

Internal Chatbox for Team Communication

Project Overview:

The internal chatbox will enable seamless communication between employees, allowing them to connect with team members, different departments, and management through an easy-to-use and innovative platform. It will include features such as one-on-one chats, group chats, real-time online status, and search functionalities.

Core Functionalities:

1. User Profiles & Online Status

- Display employee details: **Photo, Name, Designation, Location (Reporting Office).**
- Show real-time availability: **Online, Working, Away, or Offline.**
- Search functionality to find and connect with team members across departments.

2. One-on-One & Group Chats

- Employees can initiate **private chats** with other employees.
- **Group chat support** for teams and departments.
- Message delivery and read receipts for transparency.

3. Chat History & Privacy Control

- Employees can access their chat history for **a maximum of 10 days.**
- **Admins have full access** to chat history unless manually deleted.
- End-to-end encryption for secure conversations.
- **No large file sharing over 1 MB** is allowed.

4. User-Friendly & Innovative Interface

- **Simple yet modern UI** to enhance ease of use.
- Smart filters and quick access to frequently contacted team members.
- Push notifications for new messages and mentions.

5. Authentication & Security

- Authentication through **official email IDs** only.
- **Data protection policies** will be enforced to safeguard sensitive information.

6. Voice Call Support

- Only **voice calling** is allowed (no video calls).

User Roles & Access Levels

1. Employees

- Search and connect with colleagues.
- Send one-on-one and group messages.
- View chat history for up to 10 days.
- Check user availability status.

2. Admins

- Monitor chat history unless manually deleted.
- Manage user roles and access control.
- Set company-wide announcements and alerts.

Technology Stack:

- **Frontend:** React.js / Vue.js
- **Backend:** Node.js / Django / Flask
- **Database:** PostgreSQL / MongoDB
- **Authentication:** OAuth / JWT
- **Hosting:** AWS / Azure / Google Cloud

Project Timeline & Team Structure:

Team Composition (22 Members)

- **Project Manager (1)** – Oversee project execution and team coordination.
- **UI/UX Designers (6)** – Develop an intuitive and engaging chat interface.
- **Frontend Developers (8)** – Build and integrate chat UI components.
- **Backend Developers (7)** – Develop API, real-time messaging, and data handling.

Project Timeline: 10 Days

- **Day 1-2:** Requirement analysis, wireframing & UI/UX design.
- **Day 3-5:** Development of frontend and backend functionalities.
- **Day 6-7:** Database setup, real-time communication testing.

- **Day 8:** Security and authentication implementation.
 - **Day 9-10:** Final testing, bug fixes, and deployment.
-

Key Responsibility Areas (KRA):

UI/UX Designers

- Create wireframes and design prototypes.
- Develop intuitive and visually appealing UI.
- Ensure consistency across all design elements.

Frontend Developers

- Implement UI components with responsive design.
- Integrate frontend with backend APIs.
- Optimize performance and ensure smooth interactions.

Backend Developers

- Develop and manage APIs for real-time messaging.
- Implement authentication and security protocols.
- Handle database management and data protection policies.

QA/Testers

- Conduct rigorous testing for bugs and performance issues.
 - Ensure compliance with security and data protection policies.
 - Validate overall user experience and application functionality.
-

Additional Features (Future Enhancements):

- File Sharing (Documents, Images, PDFs) up to **1 MB max**
- Message Reactions & Emojis
- Customizable Notification Settings

This internal chatbox will **enhance workplace communication, improve collaboration, and provide a secure and user-friendly platform** for team interactions.