AMIMUL EHSAN

Senior Software Engineer





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Software engineer with a strong background in technical and project management. Committed to producing high-quality software and fostering innovation. Experienced mentor and thinker.

SKILLS

- . Languages: Java, Spring Boot, Go, Echo, Python, C, C++, SQL.
- Databases and Cache: MySQL, Oracle, MongoDB, Redis.
- Messaging: RabbitMQ, Kafka.
- Containerization: ECS, Docker,

Kubernetes.

Search Engine: Elastic Search.

- Version Control: Git, GitHub, GitLab.
- Cloud Platforms: AWS, Azure, GCP.

PERSONAL PROJECTS

- JOSSBEE An Airbnb Clone
- **SPRING BOOT HANDS-ON MICROSERVICES**
- **OWO E-Commerce APP**
- **OWO ADMIN PANEL**
- **OWO BACKEND**
- **NEO-CYBER**

EDUCATION

- BSC in Computer Science **Bangladesh University of Engineering and Technology,** Dhaka.
- . Higher Secondary Education GOVT. Azizul Hague College, Bogura.

WORK EXPERIENCE

Senior Software Engineer - Contractual

Bkash Limited X Inument Solutions Limited

June 2024 - CURRENT

- Took over the Direct Charge project from a Chinese company, enabling PIN-free payments for customers
- Upgraded Java from 8 to 21 and dynamodb from 1.x to 2.x for better maintainability.
- Re-engineered the gateway module for the Direct Charge project, optimizing transaction flow and improving speed by 10%, enabling 5000+ additional daily transactions.
- · Added customer module for mandate management.
- Created dev side CI/CD pipeline for easier deployments.
- Introduced a lock management system to prevent fraudulent transactions

SOFTWARE DEVELOPMENT ENGINEER - 2 <u>Sayurbox</u>

MAY 2022 - MAY 2024

- · Virtual Bundle Strategy Implementation:
 - Planned, Developed and Achieved impressive 20% revenue growth and captured a 15% more market share within the initial quarter.
- Created and executed a comprehensive campaign management system, resulting in a 25% increase in campaign-generated revenue.
- Resolved a persistent memory leak issue in Java-based services, analyzed heap data, and mitigated the leaking issue. 30% memory requirement was lower down.
- Mitigated database **deadlock** issue.
- Addressed database query optimization (optimized over 50 queries) and enabled the application to use replication (Write to master and read from slave to distribute database load).
- Implemented REDIS BLOOM FILTER to optimize login performance, delivering fast and efficient user authentication, eliminating database queries, and reducing login failures
- HTTP Request Scheduler Development: Led the development of an HTTP request scheduler while managing 5 engs. throughout the project. Engineered the system to break down HTTP requests into components and then stored components in the database for future HTTP req. reconstruction.
- Solved ordering issues on black Friday sales, by implementing a red-sync distributed locking algorithm in the system with Redis. Archived 90% latency improvement via partitioning the order database.
- **Supplier Management System Creation:**
 - Planned and developed an advanced supplier management system that facilitates efficient data management and farmer communication. This led to a 10% reduction in overall farmer management costs.

SOFTWARE ENGINEER

TECHSTONE LIMITED

NOVEMBER 2021 - MAY 2022

- Redesigned the whole database. Making things much more consistent and normalized up to 4th normal form.
- Migration to AWS (ECS):
 - o Containerized services for on-premise to AWS migration and established an inner network for seamless communication among services.
 - o Written GitHub actions for Docker builds and Achieved CI/CD service availability.
- o Resulted in a 30% reduction in infrastructure costs.
- Integrated payment gateways, empowering easier payments.
- Automated SMS and automated payment system.
- Attendance Machine Protocol Implementation:
 - o Authored attendance machine protocol using web socket technology which enables seamless user enrollment via fingerprint and RFID card. Reduced
 - o organization's time for user registration and maintenance.
- **Admission Portal Development:**

Planned and revamped a user-friendly Admission Portal which has an integrated pdf form generation capability and guided a payment system for a seamless admissions process.

• Introduced a Dynamic template for PDF generation in the system.

BACKEND DEVELOPER

SHOPKPR

NOVEMBER 2019 - NOVEMBER 2021

- Lead the development of KYC-based password less verification. User registration lowered from an average of 3 min to 30 sec only.
- · Led monolith to microservice transition at the organization which led to higher scalability and higher efficiency for the backend services.
- · Migrated spring-based application to reactive spring-based application for better performance and throughput.
- Made use of Azure heavily to leverage the on-demand application. This saved 20% server budget that was coming from the local provider.