA-Z\s]+$/,
        message: "Full Name should only contain letters and spaces."
      },
      {
        field: document.getElementById('username'),
        regex: /^[a-zA-Z0-9_]{3,16}$/
      }
    ];
  });
</script>

```

```

        message: "Username should be 3-16 characters, alphanumeric with
underscores."
      },
      {
        field: document.getElementById('email'),
        regex: /^[^\s@]+@[^\s@]+\.[^\s@]+$/,
        message: "Enter a valid email address."
      },
      {
        field: document.getElementById('password'),
        regex: /^(?=.*[A-Za-z])(?=.*\d)[A-Za-z\d]{8,}$/,
        message: "Password must be at least 8 characters, including a letter and a
number."
      },
      {
        field: document.getElementById('phone_number'),
        regex: /^\d{10}$/,
        message: "Phone Number must be 10 digits."
      },
      {
        field: document.getElementById('dob'),
        regex: /.+/,
        message: "Please select your date of birth."
      }
    ];
    fields.forEach(({ field, regex, message }) => {
      field.addEventListener('blur', () => {
        const error = field.nextElementSibling;
        if (!regex.test(field.value)) {
          if (!error || !error.classList.contains('error')) {
            const errorMessage = document.createElement('div');
            errorMessage.textContent = message;

```

```

        errorMessage.classList.add('error');
        field.parentNode.insertBefore(errorMessage, field.nextSibling);
    }
} else {
    if (error && error.classList.contains('error')) {
        error.remove();
    }
}
});
});
});
</script>
</head>
<body>
    <header>
        <div class="logo-title">
            
            <h1>Convo X</h1>
        </div>
        <nav>
            <a href="welcome.php">Home</a>
            <a href="login.php">Login</a>
        </nav>
    </header>
    <main>
        <h2 style="font-family:'Venite Adoremus Straight'">Register to Convo X</h2>
        <div class="container">
            <form method="POST" action="register.php" id="registrationForm">
                <label for="full_name">Full Name:</label>
                <input type="text" name="full_name" id="full_name" required>
                <label for="username">Username:</label>
                <input type="text" name="username" id="username" required>
            </form>
        </div>
    </main>
</body>
</html>

```

```

<label for="email">Email:</label>
<input type="email" name="email" id="email" required>
<label for="password">Password:</label>
<input type="password" name="password" id="password" required>
<label for="phone_number">Phone Number:</label>
<input type="tel" name="phone_number" id="phone_number" required>
<label for="dob">Date of Birth:</label>
<input type="date" name="dob" id="dob" required>
<input type="submit" value="Register Now">
<div class="login-redirect">
    <p>Already have an account? <a href="login.php">Login here</a></p>
</div>
</form>
</div>
</main>
<footer>
<div class="footer-links">
    <a href="#">About Us</a>
    <a href="#">Privacy Policy</a>
    <a href="#">Contact Support</a>
</div>
    <p>&copy; 2024 Convo X. All rights reserved.</p>
</footer>
</body>
</html>

```

### **login.php:**

```

<?php
session_start();
$error_message = "";
if ($_SERVER['REQUEST_METHOD'] == 'POST') {
    $email_or_username = $_POST['email_or_username'];
    $password = $_POST['password'];

```

```

$conn = new mysqli("localhost:3307", "root", "", "chatterhub");
if ($conn->connect_error) {
    die("Connection failed: " . $conn->connect_error);
}
$sql = "SELECT * FROM users WHERE email = ? OR username = ?";
$stmt = $conn->prepare($sql);
$stmt->bind_param("ss", $email_or_username, $email_or_username);
$stmt->execute();
$result = $stmt->get_result();
if ($result->num_rows > 0) {
    $user = $result->fetch_assoc();
    if (password_verify($password, $user['password_hash'])) {
        $_SESSION['user_id'] = $user['id'];
        $_SESSION['username'] = $user['username'];
        header("Location: menu.php");
        exit;
    } else {
        $error_message = "Invalid email/username or password.";
    }
} else {
    $error_message = "No user found with that email or username.";
}
$stmt->close();
$conn->close();
}
?>
<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title>Login - ChatterHub</title>

```

```

<style>
  body {
    font-family: Arial, sans-serif;
    background-color: #FAF3DD;
    margin: 0;
    display: flex;
    flex-direction: column;
    justify-content: space-between;
    height: 100vh;
  }
  header {
    display: flex;
    justify-content: space-between;
    align-items: center;
    padding: 10px 20px;
    background-color: black;
    color: white;
  }
  header h1 {
    font-size: 2.5em;
    margin: 0;
    color: pink;
    cursor: pointer;
    font-family: 'Venite Adoremus Straight';
  }
  header nav a {
    color: white;
    text-decoration: none;
    margin-left: 30px;
    font-size: 1.2em;
    font-weight: bold;
    transition: background-color 0.5s, color 0.5s;
  }

```



```
}
header nav a:hover {
    text-decoration: underline;
}
.logo {
    height: 40px;
    margin-right: 10px;
}
.logo-title {
    display: flex;
    align-items: center;
}
main {
    text-align: center;
    padding: 50px 20px;
    flex-grow: 1;
}
h2 {
    font-size: 2.0em;
    color: #202124;
    margin-bottom: 20px;
}
form {
    display: inline-block;
    text-align: left;
    background: #fff;
    padding: 30px;
    border-radius: 10px;
    box-shadow: 0 2px 10px rgba(0, 0, 0, 0.1);
    width: 100%;
    max-width: 600px;
    margin: 0 auto;
```

```

}
label {
    font-size: 1em;
    color: #202124;
    display: block;
    margin-bottom: 5px;
}
input[type="text"], input[type="password"] {
    width: 94%;
    padding: 15px;
    margin-bottom: 20px;
    border: 1px solid #ddd;
    border-radius: 30px;
    font-size: 1em;
}
input[type="submit"] {
    width: 100%;
    padding: 15px;
    background-color: #202124;
    color: white;
    border: none;
    border-radius: 50px;
    font-size: 1.2em;
    cursor: pointer;
}
input[type="submit"]:hover {
    background-color: #FFD700;
    color: #202124;
}
.signup-container {
    margin-top: 15px;
}

```

```

.signup-link {
  color: #007bff;
  text-decoration: none;
  font-weight: bold;
}
.signup-link:hover {
  color: #0056b3;
}
.error {
  color: #D32F2F;
  margin-top: 10px;
}
footer {
  background-color: #222;
  color: white;
  text-align: center;
  padding: 10px 20px;
}
.footer-links a {
  color: skyblue;
  text-decoration: none;
  margin: 0 10px;
}
.footer-links a:hover {
  text-decoration: underline;
}
</style>
</head>
<body>
<header>
<div class="logo-title">
  

```

