Problem Statement

With the rapid growth of online communication, existing social networking platforms face challenges related to scalability, real-time interaction, content moderation, and data privacy. Many systems struggle to efficiently manage multimedia content, provide instant notifications, and ensure secure user authentication while maintaining high performance. There is a need to design and develop a robust social media platform that enables seamless user interaction, real-time messaging, secure data handling, and optimized content delivery to enhance user experience and system reliability.

Abstract

The Social Media Platform project aims to design and implement a scalable and secure web-based application that allows users to create profiles, connect with others, share multimedia posts, and communicate through private messaging. The system supports real-time notifications and interactions using WebSocket technology while ensuring data privacy through JWT-based authentication and authorization. A well-structured backend with RESTful APIs and efficient database schema design enables optimized news feed generation and fast data retrieval. Content moderation mechanisms and caching strategies are incorporated to enhance platform safety and performance. This project demonstrates the application of full-stack development principles to build a modern, reliable, and user-friendly social networking system.

Features

- Personalized News Feed
- Real-Time Chat & Notifications
- AI Content Moderation
- Secure Authentication
- Analytics Dashboard