# **Total Time: 1 Month (4 Weeks)**

## Team Composition:

- Authentication Team (1 members): Login and signup functionality.
- Chat Team (2 members): Chat feature.
  - Group (same 2 members): Creation and management of teams/groups.
- Teams (Spaces) (3 members): Develop team space functionalities.
- Calls (2 members): Video and audio call features.
- Homepage Team (2 member): Homepage design and functionality.
  - Report & Website Team (same 2 member): Progress report and company website.

## Week 1: Setup and Initial Development

- Authentication Team:
  - Frontend: Design UI for login and signup pages using React.
  - Backend: Start learning about authentication services (e.g., Firebase Auth).
- Chat Team:
  - Frontend: Create a basic chat interface with React.
  - Backend: Begin learning about real-time databases (e.g., Firebase Realtime Database).
- Teams/Groups Team:
  - Frontend: Design UI for team/group creation and management.
  - Backend: Learn about handling data structures and permissions.
- Events Team:
  - Frontend: Sketch out settings and event scheduling interfaces.
  - Backend: Start learning about APIs for settings management and event handling.

#### · Calls Team:

- Frontend: Plan the UI for video and audio calls.
- Backend: Learn about WebRTC or similar technologies for real-time communication.

## Homepage Team:

- Frontend: Design and implement the homepage layout.
- Backend: Get familiar with routing and data fetching.

## Week 2: Development and Integration

#### Authentication Team:

- Frontend: Refine UI and start connecting to the backend.
- Backend: Implement authentication logic and database integration.

### Chat Team:

- Frontend: Integrate chat UI with real-time database updates.
- Backend: Set up and test database for storing and retrieving messages.

### • Teams/Groups Team:

- Frontend: Integrate team/group management UI with backend services.
- Backend: Develop APIs for creating and managing teams/groups.

#### Settings/Events Team:

- Frontend: Connect settings and event UI with backend APIs.
- Backend: Implement logic for managing user settings and scheduling events.

## · Calls Team:

- Frontend: Start implementing call UI features.
- Backend: Establish basic real-time communication channels.

## Homepage Team:

- Frontend: Enhance the homepage with dynamic content and navigation.
- Backend: Implement server-side rendering or static generation as appropriate.

# Week 3: Testing and Refinement (Flexible)

#### All Teams:

- Frontend: Test UI components, ensure responsiveness and usability.
- Backend: Test APIs and database interactions, ensure security and performance.
- Integration: Ensure frontend and backend components work seamlessly together.
- Learning: Continue enhancing skills in areas identified as weak during development.

## Week 4: Finalization and Documentation (Flexible)

#### All Teams:

- Frontend & Backend: Fix any remaining bugs, optimize performance, and refine user experience.
- Documentation: Document code, write usage instructions, and describe features.
- Preparation: Prepare for the application demonstration, including creating presentation materials.

### Report & Website Team (Throughout all sprints):

- Weeks 1-2: Plan and start designing the company website; outline the progress report.
- Week 3: Develop and finalize the company website; detail sections of the progress report as features are completed.
- Week 4: Finalize the progress report; assist in preparing for the application demonstration.

# Notes:

- Weekly Meetings: Essential to track progress, address challenges, and adapt plans.
- Peer Review: Encourage teams to review each other's work for quality assurance.
- Adaptability: Be ready to adjust tasks based on the progress and learning curve of the team members.