```

        <h1>Convo X</h1>
    </div>
    <nav>
        <a href="welcome.php">Home</a>
        <a href="register.php">Register</a>
    </nav>
</header>
<main>
    <h3 style="font-family:'Venite Adoremus Straight';font-size:30px;">Login to Convo
X</h3>
    <form method="POST" action="login.php">
        <label for="email_or_username">Email or Username:</label>
        <input type="text" name="email_or_username" required>
        <label for="password">Password:</label>
        <input type="password" name="password" required>
        <input type="submit" value="Login">
        <div class="signup-container">
            <p style="text-align:center">Don't have an account? <a href="register.php"
class="signup-link">Sign up</a></p>
        </div>
        <?php if (!empty($error_message)) : ?>
            <div class="error"><?php echo $error_message; ?></div>
        <?php endif; ?>
    </form>
</main>
<footer>
<div class="footer-links">
    <a href="#">About Us</a>
    <a href="#">Privacy Policy</a>
    <a href="#">Contact Support</a>
</div>
    <p>&copy; 2024 Convo X. All rights reserved.</p>

```

```

    </footer>
</body>
</html>
menu.php:
<?php
session_start();
if (!isset($_SESSION['user_id'])) {
    header("Location: login.php");
    exit();
}
$host = 'localhost:3307';
$dbname = 'chatterhub';
$username = 'root';
$password = "";
$conn = new mysqli($host, $username, $password, $dbname);
if ($conn->connect_error) {
    die("Connection failed: " . $conn->connect_error);
}
if ($_SERVER['REQUEST_METHOD'] == 'POST' && isset($_POST['updateProfile']))
{
    $newUsername = htmlspecialchars($_POST['newUsername'], ENT_QUOTES, 'UTF-8');
    $newPassword = password_hash($_POST['newPassword'], PASSWORD_DEFAULT);
    $updateQuery = "UPDATE users SET username = ?, password_hash = ? WHERE id = ?";
    $stmt = $conn->prepare($updateQuery);
    if ($stmt) {
        $stmt->bind_param("ssi", $newUsername, $newPassword, $_SESSION['user_id']);
        if ($stmt->execute()) {
            $_SESSION['username'] = $newUsername;
            echo "<script>alert('Profile updated successfully');</script>";
        } else {

```

```

        echo "<script>alert('Error updating profile: " . $stmt->error . "');</script>";
    }
    $stmt->close();
} else {
    echo "<script>alert('Failed to prepare statement');</script>";
}
}
$user_id = $_SESSION['user_id'];
$username = $_SESSION['username'];
$sql = "SELECT * FROM files WHERE receiver_id = ? ORDER BY uploaded_at
DESC";
$stmt = $conn->prepare($sql);
$stmt->bind_param("i", $user_id);
$stmt->execute();
$result = $stmt->get_result();
$files = $result->fetch_all(MYSQLI_ASSOC);
?>
<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title>Menu - Convo X</title>
    <style>
        body {
            font-family: Arial, sans-serif;
            background-color: #FAF3DD;
            margin: 0;
            display: flex;
            flex-direction: column;
            min-height: 100vh;
        }

```

```

header {
  display: flex;
  justify-content: space-between;
  align-items: center;
  padding: 10px 20px;
  background-color: black;
  color: white;
}
header h1 {
  font-size: 2.5em;
  color: pink;
  font-family: 'Venite Adoremus Straight';
  margin: 0;
  display: flex;
  align-items: center;
}
header h1 img {
  width: 50px;
  height: 50px;
  margin-right: 10px;
}
.profile {
  display: flex;
  align-items: center;
}
.profile img {
  border-radius: 50%;
  width: 60px;
  height: 40px;
  margin-right: 10px;
}
.profile a {

```

```

margin-right: 15px;
text-decoration: none;
color: white;
font-size: 20px;
background-color: black;
padding: 5px 10px;
border-radius: 30px;
cursor: pointer;
transition: background-color 0.5s, color 0.5s;
}
.profile a:hover {
    background-color: gold;
    color: black;
    transform: scale(1.1);
}
.profile form button {
    background-color: black;
    color: white;
    border: none;
    padding: 10px 15px;
    border-radius: 50px;
    cursor: pointer;
    font-size: 20px;
}
.profile form button:hover {
    background-color: gold;
    color: black;
}
.welcome-section {
    text-align: center;
    padding: 20px;
    background-color: #28282B;

```



```
    color: pink;
    font-size:20px;
}
.menu-grid {
    display: grid;
    grid-template-columns: repeat(auto-fit, minmax(150px, 1fr));
    gap: 20px;
    padding: 20px;
    text-align: center;
}
.menu-item {
    background-color: #28282B;
    border-radius: 30px;
    font-size:20px;
    font-weight:bold;
    padding: 20px;
    color: lightgreen;
    cursor: pointer;
    text-decoration: none;
    box-shadow: 0 2px 5px rgba(0, 0, 0, 0.1);
}
.menu-item:hover {
    background-color: #FFD700;
    color: black;
}
footer {
    background-color: black;
    color: white;
    text-align: center;
    padding: 10px 20px;
    margin-top: auto;
}
```

```
.footer-links a {
    color: skyblue;
    text-decoration: none;
    margin: 0 10px;
}
.footer-links a:hover {
    text-decoration: underline;
}
#dynamicContent {
    display: none;
    margin-top: 20px;
    padding: 20px;
    background-color: white;
    border-radius: 10px;
    box-shadow: 0 2px 5px rgba(0, 0, 0, 0.1);
}
.received-files {
    padding: 20px;
    background-color: #f4f4f4;
    margin-top: 20px;
    border-radius: 10px;
}
.file-item {
    padding: 10px;
    background-color: #28282B;
    color: gold;
    border-radius: 5px;
    margin-bottom: 10px;
    display: flex;
    justify-content: space-between;
    align-items: center;
}
```

```
.file-item:hover {
    background-color: #FFD700;
    color: black;
}

.file-name {
    font-size: 16px;
    font-weight: bold;
}

.file-size {
    font-size: 14px;
    color: #aaa;
}

.file-link {
    color: gold;
    text-decoration: none;
    font-size: 14px;
}

.file-link:hover {
    text-decoration: underline;
}

.modal {
    display: none;
    position: fixed;
    z-index: 1;
    left: 0;
    top: 0;
    width: 100%;
    height: 100%;
    background-color: rgba(0, 0, 0, 0.4);
    padding-top: 60px;
}

.modal-content {
```

```

    background-color: white;
    margin: 5% auto;
    padding: 20px;
    border-radius: 10px;
    width: 80%;
    max-width: 400px;
}
.close {
    color: #aaa;
    float: right;
    font-size: 28px;
    font-weight: bold;
}
.close:hover,
.close:focus {
    color: black;
    text-decoration: none;
    cursor: pointer;
}
label {
    font-weight: bold;
}
input[type="email"], input[type="password"], input[type="text"]
{
    width: 100%;
    padding: 10px;
    margin: 5px 0 15px;
    border: 1px solid #ccc;
    border-radius: 5px;
    box-shadow: inset 0 1px 3px rgba(0, 0, 0, 0.12);
    font-size: 14px;
}

```

```

button {
    background-color: black;
    color: white;
    padding: 10px 20px;
    border: none;
    border-radius: 5px;
    cursor: pointer;
}
button:hover {
    background-color: gold;
    color: black;
}
.message-table {
width: 100%;
border-collapse: collapse;
margin-top: 20px;
}
.message-table th, .message-table td {
padding: 10px;
text-align: left;
border: 1px solid #FFD700;
}
.message-table th {
background-color: #28282B;
color: gold;
}
.message-table tr:nth-child(even) {
background-color: #333;
}
.message-table tr:hover {
background-color: #FFD700;
color: black;
}

```

