Mock Interview Reference Guide

Role: Java Full Stack Engineer – Cloud & AI
Minimum Experience: 1.5 Years

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1. Purpose of This Document

This guide is intended to support interviewers in conducting structured and consistent mock interviews for trained candidates before their final client interviews. It reflects the expected skill outcomes after the training program and should be used as a reference for:

- Assessing technical depth and practical capability
- Evaluating problem-solving, communication, and design thinking
- Providing detailed, actionable feedback to the training team

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2. Candidate Profile Context

Candidates:

- Have a **minimum of 1.5 years of prior IT experience**
- Have completed a **6-week skill-gap training program** aligned to the role expectations
- Are expected to demonstrate hands-on ability, not just theoretical knowledge

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3. Core Skill Areas to Evaluate

A. Java & Backend (Spring Boot / Microservices)

Evaluate the candidate on:

- Core Java (OOP, Collections, Streams, Exception Handling)
- Spring Boot fundamentals (Controllers, Services, Repositories)
- REST API design & error handling
- Microservices concepts (service discovery, config, resilience)

Sample Questions:

- Explain how Spring Boot auto-configuration works.

- How would you design a REST API for a user management system?

B. Frontend (Angular / JavaScript)

Evaluate the candidate on:

- Angular components, hooks, state management
- API integration from frontend
- Basic UI/UX awareness

Sample Questions:

- Difference between useState and useEffect?
- How do you handle API errors in a Angular app?

C. Cloud & DevOps (AWS + CI/CD)

Evaluate the candidate on:

- Hosting applications on AWS (EC2, S3, RDS)
- Environment configurations
- CI/CD basics (pipelines, builds, deployments)

Sample Questions:

- How would you deploy a Spring Boot app to AWS?
- What is the role of a CI/CD pipeline?

D. Databases

Evaluate the candidate on:

- RDBMS concepts
- JDBC / ORM (JPA / Hibernate)
- Basic performance considerations

Sample Questions:

- Difference between JPA and JDBC?
- How do you optimize a slow SQL query?

E. AI / Modern Enhancements (Awareness Level)

Evaluate the candidate on:

- Understanding of AI-powered APIs
- Prompt engineering basics
- AI integration use cases

Sample Questions:

- What is prompt engineering?
- How would you use AI APIs in a Java application?

F. Live Coding Exercise (Final 10–15 Minutes)

Objective

Evaluate the candidate's ability to:

- Write clean, working Java code
- Apply OOP and collections
- Think logically and explain their approach