

Real-Time Chat Application

Core Features:

1. User Authentication and Registration

- Users can sign up, log in, and log out.
- PHP handles the authentication and session management.
- Password encryption for secure storage.

2. One-on-One and Group Chats

- Users can chat privately with individuals or create/join group chats.
- PHP backend manages user data, group creation, and participant lists.
- JavaScript and WebSocket (or AJAX for simpler implementation) enable real-time message delivery.

3. Real-Time Messaging

- Messages are sent and received instantly without page reloads.
- WebSocket technology allows two-way communication between the server and clients for real-time updates.
- Unread message indicators and timestamps for each message.

4. Message History

- Past messages are stored in a database and displayed when a user opens a chat.
- PHP retrieves message history and displays it, with JavaScript loading messages dynamically as users scroll up.

5. Notifications

- Real-time notifications for new messages, even when users are in a different chat or offline.
- Browser notifications and/or sound alerts for new messages.

6. Typing Indicators

- Show when the other person is typing in real time.
- JavaScript updates the UI to show “typing...” status, making conversations feel more interactive.

7. Read Receipts

- Indicate when a message has been delivered and read.
- PHP updates message status in the database, while JavaScript displays read indicators in real-time.

8. File and Media Sharing

- Users can share images, files, and other media.
- PHP handles file uploads, storage, and retrieval.
- JavaScript dynamically displays images and files within the chat interface.

Optional Features:

1. Profile Customization

- Users can upload a profile picture, set status messages, or change display names.
- PHP handles image upload and profile data, while JavaScript updates the UI accordingly.

2. Message Pinning

- Allows users to pin important messages within a chat for easy access.
- PHP updates pin status, and JavaScript displays pinned messages at the top of the chat.

3. Admin Controls for Group Chats

- Group chat administrators can add/remove members, set permissions, or mute members.
- PHP handles permission settings and member management, while JavaScript reflects changes in the UI in real time.