

Project Timeline

Our project roadmap details a structured timeline for developing an advanced team chat application, integrating a blend of cutting-edge technologies and functionalities aimed at optimizing team collaboration.

Phase 1: Initiation and Planning (Jan 23 - Feb 5, 2024)

- Objectives: Outline project scope with features like real-time messaging, file sharing, and advanced user management.
- Team Formation: Assign roles within development, UX/UI design, QA, and project management.
- Tools Setup: Utilize GitHub for version control and Jira for project management.
- Key Deliverables: Complete a project proposal and establish a risk management framework.
- Deadline: February 5, 2024.

Phase 2: System Design and Tech Selection (Feb 6 - Feb 26, 2024)

- System Design: Architect a scalable system using a microservices approach for flexibility and maintenance.
- Database & Tech Stack: Opt for MySQL for data storage, Next.js and React for frontend development, Socket.io for real-time communication, and Prisma for ORM.
- Security Planning: Implement JWT for secure authentication and HTTPS for encrypted data transmission.
- Deadline: February 26, 2024.

Phase 3: Core Functionality Development (Feb 27 - Mar 18, 2024)

- Messaging & File Sharing: Develop seamless one-on-one and group chat functionalities, including support for various file types.
- User Management: Create comprehensive user profiles, friend lists, and group memberships with Prisma and MySQL.
- UI Customization: Enable dark and light modes with Tailwind CSS for a personalized user experience.
- Deadline: March 18, 2024.

Phase 4: Enhancements and Integrations (Mar 19 - Apr 8, 2024)

- Communication Channels: Integrate video and audio call functionalities using WebRTC for direct peer-to-peer connections.
- Server & Channel Management: Implement tools for creating and managing dedicated communication spaces.
- Collaboration Tools: Add shared calendars and task management features for enhanced team coordination.
- Deadline: April 8, 2024.

Phase 5: Testing, Final Review, and Handover (Apr 9 - Apr 29, 2024)

- Testing: Conduct unit, integration, and end-to-end testing using Jest and Cypress to ensure functionality and reliability.
- Security Audits: Perform thorough security assessments to patch vulnerabilities and ensure data protection.
- User Feedback: Facilitate user testing sessions for real-world usability insights and final adjustments.
- Deadline: April 29, 2024.

For the specified timeline and tasks, here is the respective Gantt Chart:

