

Backend Web Development Internship (4 Weeks)

Week 1: RESTful Blog API

Goal: Develop a CRUD API for blog posts.

- **Endpoints:** POST, GET, PUT, DELETE
- **Include:** User authentication with JWT
- **Database:** Store posts, users, and timestamps
- **Focus:** REST architecture, Express/Django/Flask basics, DB integration

Week 2: Authentication System

Goal: Build a secure login and registration system.

- Registration & login with validation
- Hashed password storage (e.g., bcrypt)
- Implement forgot/reset password flow via email (mock or real)
- **Focus:** Auth logic, sessions/JWT, secure coding

Week 3: File Upload & Storage API

Goal: Create a backend to handle file uploads.

- **File types:** Images, PDFs, Docs
- Validate file size and type
- Save metadata to the database
- **Optional:** Serve files on request
- **Focus:** File handling, middleware, storage concepts

Week 4: Role-Based Access Control System

Goal: Secure API using user roles.

- **Roles:** Admin, Editor, Viewer
- Restrict access to certain routes by role
- **Example:** Only admin can delete, editor can update, viewer can read
- **Focus:** Middleware, access logic, authorization