# **Assignment**

# **Objective**

Build a small web application to manage user-generated blog posts. The app should support authentication (JWT), REST APIs, file upload, SQL relational logic, and include a basic UI. Swagger/OpenAPI documentation is optional but appreciated.

# Requirements

### 1. Authentication

- Implement **JWT-based** login and registration.
- Only authenticated users can create/update/delete blog posts.
- POST /auth/register Register a new user (email, password, name)
- POST /auth/login Login with JWT token generation
- GET /auth/profile Get logged-in user's profile (JWT required)

## 2. Blog Post CRUD REST API (Use Middleware to Authenticate)

#### Create RESTful APIs for:

- POST /posts Create a blog post
- GET /posts Get all blog posts
- GET /posts/:id Get single blog post
- PUT /posts/:id Update blog post
- DELETE /posts/:id Delete blog post

#### Each post should have:

- Title (string)
- Content (text)
- Author (linked to user)
- Cover image (upload)
- Created & updated timestamps

### 3. File Upload

- Enable users to upload a cover image for each blog post.
- Store the image locally or on cloud storage (S3 preferred for bonus).
- Include the image URL in the response.

### 4. Database Design (SQL)

Use MySQL with proper normalization. Include at least:

#### Tables:

- users
- posts (foreign key to users)

Use proper SQL joins in your API to return post details with user information.

#### Example query requirement:

Get all posts along with the name/email of the author using a JOIN.

### 5. Basic UI (Frontend)

- Simple interface (HTML/CSS/JS, or React/Next.js) with:
  - Login/Registration
  - Create Post form
  - Post listing page
  - View single post with cover image

## 6. Swagger Documentation (Optional – Bonus Extra Point )

- Add Swagger/OpenAPI documentation for your API endpoints.
- Expose it via /docs route.

## **Deliverables**

- Live url Frontend and Backend (Optional Bonus Extra Point )
- Source code (GitHub repo or zipped project)
- SQL schema or migration files
- README including:
  - Project setup instructions
  - o Technologies used
  - o Optional: Swagger API usage guide
  - o example.env

Time to Complete: 3 days

Good luck, and we're excited to see what you build!