```

}
.message-table td {
color: gold;
}
#editProfileModal {
display: none;
position: fixed;
top: 50%;
left: 50%;
transform: translate(-50%, -50%);
width: 80%;
max-width: 400px;
background-color: white;
padding: 20px;
border-radius: 10px;
box-shadow: 0 2px 5px rgba(0, 0, 0, 0.3);
z-index: 1000;
}
#editProfileModal form {
display: flex;
flex-direction: column;
}
#editProfileModal label {
margin-top: 10px;
font-weight: bold;
}
#editProfileModal input {
margin-top: 5px;
padding: 10px;
border: 1px solid #ccc;
border-radius: 30px;
width: 94%;

```

```

    }
    #editProfileModal button {
    margin-top: 20px;
    padding: 10px;
    background-color: black;
    color: white;
    border: none;
    border-radius: 30px;
    cursor: pointer;
    }
    #editProfileModal button:hover {
    background-color: gold;
    color: black;
    }
    #overlay {
    display: none;
    position: fixed;
    top: 0;
    left: 0;
    width: 100%;
    height: 100%;
    background-color: rgba(0, 0, 0, 0.5);
    z-index: 999;
    }
</style>
</head>
<body>
<header>
    <h1>
         Convo X
    </h1>
    <div class="profile">

```

```

    <a href="#" id="editProfileBtn">Edit Profile</a>
    
    <form method="POST" action="logout.php">
        <button type="submit" name="logout">Logout</button>
    </form>
</div>
</header>
<section class="welcome-section">
    <h2 id="welcomeMessage">Welcome, <?php echo
htmlspecialchars($username); ?>!</h2>
    <p>What would you like to do today?</p>
</section>
<section class="menu-grid">
    <a href="javascript:void(0);" class="menu-item" id="messagesBtn">Messages</a>
    <a href="javascript:void(0);" class="menu-item"
id="createBlogBtn">Broadcasting</a>
    <a href="javascript:void(0);" class="menu-item" id="uploadFileBtn">File
Uploads</a>
</section>
<div id="editProfileModal">
    <form method="POST">
        <center>
            <h3>Edit Profile</h3>
        </center>
        <label for="newUsername">New Username</label>
        <input type="text" name="newUsername" id="newUsername" placeholder="Enter
your new username" required>
        <label for="newPassword">New Password</label>
        <input type="password" name="newPassword" id="newPassword"
placeholder="Enter your new password" required>
        <button type="submit" name="updateProfile">Update Profile</button>
        <button type="button" id="closeModal">Cancel</button>

```



```

    </form>
</div>
<div id="overlay"></div>
<div id="dynamicContent"></div>
<footer>
    <div class="footer-links">
        <a href="#">About Us</a>
        <a href="#">Privacy Policy</a>
        <a href="#">Contact Support</a>
    </div>
    <p>&copy; 2024 Convo X. All rights reserved.</p>
</footer>
<script>
    const editProfileBtn = document.getElementById('editProfileBtn');
    const editProfileModal = document.getElementById('editProfileModal');
    const overlay = document.getElementById('overlay');
    const closeModalBtn = document.getElementById('closeModal');
    editProfileBtn.addEventListener('click', function () {
        editProfileModal.style.display = 'block';
        overlay.style.display = 'block';
    });
    closeModalBtn.addEventListener('click', function () {
        editProfileModal.style.display = 'none';
        overlay.style.display = 'none';
    });
    overlay.addEventListener('click', function () {
        editProfileModal.style.display = 'none';
        overlay.style.display = 'none';
    });
    window.onclick = function(event) {
        if (event.target == modal) {
            modal.style.display = "none";

```

```

    }
}
function loadContent(url) {
    var dynamicContent = document.getElementById('dynamicContent');
    dynamicContent.style.display = 'block';
    var xhr = new XMLHttpRequest();
    xhr.open('GET', url, true);
    xhr.onload = function () {
        if (xhr.status === 200) {
            dynamicContent.innerHTML = xhr.responseText;
            document.getElementById('welcomeMessage').style.color = 'pink';
        } else {
            dynamicContent.innerHTML = '<p style="color: red;">Error loading content.
Please try again.</p>';
        }
    };
    xhr.send();
}
document.getElementById('createBlogBtn').addEventListener('click', function () {
    loadContent('recent_broadcasts.php');
});
document.getElementById('messagesBtn').addEventListener('click', function () {
    loadContent('recent_messages.php');
});
document.getElementById('uploadFileBtn').addEventListener('click', function () {
    loadContent('recent_files.php');
});
</script>
</body>
</html>
<?php
$stmt->close();

```

```
$conn->close();
```

```
?>
```

### **recent\_messages.php:**

```
<?php
```

```
session_start();
```

```
if (!isset($_SESSION['user_id'])) {
```

```
    echo "You need to log in to view messages.";
```

```
    exit();
```

```
}
```

```
$host = 'localhost:3307';
```

```
$dbname = 'chatterhub';
```

```
$username = 'root';
```

```
$password = '';
```

```
$conn = new mysqli($host, $username, $password, $dbname);
```

```
if ($conn->connect_error) {
```

```
    die("Connection failed: " . $conn->connect_error);
```

```
}
```

```
$user_id = $_SESSION['user_id'];
```

```
$sql = "SELECT messages.sender_id, messages.receiver_id, messages.message,
```

```
messages.sent_at, users.username AS sender_name
```

```
FROM messages
```

```
JOIN users ON messages.sender_id = users.id
```

```
WHERE messages.receiver_id = ?
```

```
ORDER BY messages.sent_at DESC";
```

```
$stmt = $conn->prepare($sql);
```

```
$stmt->bind_param("i", $user_id);
```

```
$stmt->execute();
```

```
$result = $stmt->get_result();
```

```
echo '<!DOCTYPE html>';
```

```
echo '<html lang="en">';
```

```
echo '<head>';
```

```
echo '<meta charset="UTF-8">';
```

```

echo '<meta name="viewport" content="width=device-width, initial-scale=1.0">';
echo '<style>';
echo 'table { width: 100%; border-collapse: collapse; margin-top: 20px; }';
echo 'th, td { padding: 10px; text-align: left; border-bottom: 1px solid #ddd; }';
echo 'th { background-color: #28282B; color: white; }';
echo 'td { background-color: #f4f4f4; }';
echo '.file-link { text-decoration: none; color: white; padding: 5px 10px; background-
color: black; border-radius: 5px; }';
echo '.file-link:hover { background-color: gold; color: black; }';
echo '.send-message-btn { background-color: black; color: white; padding: 10px 20px;
font-size: 16px; border-radius: 50px; text-decoration: none; }';
echo '.send-message-btn:hover { background-color: gold; color: black; }';
echo '</style>';
echo '</head>';
echo '<body>';
if ($result->num_rows > 0) {
    echo "<h3><center>RECEIVED MESSAGES</center></h3>";
    echo "<table>";
    echo "<thead><tr><th>From</th><th>Message</th><th>Time
Sent</th></tr></thead>";
    echo "<tbody>";
    while ($row = $result->fetch_assoc()) {
        echo "<tr>";
        echo "<td>" . htmlspecialchars($row['sender_name']) . "</td>";
        echo "<td>" . htmlspecialchars($row['message']) . "</td>";
        echo "<td>" . date("F j, Y, g:i a", strtotime($row['sent_at'])) . "</td>";
        echo "</tr>";
    }
    echo "</tbody></table>";
} else {
    echo "<p><center>No messages received yet.</center></p>";
}

```

```

echo '<div style="text-align: center; margin-top: 20px;">';
echo '<a href="available_users.php" class="send-message-btn">Send Message</a>';
echo '</div>';
echo '</body></html>';
$stmt->close();
$conn->close();
?>

```

### **recent\_broadcasts.php:**

```

<?php
session_start();
if (!isset($_SESSION['user_id'])) {
    echo "Unauthorized access.";
    exit();
}
$host = 'localhost:3307';
$dbname = 'chatterhub';
$username = 'root';
$password = "";
$conn = new mysqli($host, $username, $password, $dbname);
if ($conn->connect_error) {
    die("Connection failed: " . $conn->connect_error);
}
$user_id = $_SESSION['user_id'];
$sql = "SELECT b.content, b.created_at, u.username
        FROM blogs b
        JOIN users u ON b.author_id = u.id
        ORDER BY b.created_at DESC";
$stmt = $conn->prepare($sql);
$stmt->execute();
$result = $stmt->get_result();
echo '<!DOCTYPE html>';
echo '<html lang="en">';

```

```

echo '<head>';
echo '<meta charset="UTF-8">';
echo '<meta name="viewport" content="width=device-width, initial-scale=1.0">';
echo '<style>';
echo '.create-btn { display: inline-block; margin-top: 20px; padding: 10px 20px;
background-color: black; color: white; border: none; border-radius: 30px; text-decoration:
none; font-size: 16px; cursor: pointer; }';
echo '.create-btn:hover { background-color: gold;color:black; }';
echo 'table { width: 100%; border-collapse: collapse; margin-top: 20px; }';
echo 'th, td { padding: 10px; text-align: left; border-bottom: 1px solid #ddd; }';
echo 'th { background-color: #28282B; color: white; }';
echo 'td { background-color: #f4f4f4; }';
echo '</style>';
echo '</head>';
echo '<body>';
if ($result->num_rows > 0) {
    echo "<h3><center>RECENT BROADCASTS</center></h3>";
    echo "<table>";
    echo "<thead><tr><th>Author</th><th>Broadcast Message</th><th>Time
Sent</th></tr></thead>";
    echo "<tbody>";
    while ($row = $result->fetch_assoc()) {
        echo "<tr>";
        echo "<td>" . htmlspecialchars($row['username']) . "</td>";
        echo "<td>" . htmlspecialchars($row['content']) . "</td>";
        echo "<td>" . date("F j, Y, g:i a", strtotime($row['created_at'])) . "</td>";
        echo "</tr>";
    }
    echo "</tbody></table>";
    echo '<center><button class="create-btn"
onclick="location.href=\'create_blog.php\'">Create Broadcast</button></center>';
} else {

```

```

        echo "<p><center>No broadcasts found.</center></p>";
        echo '<center><button class="create-btn"
onclick="location.href=\'create_blog.php\'">Create Broadcast</button></center>';
    }
    echo '</body>';
    echo '</html>';
    $stmt->close();
    $conn->close();
?>

```

### **recent\_files.php:**

```

<?php
session_start();
if (!isset($_SESSION['user_id'])) {
    echo "User not logged in!";
    exit();
}
$host = 'localhost:3307';
$dbname = 'chatterhub';
$username = 'root';
$password = "";
$conn = new mysqli($host, $username, $password, $dbname);
if ($conn->connect_error) {
    die("Connection failed: " . $conn->connect_error);
}
$user_id = $_SESSION['user_id'];
$sql = "SELECT f.file_name, f.file_size, f.file_path, f.uploaded_at, u.username AS
sender_name
FROM files f
JOIN users u ON f.sender_id = u.id
WHERE f.receiver_id = ?
ORDER BY f.uploaded_at DESC";
$stmt = $conn->prepare($sql);

```

```

$stmt->bind_param("i", $user_id);
$stmt->execute();
$result = $stmt->get_result();
echo '<!DOCTYPE html>';
echo '<html lang="en">';
echo '<head>';
echo '<meta charset="UTF-8">';
echo '<meta name="viewport" content="width=device-width, initial-scale=1.0">';
echo '<style>';
echo 'table { width: 100%; border-collapse: collapse; margin-top: 20px; }';
echo 'th, td { padding: 10px; text-align: left; border-bottom: 1px solid #ddd; }';
echo 'th { background-color: #28282B; color: white; }';
echo 'td { background-color: #f4f4f4; }';
echo '.file-link { text-decoration: none; color: white; padding: 5px 10px; background-
color: black; border-radius: 5px; }';
echo '.file-link:hover { background-color: gold; color: black; }';
echo '</style>';
echo '</head>';
echo '<body>';
if ($result->num_rows > 0) {
    echo "<h3><center>RECEIVED FILES</center></h3>";
    echo "<table>";
    echo "<thead><tr><th>File Name</th><th>Sender</th><th>File Size</th><th>Time
Sent</th><th>Action</th></tr></thead>";
    echo "<tbody>";
    while ($row = $result->fetch_assoc()) {
        echo "<tr>";
        echo "<td>" . htmlspecialchars($row['file_name']) . "</td>";
        echo "<td>" . htmlspecialchars($row['sender_name']) . "</td>";
        echo "<td>" . round($row['file_size'] / 1024, 2) . " KB</td>";
        echo "<td>" . date("F j, Y, g:i a", strtotime($row['uploaded_at'])) . "</td>";
    }
}

```



```

        echo "<td><a href='" . htmlspecialchars($row['file_path']) . "' class='file-link'
download>Download</a></td>";
        echo "</tr>";
    }
    echo "</tbody></table>";
} else {
    echo "<p><center>No files received yet.</center></p>";
}
echo '<div style="text-align: center; margin-top: 20px;">
    <a href="available_users.php" style="text-decoration: none; background-color:
black; color: white; padding: 10px 20px; font-size: 16px; border-radius: 50px; cursor:
pointer; "
        onmouseover="this.style.backgroundColor=\'#FFD700\'; this.style.color=\'black\';"
        onmouseout="this.style.backgroundColor=\'black\';
this.style.color=\'white\';">Upload Files</a>
    </div>';
$stmt->close();
$conn->close();
?>
</body>
</html>

```

### **create\_blog.php:**

```

<?php
session_start();
if (isset($_POST['logout'])) {
    session_destroy();
    header("Location: login.php");
    exit();
}
if ($_SERVER['REQUEST_METHOD'] == 'POST' && !isset($_POST['logout'])) {
    $title = $_POST['title'];
    $content = $_POST['content'];
}

```

