**Hasan Masoud**

**Software Engineer**

**Location:** Amman, Jordan (Middle East)

**Mobile:** +962 782377755

**Email:** [hasan.omar.masoud@gmail.com](mailto:hasan.omar.masoud@gmail.com)

**LinkedIn:** [Hasan LinkedIn](https://www.linkedin.com/in/hasan-m-054b27228/)

**GitHub:** [**Hasan GitHub**](https://github.com/Hasan-selawy)

**References:** Available Upon Request

# Summary

# Fourth-year Computer Information Systems student with a passion for software engineering. Currently developing a Spring Boot projects and proficient in multiple programming languages. Experienced in designing, developing, and testing software applications in collaborative environments.

# EDUCATION

### Yarmouk University, Irbid

* undergraduate student in Bachelor of Computer information system (CIS) - Yarmouk University, Irbid
* Competitive programming (problem-solving) for two years by training and participation in ACM contests.

# TECHNICAL SKILLS

|  |  |
| --- | --- |
| * OOP & Design Pattern | * System Design |
| * Algorithms & Data Structures | * Backend (Spring) |
| * functional programming | * SQL databass |
| * Experience with Java and Python * Git and GitHub | * Testing & debugging * Docker |

# SOFT SKILLS

|  |  |
| --- | --- |
| * Communication skills | * Commitment in deadline |
| * Team Worker | * Problem Solving |
| * Work Under Pressure | * Hard Worker |
| * Fast-Learner |  |

# LANGUAGES

* ENGLISH
* ARABIC

# Area of Interest

|  |
| --- |
| * Backend Development |
| * Distributed Systems |
| * Scalable Web Applications |
| * Software Architecture |

# Projects

**URL Shortener**

*Technologies: Java, Spring Boot, PostgreSQL, Snowflake IDs, Load Balancer*

* Designed a URL shortening service using Snowflake ID generation and Base62 conversion for short URLs.
* Deployed multiple web servers with a shared PostgreSQL database behind a load balancer for scalability and high availability.
* Ensured fault tolerance by distributing traffic across servers to maintain service continuity during failures.

**Codeforces Backend Project**

*Technologies: Java, Spring Boot, PostgreSQL, Judge0 API, RabbitMQ/Kafka*

* Developed a backend system where users submit code, which is processed by a background server using Judge0 API for code execution and result verification.
* Implemented a queue-based system for submission handling and asynchronous processing of results.
* Created REST API endpoints for code submission and result retrieval, integrated with PostgreSQL for storing user, question, and submission data.

**UNO Game Engine**

Technologies: Java, OOP, Design Patterns

* Developed a modular & extensible UNO game engine that allows developers to modify rules and add custom cards without altering core logic.
* Implemented Factory, Strategy, and Template Method design patterns for flexibility and scalability.
* Introduced Wild Card logic & turn-based hooks (beforeTurn(), afterTurn()) for easy customization.