I want you to build a complete full-stack social media web app called **ClassGram** — it is like a second version of Instagram, but made only for my classmates.

**🧩 Technologies to use:**

* **Frontend:** React + manual CSS (no libraries like Tailwind or Bootstrap)
* **Backend:** Node.js (Express)
* **Database:** MySQL

**🎯 Main Goal:**  
Create a clean, fun, and attractive platform where students can post, chat, follow each other, and share class moments.  
The design should feel modern and bright, with colors that students like — mix of **blue, purple, white, and neon accent buttons**.  
The UI should be responsive and look nice on both phones and computers.

**🧱 Features to Include:**

**1. Authentication (Login & Signup)**

* Students can create an account and login.
* Store passwords in a hashed way.
* Show basic profile info after login.

**2. Profile System**

* Each user has a profile page showing their posts, followers, and following count.
* Editable profile picture, bio, and username.

**3. Posting System**

* Students can post images, videos, or short text captions.
* Posts should show in the home feed and profile page.
* Show who posted it and when.

**4. Like & Comment System**

* Users can like or comment on posts.
* Show the number of likes and comments.

**5. Follow System**

* Students can follow and unfollow classmates.
* Home feed shows posts only from people they follow.

**6. Chat System**

* Direct messaging between classmates.
* Simple real-time chat using WebSocket or Socket.io.

**7. Notifications**

* Notify when someone likes, comments, follows, or sends a message.
* Mark notifications as read when opened.

**8. Trending Page**

* Show most liked posts of the week.

**📁 Project Folder Structure**

classgram/

├── frontend/ # React app (manual CSS)

├── backend/ # Node.js (Express)

└── database/ # MySQL schema and setup

**🗄️ MySQL Database Setup**  
Database name: classgram\_db

Tables to include:

**users**

* user\_id (INT, PK, AI)
* username (VARCHAR 50, UNIQUE)
* email (VARCHAR 100, UNIQUE)
* password (VARCHAR 255)
* profile\_pic (VARCHAR 255)
* bio (TEXT)
* created\_at (TIMESTAMP DEFAULT CURRENT\_TIMESTAMP)

**posts**

* post\_id (INT, PK, AI)
* user\_id (INT, FK → users.user\_id)
* content (TEXT)
* image\_url (VARCHAR 255)
* created\_at (TIMESTAMP DEFAULT CURRENT\_TIMESTAMP)

**likes**

* like\_id (INT, PK, AI)
* post\_id (INT, FK → posts.post\_id)
* user\_id (INT, FK → users.user\_id)
* created\_at (TIMESTAMP DEFAULT CURRENT\_TIMESTAMP)

**comments**

* comment\_id (INT, PK, AI)
* post\_id (INT, FK → posts.post\_id)
* user\_id (INT, FK → users.user\_id)
* comment\_text (TEXT)
* created\_at (TIMESTAMP DEFAULT CURRENT\_TIMESTAMP)

**followers**

* follow\_id (INT, PK, AI)
* follower\_id (INT, FK → users.user\_id)
* following\_id (INT, FK → users.user\_id)
* created\_at (TIMESTAMP DEFAULT CURRENT\_TIMESTAMP)

**messages**

* message\_id (INT, PK, AI)
* sender\_id (INT, FK → users.user\_id)
* receiver\_id (INT, FK → users.user\_id)
* message\_text (TEXT)
* created\_at (TIMESTAMP DEFAULT CURRENT\_TIMESTAMP)

**notifications**

* notification\_id (INT, PK, AI)
* user\_id (INT, FK → users.user\_id)
* sender\_id (INT, FK → users.user\_id)
* type (ENUM: 'like', 'comment', 'follow', 'message')
* message (TEXT)
* is\_read (BOOLEAN DEFAULT FALSE)
* created\_at (TIMESTAMP DEFAULT CURRENT\_TIMESTAMP)

**📱 UI Style Notes**

* Modern, bright, and smooth animation (hover effects, shadows).
* Mix of **blue**, **purple**, and **white** backgrounds.
* **Neon green or pink** for buttons and highlights.
* Clean, rounded cards for posts.
* Add simple logo text “ClassGram” on top nav.

**🧠 Task for you:**

* Generate full working code structure (frontend + backend + MySQL setup).
* Include API routes for login, register, posts, likes, comments, follow, chat, and notifications.
* Make the app ready to run locally (show commands to start server and client).
* Keep code simple, clean, and easy to test.

End goal: A fun and beautiful **ClassGram** social site that feels like Instagram for classmates.