```

$author_id = $_SESSION['user_id'];
$conn = new mysqli("localhost:3307", "root", "", "chatterhub");
if ($conn->connect_error) {
    die("Connection failed: " . $conn->connect_error);
}
$sql = "INSERT INTO blogs (title, content, author_id) VALUES ('$title', '$content',
'$author_id')";
if ($conn->query($sql) === TRUE) {
    $blog_id = $conn->insert_id;
    $sql_users = "SELECT id FROM users";
    $result_users = $conn->query($sql_users);
    if ($result_users->num_rows > 0) {
        while ($row = $result_users->fetch_assoc()) {
            $user_id = $row['id'];
            $sql_message = "INSERT INTO messages (group_chat_id, sender_id, message,
is_broadcast)
                VALUES (NULL, '$author_id', 'New blog posted: $title - $content',
1)";
            $conn->query($sql_message);
        }
    }
    echo "<div class='alert success'>Blog created and broadcasted successfully!</div>";
} else {
    echo "<div class='alert error'>Error: " . $conn->error . "</div>";
}
$conn->close();
}
?>
<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">

```

```
<meta name="viewport" content="width=device-width, initial-scale=1.0">
```

```
<title>Create Blog - Convo X</title>
```

```
<style>
```

```
  body {
```

```
    font-family: Arial, sans-serif;
```

```
    background-color: #FAF3DD;
```

```
    margin: 0;
```

```
    display: flex;
```

```
    flex-direction: column;
```

```
    height: 100vh;
```

```
  }
```

```
  header {
```

```
    display: flex;
```

```
    justify-content: space-between;
```

```
    align-items: center;
```

```
    padding: 15px 20px;
```

```
    background-color: black;
```

```
    color: white;
```

```
    box-shadow: 0 2px 5px rgba(0, 0, 0, 0.1);
```

```
  }
```

```
  header .logo-title {
```

```
    display: flex;
```

```
    align-items: center;
```

```
  }
```

```
  header h1 {
```

```
    font-size: 2.5em;
```

```
    color: pink;
```

```
    margin: 0;
```

```
    cursor: pointer;
```

```
    font-family: 'Venite Adoremus Straight';
```

```
  }
```

```
.profile {
  display: flex;
  align-items: center;
}

.profile img {
  border-radius: 50%;
  width: 60px;
  height: 40px;
  margin-right: 20px;
}

.profile form button {
  background-color: black;
  color: white;
  border: none;
  font-size: 20px;
  cursor: pointer;
  padding: 10px;
  border-radius: 50px;
  transition: background-color 0.5s, color 0.5s;
}

.profile form button:hover {
  background-color: gold;
  color: black;
  transform: scale(1.1);
}

.container {
  background-color: white;
  padding: 30px;
  border-radius: 10px;
  box-shadow: 0 0 15px rgba(0, 0, 0, 0.1);
  width: 100%;
  max-width: 600px;
}
```

```
    margin: 50px auto;
}
.logo {
    height: 40px;
    margin-right: 10px;
}
h2 {
    color: black;
    text-align: center;
    margin-bottom: 20px;
}
label {
    font-size: 14px;
    color: #333;
    margin-bottom: 5px;
}
textarea, input[type="text"], input[type="number"] {
    width: 96%;
    padding: 10px;
    margin: 10px 0;
    border: 1px solid #ccc;
    border-radius: 5px;
    font-size: 14px;
}
textarea {
    height: 150px;
    resize: vertical;
}
input[type="submit"] {
    width: 100%;
    padding: 10px;
    background-color: black;
```

```

    color: white;
    border: none;
    border-radius: 50px;
    font-size: 16px;
    cursor: pointer;
}
input[type="submit"]:hover {
    background-color: gold;
    color: black;
}
.error-message {
    color: red;
    font-size: 14px;
    text-align: center;
    margin-top: 10px;
}
.success-message {
    color: green;
    font-size: 14px;
    text-align: center;
    margin-top: 10px;
}
.back-button {
    margin-top: 20px;
    text-align: center;
}
.back-button a {
    text-decoration: none;
}
.back-button input[type="button"] {
    width: 100%;
    padding: 10px;

```

```

    background-color: black;
    color: white;
    border: none;
    border-radius: 50px;
    font-size: 16px;
    cursor: pointer;
}
.back-button input[type="button"]:hover {
    background-color: gold;
    color: black;
}
footer {
    background-color: #222;
    color: white;
    text-align: center;
    padding: 10px 20px;
    margin-top: auto;
}
#dynamicContent {
    display: none;
    margin-top: 20px;
    padding: 20px;
    background-color: white;
    border-radius: 10px;
    box-shadow: 0 2px 5px rgba(0, 0, 0, 0.1);
}
#editProfileModal {
    display: none;
    position: fixed;
    top: 50%;
    left: 50%;
    transform: translate(-50%, -50%);

```

```
width: 80%;
max-width: 400px;
background-color: white;
padding: 20px;
border-radius: 10px;
box-shadow: 0 2px 5px rgba(0, 0, 0, 0.3);
z-index: 1000;
}
#editProfileModal form {
display: flex;
flex-direction: column;
}
#editProfileModal label {
margin-top: 10px;
font-weight: bold;
}
#editProfileModal input {
margin-top: 5px;
padding: 10px;
border: 1px solid #ccc;
border-radius: 30px;
}
#editProfileModal button {
margin-top: 20px;
padding: 10px;
background-color: black;
color: white;
border: none;
border-radius: 30px;
cursor: pointer;
}
#editProfileModal button:hover {
```



```
background-color: gold;
color: black;
}
#overlay {
display: none;
position: fixed;
top: 0;
left: 0;
width: 100%;
height: 100%;
background-color: rgba(0, 0, 0, 0.5);
z-index: 999;
}
.footer-links a {
color: skyblue;
text-decoration: none;
margin: 0 10px;
}
.footer-links a:hover {
text-decoration: underline;
}
.profile button {
background-color: black;
color: white;
border: none;
font-size: 20px;
cursor: pointer;
padding: 10px;
border-radius: 50px;
margin-right: 20px;
transition: background-color 0.5s, color 0.5s;
}
```

```

.profile button:hover {
background-color: gold;
color: black;
transform: scale(1.1);
}
.back-button {
margin-top: 20px;
text-align: center;
}
.back-button .menu-button {
width: 100%;
padding: 10px;
background-color: black;
color: white;
border: none;
border-radius: 50px;
font-size: 16px;
cursor: pointer;
}
.back-button .menu-button:hover {
background-color: gold;
color: black;
}
#dynamicContent {
display: none;
margin-top: 20px;
padding: 20px;
background-color: white;
border-radius: 10px;
box-shadow: 0 2px 5px rgba(0, 0, 0, 0.1);
}
</style>

```

```

</head>
<body>
  <header>
    <div class="logo-title">
      
      <h1>Convo X</h1>
    </div>
    <div class="profile">
      <button id="editProfileButton">Edit Profile</button>
      
