COLLEGE CODE : 9623

COLLEGE NAME : Amrita College Of Engineering And Technology

DEPARTMENT : Computer Science and Engineering

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DATE : 22-09-2025

Completed the project named as Phase_02_ ChatApplicationUI

NAME : Chat Application UI

SUBMITTED BY,

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Agenda

- Project Setup
- Core Features Implementation
- Data Storage (Local State / Database)
- Testing Core Features
- Version Control (GitHub)

Project Setup

- Initialize project repository
- Configure dependencies (React Native, Node.js, Firebase/MongoDB)
- Setup authentication (Firebase Auth / JWT)
- Define project folder structure
- Integrate basic UI screens

Core Features Implementation

- Real-time chat functionality using WebSocket / Socket.IO
- Send and receive text messages instantly
- Group and private chat support
- Online/offline indicators
- Typing indicators

Data Storage

- Firebase Firestore / MongoDB for storing chats, users, media
- Local state management for quick updates
- Sync chat history across devices
- Ensure message persistence with database

Testing Core Features

- Unit testing for message functions
- Integration testing for chat flow
- Real-time message delivery
validation
- Cross-device testing
- Debugging UI/UX issues

Version Control (GitHub)

- Setup Git repository
- Branching strategy for features
- Regular commits and pull requests
- Collaboration and code reviews
- CI/CD integration (optional)

Conclusion

- MVP implemented with core chat features
- Secure and scalable architecture
- Real-time communication achieved
- Ready for user testing and feedback