MiniSocial: A Simplified Social Networking AppObjective:

Build a basic social networking app where users can sign up, create posts, and interact with others through likes and comments.

Core Features (MVP)

User Features

User Authentication

• Sign up with email and password.
• Log in securely using JWT authentication.
• Basic session management for logged-in users.

Posts

• Users can create text-only posts.
• Posts are displayed in a newsfeed (sorted by most recent).

Interactions

• Users can like posts.
• Users can view a count of likes on each post.

User Profile

• Users can view their own profile, showing:
• Name, email, and their own posts.

Non-Functional Requirements

Performance: Handle up to 100 concurrent users.

Usability: Responsive design for both desktop and mobile devices.

Security: Encrypt passwords and secure APIs with JWT.

Technical Requirements

Frontend
• Framework: React.js.
• Routing: React Router.
• API Communication: Axios for HTTP requests.
• UI Design: Minimal styling using plain CSS or a lightweight library like Tailwind CSS.Backend
• Framework: Node.js with Express.js.
• Authentication: JWT and bcrypt for password hashing.
• Database Communication: Mongoose for MongoDB.Database
• Database: MongoDB (hosted on MongoDB Atlas or Postgres)

Deliverables

GitHub Repository:

• Include all source code with clear folder structure.
• Add a README.md file with instructions to run the app locally.

Live Demo:

• Deploy the app (e.g., frontend on Vercel, backend on Render).

Basic Demo Features:

• User signup/login.
• Create posts.
• View posts in the newsfeed.
• Like posts.

Tools & Resources

Development Tools:

• Editor: VS Code.
• Database Management: MongoDB Compass.
• Testing: Postman for API testing.

Libraries:

• Frontend: React.js, Axios.
• Backend: Express.js, Mongoose, bcrypt, JWT.

Hosting:

• MongoDB Atlas for the database.
• Vercel for the frontend.
• Render or Heroku for the backend.

Success Criteria

• Users can register and log in securely.
• Posts are displayed in a simple, responsive newsfeed.
• Users can interact with posts (like them).
• The app runs smoothly without significant bugs.