      <form method="POST" action="">
        <button type="submit" name="logout">Logout</button>
      </form>
    </div>
  </header>
  <div class="container">
    <h2>Create and Broadcast Blog</h2>
    <form method="POST" action="create_blog.php">
      <label for="title">Title:</label>
      <input type="text" id="title" name="title" required placeholder="Enter the title">
      <label for="content">Content:</label>
      <textarea id="content" name="content" required placeholder="Write your content
here"></textarea>
      <div class="button-container">
        <input type="submit" value="Create Blog">
        <div class="back-button">
          <button class="menu-button" onclick="window.location.href='menu.php'">Back to
Menu</button>
        </div>
      </div>
    </form>
  </div>

```

```

    <div id="dynamicContent"></div>
<div id="overlay"></div>
<div id="editProfileModal">
    <form method="POST">
        <center>
            <h3>Edit Profile</h3>
        </center>
        <label for="newUsername">New Username</label>
        <input type="text" name="newUsername" id="newUsername" placeholder="Enter
your new username" required>
        <label for="newPassword">New Password</label>
        <input type="password" name="newPassword" id="newPassword"
placeholder="Enter your new password" required>
        <button type="submit" name="updateProfile">Update Profile</button>
        <button type="button" id="closeModal">Cancel</button>
    </form>
</div>
<script>
const editProfileBtn = document.getElementById('editProfileButton');
const editProfileModal = document.getElementById('editProfileModal');
const overlay = document.getElementById('overlay');
const closeModalBtn = document.getElementById('closeModal');
editProfileBtn.addEventListener('click', function () {
    editProfileModal.style.display = 'block';
    overlay.style.display = 'block';
});
closeModalBtn.addEventListener('click', function () {
    editProfileModal.style.display = 'none';
    overlay.style.display = 'none';
});
overlay.addEventListener('click', function () {
    editProfileModal.style.display = 'none';

```

```

        overlay.style.display = 'none';
    });
    function loadContent(url) {
        var dynamicContent = document.getElementById('dynamicContent');
        dynamicContent.style.display = 'block';
        var xhr = new XMLHttpRequest();
        xhr.open('GET', url, true);
        xhr.onload = function () {
            if (xhr.status === 200) {
                dynamicContent.innerHTML = xhr.responseText;
            } else {
                dynamicContent.innerHTML = '<p style="color: red;">Error loading content.
Please try again.</p>';
            }
        };
        xhr.send();
    }
</script>
<footer>
    <div class="footer-links">
        <a href="#">About Us</a>
        <a href="#">Privacy Policy</a>
        <a href="#">Contact Support</a>
    </div>
    <p>&copy; 2024 Convo X. All rights reserved.</p>
</footer>
</body>
</html>

```

### **send\_message.php:**

```

<?php
session_start();
if (!isset($_SESSION['user_id'])) {

```

```

    header("Location: login.php");
    exit();
}
$error_message = "";
$success_message = "";
if ($_SERVER['REQUEST_METHOD'] == 'POST' && !isset($_POST['logout'])) {
    error_log("Form is being submitted!");
    $message = $_POST['message'];
    $receiver_id = $_POST['receiver_id'];
    $sender_id = $_SESSION['user_id'];
    error_log("Message: " . $message);
    error_log("Receiver ID: " . $receiver_id);
    error_log("Sender ID: " . $sender_id);
    if (empty($message) || empty($receiver_id)) {
        $error_message = "Message or receiver is missing.";
    } else {
        $conn = new mysqli("localhost:3307", "root", "", "chatterhub");
        if ($conn->connect_error) {
            die("Connection failed: " . $conn->connect_error);
        }
        $stmt = $conn->prepare("INSERT INTO messages (sender_id, receiver_id, message,
sent_at) VALUES (?, ?, ?, NOW())");
        $stmt->bind_param("iis", $sender_id, $receiver_id, $message);

        if ($stmt->execute()) {
            $_SESSION['success_message'] = "Message sent successfully!";
            header("Location: send_message.php");
            exit();
        } else {
            $_SESSION['error_message'] = "Error: " . $conn->error;
        }
        $stmt->close();
    }
}

```

```

        $conn->close();
    }
}
$conn = new mysqli("localhost:3307", "root", "", "chatterhub");
if ($conn->connect_error) {
    die("Connection failed: " . $conn->connect_error);
}
$available_users_sql = "SELECT id, username FROM users WHERE id != ?";
$stmt = $conn->prepare($available_users_sql);
$stmt->bind_param("i", $_SESSION['user_id']);
$stmt->execute();
$available_users_result = $stmt->get_result();
$users = [];
while ($row = $available_users_result->fetch_assoc()) {
    $users[] = $row;
}
$stmt->close();
$conn->close();
?>
<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title>Send Message - Convo X</title>
    <style>
        body {
            font-family: Arial, sans-serif;
            background-color: #FAF3DD;
            margin: 0;
            display: flex;
            flex-direction: column;

```

```

    height: 100vh;
}
header {
    display: flex;
    justify-content: space-between;
    align-items: center;
    padding: 15px 20px;
    background-color: black;
    color: white;
    box-shadow: 0 2px 5px rgba(0, 0, 0, 0.1);
}
header .logo-title {
    display: flex;
    align-items: center;
}
header h1 {
    font-size: 2.5em;
    color: pink;
    margin: 0;
    cursor: pointer;
    font-family: 'Venite Adoremus Straight';
}
.profile {
    display: flex;
    align-items: center;
}
.profile img {
    border-radius: 50%;
    width: 60px;
    height: 40px;
    margin-right: 20px;
}

```



```
.profile form button {
  background-color: black;
  color: white;
  border: none;
  font-size: 20px;
  cursor: pointer;
  padding: 10px;
  border-radius: 30px;
  transition: background-color 0.5s, color 0.5s;
}

.profile form button:hover {
  background-color: gold;
  color: black;
  transform: scale(1.1);
}

.container {
  background-color: white;
  padding: 30px;
  border-radius: 10px;
  box-shadow: 0 0 15px rgba(0, 0, 0, 0.1);
  width: 100%;
  max-width: 600px;
  margin: 50px auto;
}

.logo {
  height: 40px;
  margin-right: 10px;
}

h2 {
  color: black;
  text-align: center;
  margin-bottom: 20px;
```

```

}
label {
    font-size: 14px;
    color: #333;
    margin-bottom: 5px;
}
textarea, input[type="text"], input[type="number"], select {
    width: 96%;
    padding: 10px;
    margin: 10px 0;
    border: 1px solid #ccc;
    border-radius: 5px;
    font-size: 14px;
}
textarea {
    height: 150px;
    resize: vertical;
}
input[type="submit"] {
    width: 100%;
    padding: 10px;
    background-color: black;
    color: white;
    border: none;
    border-radius: 50px;
    font-size: 16px;
    cursor: pointer;
}
input[type="submit"]:hover {
    background-color: gold;
    color: black;
}

```

```
.error-message {
  color: red;
  font-size: 14px;
  text-align: center;
  margin-top: 10px;
}
.success-message {
  color: green;
  font-size: 14px;
  text-align: center;
  margin-top: 10px;
}
.back-button {
  margin-top: 20px;
  text-align: center;
}
.back-button a {
  text-decoration: none;
}
.back-button input[type="button"] {
  width: 100%;
  padding: 10px;
  background-color: black;
  color: white;
  border: none;
  border-radius: 50px;
  font-size: 16px;
  cursor: pointer;
}
.back-button input[type="button"]:hover {
  background-color: gold;
  color: black;
}
```

```

}
footer {
    background-color: #222;
    color: white;
    text-align: center;
    padding: 10px 20px;
    margin-top: auto;
}
#dynamicContent {
    display: none;
    margin-top: 20px;
    padding: 20px;
    background-color: white;
    border-radius: 10px;
    box-shadow: 0 2px 5px rgba(0, 0, 0, 0.1);
}
a.button {
    display: inline-block;
    padding: 10px 20px;
    background-color: black;
    color: white;
    border-radius: 30px;
    text-decoration: none;
    font-size: 20px;
    cursor: pointer;
    margin-right: 20px;
    text-align: center;
    transition: background-color 0.5s, color 0.5s;
}
a.button:hover {
    background-color: gold;
    color: black;
}

```

```

        transform: scale(1.1);
    }
    #editProfileModal {
    display: none;
    position: fixed;
    top: 50%;
    left: 50%;
    transform: translate(-50%, -50%);
    width: 80%;
    max-width: 500px;
    background-color: #fff;
    padding: 30px;
    border-radius: 10px;
    box-shadow: 0px 4px 12px rgba(0, 0, 0, 0.1);
    z-index: 1000;
    }
    #editProfileModal form {
    display: flex;
    flex-direction: column;
    gap: 15px;
    }
    #editProfileModal label {
    font-size: 16px;
    color: #333;
    font-weight: bold;
    }
    #editProfileModal input {
    padding: 12px;
    font-size: 16px;
    border: 1px solid #ccc;
    border-radius: 30px;
    width: 96%;

```

```

    }
    #editProfileModal button {
    margin-top: 20px;
    padding: 12px;
    background-color: #000;
    color: white;
    border: none;
    border-radius: 30px;
    cursor: pointer;
    font-size: 16px;
    }
    #editProfileModal button:hover {
    background-color: gold;
    color: black;
    }
    #overlay {
    display: none;
    position: fixed;
    top: 0;
    left: 0;
    width: 100%;
    height: 100%;
    background-color: rgba(0, 0, 0, 0.5);
    z-index: 999;
    }
</style>
</head>
<body>
    <header>
        <div class="logo-title">
            
            <h1>Convo X</h1>

```

```

</div>
<div class="profile">
  <a href="#" id="editProfileBtn" class="button">Edit Profile</a>
  
  <form method="POST" action="">
    <button type="submit" name="logout">Logout</button>
  </form>
</div>
</header>
<div class="container">
  <h2 style="font-family:'Venite Adoremus Straight'">Send Message</h2>
  <form method="POST" action="send_message.php">
    <div class="form-group">
      <label for="message">Message:</label>
      <textarea name="message" required placeholder="Type your message
here..."></textarea>
    </div>
    <div class="form-group">
      <label for="receiver_id">Receiver:</label>
      <select name="receiver_id" required>
        <option value="" disabled selected>Select receiver</option>
        <?php foreach ($users as $user): ?>
          <option value="<?php echo $user['id']; ?>"><?php echo
$user['username']; ?></option>
        <?php endforeach; ?>
      </select>
    </div>
    <div class="form-group">
      <input type="submit" value="Send Message">
    </div>
    <?php if (!empty($_SESSION['success_message'])): ?>

```

```

        <p class="success-message"><?php echo
$_SESSION['success_message']; ?></p>
        <?php unset($_SESSION['success_message']); ?>
    <?php endif; ?>
    <?php if (!empty($_SESSION['error_message'])): ?>
        <p class="error-message"><?php echo $_SESSION['error_message']; ?></p>
        <?php unset($_SESSION['error_message']); ?>
    <?php endif; ?>
</form>
<div class="back-button">
    <a href="menu.php">
        <input type="button" value="Back to Menu">
    </a>
</div>
</div>
<footer>
    <p>&copy; 2024 Convo X. All rights reserved.</p>
</footer>
</body>
</html>

```

### **upload\_file.php:**

```

<?php
session_start();
if (!isset($_SESSION['user_id'])) {
    echo "Please log in to upload files.";
    exit();
}
$host = 'localhost:3307';
$dbname = 'chatterhub';
$username = 'root';
$password = '';
$conn = new mysqli($host, $username, $password, $dbname);

```



```

if ($conn->connect_error) {
    die("Connection failed: " . $conn->connect_error);
}
if ($_SERVER['REQUEST_METHOD'] == 'POST' && isset($_FILES['fileToUpload']))
{
    $receiver_username = $_POST['receiver_username'];
    $file = $_FILES['fileToUpload'];
    if ($file['error'] == 0) {
        $uploadDir = 'uploads/';
        $fileName = basename($file['name']);
        $uploadFilePath = $uploadDir . $fileName;
        $fileSize = $file['size'];
        $fileType = $file['type'];
        if (move_uploaded_file($file['tmp_name'], $uploadFilePath)) {
            $stmt = $conn->prepare("SELECT id FROM users WHERE username = ?");
            $stmt->bind_param("s", $receiver_username);
            $stmt->execute();
            $result = $stmt->get_result();
            if ($result->num_rows > 0) {
                $receiver = $result->fetch_assoc();
                $receiver_id = $receiver['id'];
                $stmt = $conn->prepare("INSERT INTO files (sender_id, receiver_id, file_path,
file_name, file_size, file_type) VALUES (?, ?, ?, ?, ?, ?)");
                $stmt->bind_param("iissis", $_SESSION['user_id'], $receiver_id,
$uploadFilePath, $fileName, $fileSize, $fileType);
                if ($stmt->execute()) {
                    echo "<script>alert('File uploaded successfully!');</script>";
                } else {
                    echo "<script>alert('Error inserting file into database.');"</script>";
                }
                $stmt->close();
            } else {

```

```

        echo "<script>alert('Receiver not found.');

```

```

}
header {
  display: flex;
  justify-content: space-between;
  align-items: center;
  padding: 10px 20px;
  background-color: black;
  color: white;
  width: 100%;
}
header h1 {
  font-size: 2.5em;
  color: pink;
  margin: 0;
  display: flex;
  align-items: center;
  font-family: 'Venite Adoremus Straight';
}
header h1 img {
  width: 50px;
  height: 50px;
  margin-right: 10px;
}
.profile {
  display: flex;
  align-items: center;
}
.profile img {
  border-radius: 50%;
  width: 60px;
  height: 40px;
  margin-right: 10px;
}

```

```

}
.profile a {
    margin-right: 15px;
    text-decoration: none;
    color: white;
    font-size: 20px;
    background-color: black;
    padding: 5px 10px;
    border-radius: 30px;
    cursor: pointer;
    transition: background-color 0.5s, color 0.5s;
}
.profile a:hover {
    background-color: gold;
    color: black;
}
.profile form button {
    background-color: black;
    color: white;
    border: none;
    padding: 10px 15px;
    border-radius: 30px;
    cursor: pointer;
    font-size: 20px;
    transition: background-color 0.5s, color 0.5s;
}
.profile form button:hover {
    background-color: gold;
    color: black;
}
footer {
    background-color: black;

```

```
    color: white;
    text-align: center;
    padding: 10px 20px;
    margin-top: auto;
    width: 100%;
    position: relative;
}
.footer-links a {
    color: skyblue;
    text-decoration: none;
    margin: 0 10px;
}
.footer-links a:hover {
    text-decoration: underline;
}
.upload-container {
    padding: 20px;
    text-align: center;
    width: 100%;
    max-width: 500px;
    max-height: 500px;
    font-size: 24px;
}
label {
    font-size: 16px;
    margin-bottom: 8px;
    display: block;
}
input[type="file"], input[type="text"] {
    padding: 10px;
    margin: 10px 0;
    width: 100%;
```

```
    box-sizing: border-box;
    font-size: 18px;
}
button {
    padding: 10px 20px;
    background-color: black;
    color: white;
    border: none;
    border-radius: 30px;
    cursor: pointer;
    width: 100%;
    font-size: 18px;
}
button:hover {
    background-color: gold;
    color: black;
}
.back-button {
    padding: 10px 20px;
    background-color: black;
    color: white;
    border: none;
    border-radius: 30px;
    cursor: pointer;
    width: 100%;
    margin-top: 10px;
}
.back-button:hover {
    background-color: gold;
    color: black;
}
.close {
```

```
    color: #aaa;
    float: right;
    font-size: 28px;
    font-weight: bold;
}
.close:hover,
.close:focus {
    color: black;
    text-decoration: none;
    cursor: pointer;
}
label {
    font-weight: bold;
}
input[type="text"], input[type="password"] {
    width: 100%;
    padding: 10px;
    margin: 5px 0;
    border: 1px solid #ccc;
    border-radius: 5px;
}
button {
    background-color: black;
    color: white;
    padding: 10px 20px;
    border: none;
    border-radius: 5px;
    cursor: pointer;
}
button:hover {
    background-color: gold;
    color: black;
```

```

    }
    #editProfileModal {
    display: none;
    position: fixed;
    top: 50%;
    left: 50%;
    transform: translate(-50%, -50%);
    width: 80%;
    max-width: 400px;
    background-color: white;
    padding: 20px;
    border-radius: 10px;
    box-shadow: 0 2px 5px rgba(0, 0, 0, 0.3);
    z-index: 1000;
    }
    #editProfileModal form {
    display: flex;
    flex-direction: column;
    }
    #editProfileModal label {
    margin-top: 10px;
    font-weight: bold;
    }
    #editProfileModal input {
    margin-top: 5px;
    padding: 10px;
    border: 1px solid #ccc;
    border-radius: 30px;
    width: 94%;
    }
    #editProfileModal button {
    margin-top: 20px;

```



```

padding: 10px;
background-color: black;
color: white;
border: none;
border-radius: 30px;
cursor: pointer;
}
#editProfileModal button:hover {
background-color: gold;
color: black;
}
#overlay {
display: none;
position: fixed;
top: 0;
left: 0;
width: 100%;
height: 100%;
background-color: rgba(0, 0, 0, 0.5);
z-index: 999;
}
</style>
</head>
<body>
<header>
<h1>Convo X</h1>
<div class="profile">
  
  <button id="editProfileBtn">Edit Profile</button>
  <form method="POST" action="">
    <button type="submit" name="logout">Logout</button>
  </form>

```

```

</div>
</header>
<div class="upload-container">
  <h2>Upload File</h2>
  <form method="POST" enctype="multipart/form-data">
    <label for="receiver_username">Select receiver's username</label>
    <select name="receiver_username" id="receiver_username" required>
      <option value="" disabled selected>Select a receiver</option>
      <?php
        while ($row = $usernames_result->fetch_assoc()) {
          echo '<option value="" . $row['username'] . "'>' . $row['username'] . '</option>';
        }
      ?>
    </select>
    <input type="file" name="fileToUpload" required>
    <button type="submit">Upload File</button>
  </form>
  <form method="get" action="menu.php">
    <button class="back-button" type="submit">Back to Menu</button>
  </form>
</div>
<div id="editProfileModal">
  <form method="POST">
    <center>
      <h3>Edit Profile</h3>
    </center>
    <label for="newUsername">New Username</label>
    <input type="text" name="newUsername" id="newUsername" placeholder="Enter
your new username" required>
    <label for="newPassword">New Password</label>
    <input type="password" name="newPassword" id="newPassword"
placeholder="Enter your new password" required>

```

```

        <button type="submit" name="updateProfile">Update Profile</button>
        <button type="button" id="closeModal">Cancel</button>
    </form>
</div>
<div id="overlay"></div>
<footer>
    <div class="footer-links">
        <a href="#">About Us</a>
        <a href="#">Privacy Policy</a>
        <a href="#">Contact Support</a>
    </div>
    <p>&copy; 2024 Convo X. All rights reserved.</p>
</footer>
<script>
    const editProfileBtn = document.getElementById('editProfileBtn');
    const editProfileModal = document.getElementById('editProfileModal');
    const overlay = document.getElementById('overlay');
    const closeModalBtn = document.getElementById('closeModal');
    editProfileBtn.addEventListener('click', function () {
        editProfileModal.style.display = 'block';
        overlay.style.display = 'block';
    });
    closeModalBtn.addEventListener('click', function () {
        editProfileModal.style.display = 'none';
        overlay.style.display = 'none';
    });
    overlay.addEventListener('click', function () {
        editProfileModal.style.display = 'none';
        overlay.style.display = 'none';
    });
    window.onclick = function(event) {
        if (event.target == editProfileModal) {

```

```
        editProfileModal.style.display = "none";  
        overlay.style.display = "none";  
    }  
};  
</script>  
</body>  
</html>
```

## **CHAPTER 7**

### **CONCLUSION**

Convo X has been a successful implementation of a web-based communication platform that integrates real-time messaging, secure file sharing, and enhanced privacy measures. Throughout its development, the platform addressed several key challenges in online communication, including user experience, data security, and ease of navigation. By using a combination of HTML, CSS, JavaScript, PHP, and MySQL, the platform is able to deliver a smooth, responsive interface while maintaining secure backend operations. The user-friendly design ensures that both novice and experienced users can seamlessly engage with the features, while the integration of secure file-sharing mechanisms and real-time messaging helps improve the overall communication experience.

## **CHAPTER 8**

### **FUTURE WORK**

Looking ahead, there are several key areas for the future development of Convo X. The first major step will be to add advanced communication features such as video calling, voice calling, and screen sharing. These features are essential in today's fast-paced, digital-first world, where real-time communication goes beyond text and file sharing. Additionally, introducing group chat capabilities with customizable roles and permissions would help cater to teams and organizations that rely on group communication.

To further enhance the user experience, AI-powered features could be introduced, such as smart message categorization, chatbots for quick responses, and personalized recommendations. These would provide users with an even more seamless and tailored interaction.

In conclusion, while Convo X has made significant strides in achieving its goals, its potential for growth is vast. The next steps will focus on adding value through new features, improving infrastructure for scalability, and ensuring that the platform remains at the forefront of secure and efficient online communication.

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