

Ankit Tiwari

Backend-heavy full-stack developer, I love to build things from scratch, always creating projects to learn & tackling tasks with dedication.

Selected Projects [\(View all Projects[↗]\)](#)

I started building backend projects with Python in my second year of college, focusing on real-world features inspired by production-grade systems.

Backend [\(Live Link[↗]\)](#) [\(Source[🔗]\)](#) [\(Documentation[📖]\)](#)

- User authentication and management system built with **FastAPI**. It features **JWT-based authentication**, secure **password hashing** with Argon2, OTP verification using **Redis**, and social login integration using **OAuth 2.0** (Google and GitHub), SQLAlchemy for structured database operations with **PostgreSQL**, **Pydantic** for validation, and includes a modular structure for maintainability.
- Asynchronous operations, robust error handling, and a clean architecture with dependency injection ensure high performance and reliability.
- Built using FastAPI, & PostgreSQL, Redis, also fully Dockerized.

Also, I created other backend projects using Go (Gin) and Java (Spring Boot), implementing modular services and simulating a production-grade microservices architecture.

CRUDAPI [\(Source[🔗]\)](#) [\(Documentation[📖]\)](#)

- Built with **Spring Boot**, **Spring Security** for authentication and JWT-based authorization, with Spring Data MongoDB.
- Implements RESTful APIs for user, group, task, and invitation management.
- Modular service layer for business logic, including user, group, task, notification, and email services.
- Email integration for notifications and invitations using Spring Mail.
- CI/CD supported with custom JWT filter and utility classes.

GoJWT [\(Source[🔗]\)](#) [\(Documentation[📖]\)](#)

- I was learning Golang so I created this project, A JWT-based authentication service in Go, implementing user registration, login, and token validation.
- With efficient HTTP routing, password hashing, and JWT handling.

I've built several frontend projects (Mostly using Next.js) with a strong focus on **technical functionality**. When I work on products used at scale, I look forward to investing more in refined UI and user experience.

Accounts [\(Live Link[↗]\)](#) [\(Source[🔗]\)](#) [\(Documentation[📖]\)](#)

- A full-stack authentication system built using Next.js's core strengths -> Utilized **Next.js routing**, **API routes**, and **middleware** for efficient request handling and navigation and handles login, logout, password reset, email verification, and **session management** using **cookies** and **API routes**.
- **JWT-based authentication**, and social login via OAuth 2.0. Also supports **automatic token refresh**, **nookies** for server-side and client-side cookie management, custom **RESTful APIs** for user data retrieval, updates, and authentication.

AutoNext [\(Live Link[↗]\)](#) [\(Source[🔗]\)](#) [\(Documentation[📖]\)](#)

- **VS Code extension** that detects when a Next.js project is opened and automates the setup. It runs the necessary script and launches the localhost server in the default browser automatically.

LockedIn [\(Live Link[↗]\)](#) [\(Source[🔗]\)](#) [\(Doc[📖]\)](#) – Hackathon Winner

- **Advanced task management** with flexible and challenging time tracking.
- Simplified User Interface to not waste time in managing your tasks.

CertificateGenerator [\(Live Link[↗]\)](#) [\(Source[🔗]\)](#) [\(Doc[📖]\)](#)

- Generate, verify, and share certificates Instantly with Unique ID-based verification system

[My Portfolio\(unkit.site[↗]\)](#)

[Github/anktw[↗]](#)

[Gmail/at792226@gmail.com[↗]](#)

Skills

Programming Languages

Python, C/C++, Java, TypeScript, Golang, JavaScript, OCaml

Libraries, Frameworks and Databases etc.

Databases: MySQL, PostgreSQL, MongoDB

Frameworks: FastAPI, Spring Boot, Gin, Next.js, React.js, Tailwind CSS

DevOps Tools: Docker, Kubernetes, Redis, CI/CD (Jenkins, GitHub Actions)

Systems & Tools: Microservices, REST & GraphQL APIs, Distributed Systems, Load Balancing, Caching, Concurrency, Multithreading, Kubernetes, WebSockets, CI/CD Pipelines

Programming & DSA

Leetcode:[↗] Solving selected problems daily.

Education

Kurukshetra University

Bachelor of Technology from S.I.E.T. Nilokheri in Computer Science and Engineering (2022-2026). Studied Algorithms, Data Structures, Operating Systems, Computer Architecture, OOPs, Databases, Linux and Unix Operating Systems, Compiler Design & Computer Networks etc.

Interests

Apart from backend development, I am currently learning AI and ML and also planning to build a large language model(**QSAR**) in future, which will remember history and generate parameters dynamically, and persist state across chats for personalized and adaptive responses.

- I love playing Football
- Quantitative research
- algorithmic problem solving,
- machine learning, and LLMs

Open Source & Community

The majority of my projects are open-source, and I actively contribute to both my own repositories and external ones. I'm passionate about collaborative development and believe in giving back to the community through clean, reusable, code.