



Mahmudul Hasan

Backend Developer

CONTACT

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 GitHub

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TECHNICAL SKILLS

Backend Development

- ▶ Spring Boot 3.x & Java 21/Kotlin
- ▶ RESTful API Design & Development
- ▶ Microservices Architecture
- ▶ JPA/Hibernate ORM
- ▶ SQL & NoSQL Databases
- ▶ Data Structures & Algorithms
- ▶ Thymeleaf Template Engine
- ▶ Server-side Rendering (SSR)

Databases

- ▶ PostgreSQL
- ▶ H2 Database
- ▶ JPA/Hibernate ORM

Authentication

- ▶ JWT Authentication & Authorization
- ▶ OAuth2 Integration (Google, GitHub)
- ▶ Spring Security 6
- ▶ Role-based Access Control (RBAC)
- ▶ Session Management

Tools

- ▶ Git & Version Control
- ▶ Docker & Containerization
- ▶ Gradle/Maven Build Tools
- ▶ Swagger/OpenAPI 3 Documentation
- ▶ IntelliJ IDEA
- ▶ Postman API Testing
- ▶ Linux System Administration

Professional Summary

Award-winning backend developer with 2+ years of hands-on experience in Spring Boot, RESTful API development, and microservices architecture. Achieved top rankings in national skill competitions, including 1st place at Dhaka Polytechnic Institute (2025). Proficient in Java 21, Kotlin, and modern database technologies. Demonstrated expertise in building production-ready backend systems with JWT authentication, OAuth2 integration, and comprehensive API documentation. Strong experience in clean architecture principles, containerization with Docker, and database design with PostgreSQL and H2.

Professional Experience

Full Stack Developer - Community Anti-Corruption Hub (CACHCO)

Open Source Project

Project-based

- Developed a comprehensive anti-corruption platform using Spring Boot and Thymeleaf
- Implemented server-side rendering with Thymeleaf templates for a responsive web interface
- Designed and developed RESTful APIs using Spring Boot for data management
- Created secure user authentication and authorization systems
- Utilized Kotlin for backend development with Gradle build system
- Implemented database integration using JPA/Hibernate
- Managed version control and collaborative development using Git

Community Anti-Corruption Hub (CACHCO)

Full Hospital Management Backend

Open Source Project

Project-based

- Developed comprehensive RESTful API using Spring Boot 3.x with Java 21 for hospital management system
- Implemented JWT-based authentication with OAuth2 integration (Google, GitHub) using Spring Security 6
- Designed and managed PostgreSQL database with JPA/Hibernate for patient, doctor, appointment, and insurance entities
- Built CRUD operations for patient management, doctor scheduling, department administration, and insurance processing
- Integrated Swagger/OpenAPI 3 documentation for API endpoints with comprehensive Bean Validation
- Implemented appointment scheduling system with complex patient-doctor relationship management
- Configured multi-provider OAuth2 authentication supporting email registration and social login
- Applied clean architecture with separate controller, service, repository, and DTO layers
- Implemented custom exception handling and validation with proper HTTP status codes
- Configured application profiles for development (H2) and production (PostgreSQL) environments

Hospital Management Rest API

ACHIEVEMENTS

National Skill Competitions

1st Place

Institute Level Skill Competition, Dhaka Polytechnic Institute
2025

2nd Place

Regional Level Skill Competition, Chattogram Region
2024

3rd Place

Institute Level Skill Competition, Bangladesh Sweden Polytechnic Institute
2023

Result Management System (RMS)

Open Source Project

Project-based

- Developed full-stack Spring Boot application for academic result management with session-based architecture
- Implemented multi-session student promotion system enabling seamless year-to-year data migration
- Built comprehensive exam management with duplicate prevention and session-aware mark entry
- Created responsive Thymeleaf UI with Bootstrap for intuitive user experience across all modules
- Designed JPA entities with proper relationships and constraints for data integrity
- Integrated PDF report generation and Excel import/export functionality for administrative workflows
- Implemented Spring Security with role-based access control for teachers and administrators
- Configured dual database support (H2 development, PostgreSQL production) with environment profiles
- Built RESTful APIs for bulk operations, student search, and comprehensive reporting features
- Deployed production-ready application with proper logging and error handling mechanisms

Result Management System

Key Projects

Community Anti-Corruption Hub (CACHCO)

- ▶ Developed a comprehensive platform to combat corruption through community engagement and reporting
- ▶ Built with Spring Boot, Kotlin, and Thymeleaf for server-side rendering
- ▶ Implemented secure data handling and user privacy features

View Repository

Education

Diploma in Computer Science and Technology

Dhaka Polytechnic Institute

Completed

Data Structures & Algorithms

Database Management Systems

Object-Oriented Programming

Web Development

Operating Systems

Computer Networking