Internship Assignment – Animemangatoon.com - Backend Development

For my assignment, I developed a RESTful API to manage a collection of webtoons inspired by the "Top 14 Castle Swimmer Characters You Need to Know." The API features endpoints to add, fetch, and delete webtoon entries, using MongoDB for database management.

I structured the project by separating concerns into distinct modules:

- **Controllers: Handle business logic for adding, fetching, and deleting webtoons.**
- **Database Connection: Connected to MongoDB using Mongoose for efficient data querying and storage.**
- **JWT Authentication: Implemented JWT-based authentication for the POST and DELETE endpoints, securing them so only authorized users can modify data. This includes token generation, login, signup, and middleware to protect routes.**
- **Rate Limiting: Integrated rate limiting to prevent abuse by restricting the number of requests a user can make within a specific timeframe.**
- **Models: Designed a webtoon schema using Mongoose to define the structure of the webtoon data, ensuring proper validation.**
- **Routes: Set up Express routes for various endpoints like adding webtoons, fetching all, fetching by ID, and deleting by ID, with JWT protection applied to POST and DELETE routes.**
- **Middleware: Implemented a custom authentication middleware to ensure only users with valid JWT tokens can access protected routes.**
- **Login/Signup Functionality: Added user authentication, allowing users to sign up, log in, and receive JWT tokens for subsequent authenticated requests.**

Overall, the API is secure, efficient, and organized with clear separation between logic, authentication, and data management. The project is scalable and easily maintainable, ready for further enhancements.