Skill Ask - Java, Spring Boot, Microservices

- 1. What is the Features available in Java 1.8?
- 2.what is Method References and what are the scenarios that we can use it?
- 3. What is Optional?
- 4. What is Default methods? why we use it?
- 5. What Is a Functional Interface? What Are the Rules of Defining a Functional Interface?
- 6. What Is a Stream? How Does It Differ From a Collection?
- 7. What Is the Difference Between Intermediate and Terminal Operations?
- 8. How to Asynchronously Call a Method in Java?
- 9. What is the difference between error and exception in Java?
- 10. What are the main features of Microservices?
- 11. What are the fundamental characteristics of a Microservices Design?
- 12. What are the advantages and disadvantages of Microservices?
- 13. What are the different strategies of Microservices Deployment?
- 14. What is the difference between Monolithic, SOA and Microservices Architecture?
- 15. Difference between Cohesion and Coupling?
- 16. What is Distributed Transaction?
- 17. What is a Container?
- 18. What are all the ways to secure microservices?
- 19. What is saga in MircoServices?
- 20. What is design pattern and what are all the design patters that you have used?
- 21. What are all the ways microservices can communicate each other?
- 22. What is Kafka? How do we implement exception handling and reprocess in Kafka?
- 23. How can we implement to avoid loss of messages in Kafka?
- 24. What is Zookeeper?
- 25. Enlist the various relationships of database.
- 26.Define Normalization.
- 27. Compare Non-clustered and clustered index
- 28. What restrictions can you apply when you are creating views?
- 29. Define Join and enlist its types.
- 30. Explain your previous project Archtecture and how did you implementt securities in that?

Why do we use time complexity and Space complexity in Sort and Searching algorithm?

What's the time complexity of bubble sort algorithm?

What's the difference between constrcutor overloading and functional/method overloading?

How does overloading helps in a live project example?

Difference between method overriding and method overloading?

Where do you use overrding in Spring Boot Construct?

Where do we use abstract classes?

How comfortable are you with Tree and Graph algorithms?

How does tree traversal happens?

Give me a use in project where you have worked where tree concept was helpful

Do you know how NoSQL databases work?

Difference betweek constructor injection and dependency injection

Why do we need dependency injection?

when should we use the constrcutor injection?

where do we use property.xml file in SPring Boot?

what will happen if we dont use property.yaml file? - Not aware difference between logical data model and physical data model - Not aware Different between pre increment and post increment operator When we need to use pre increment and when we need to use post increment operator?

Tech skill: Java, Spring boot, Microservices, Docker, Kubernetes

Questions:

- 1. Inheritance types? Use?
- 2. Composition vs Aggregation diff?
- 3. Multithreading -> Execution framework?
- 4. Collections -> What is Set, LinkedList?
- 5. Junit? How to write junit for any method who return boolean value?
- 6. REST api types?
- 7. What is kubernetes?
- 8. scenario how you used kubernetes?
- 9. AWS cloudwatch, loadbalancer?

Skill Ask: Java, Spring Boot, Microservices, AWS

Questions

- 1. Architecture of previous project
- 2. What is Oauth 2
- 3. Difference between AWS SQS and AWS SNS
- 4. AWS SNS: Is it possible to subscribe on the same topic but subscribe/receive different messages?
- 5. How redis is used in your projects
- 6. How to invalid redis cache if there is new data
- 7. Is Java application is good for AWS lambda? Java needs more memory
- 8. What was your role in previous company
- 9. What are the other projects that you worked on
- 10. If we store the same data on multiple databases then how to achieve consistency
- 11. What are the features of the Java 8 and which one you used in projects

12. Migration:

Application 1 stores the JSON data in relation database 1.

Cron job reads the data from database 1, process it and stores in another relational database 2 Application 2 expose the get API which reads the data from database 2

What are the issues in the above architecture and how to migrate it to cloud without stopping the existing applications

Skill Ask: Java, Spring Boot, Microservices, AWS

Questions

1. Explain the features of Java 8.

- 2. Spring boot questions like what the diff modules like JPA/Security/Actuator are and how to use.
- 3. Spring boot + hibernate project overview, structure, and security related questions.
- 4. Annotations and rest api related question like how to call, secure and configure.
- 5. Gave one scenario based on Spring boot + hibernate and asked to write a program.
- 6. Microservices architecture related questions like which principals need to follow.
- 7. AWS services related and recent implemented module related gueries.
- 8. Security, optimisation, and performance related questions from AWS perspective
- 9. Security framework like JWT and OAuth

Skill Ask - Java, Spring Boot, Microservices, AWS, MongoDB

Questions

- 1. Explain about last project, what were your contributions and role.
- 2. What areas did you code recently and did any code optimizations
- 3. Write a code to create BankCustomer class with as many attributes
- 4. What is @NoArgsConstructor and its use.
- 5. How will you implement multithreading in environment with limited memory(JMM related)
- 6. What is NoSQl database, how do you store data in mongodb

Skill Ask - Java, Spring Boot, Microservices, Kanka, MongoDB

Questions

Write a program to sort array elements using bubble sort mechanism Explain about Kafka messaging system

Explain about CICD pipelines

If we get any issue in production then what are the steps we have to follow

If we get VDI issue for 3 hours in a day then how you complete yours tasks on time

If you are maintaining team, if your team members getting strugles to deliver the issues then how you complete your tasks and yours team member tasks.

What is sonar tool, where we can see issues in sonar tool.

Where we can see logs in Dyna trace tool.

Skill Ask - Java, Spring Boot, Microservices, AWS, MongoDB

Scenario based Coding Questions

Customer walked into bank, please write all classes and methods required to cater to customer

Write code to reverse the String, find dept wise max salary using Stream.

Question on sum of elements -> input would be array of elements and sumvalue of any 2 or 3 numbers , need to find out "sum of what all the values of that array "are is equal to given "sum values".

Explain LinkedList and how LinkedList is implemented.

Other interview questions

Mongo DB query optimization for performance

Mongo DB advantages

Explain Mongo DB collections and documents

Challenges faced during JDK 8 to JDK 17 migration

Challenges faced during Springboot 3 migration

How to handle exception in Springboot

How to handle overloaded microservice

How to handle composite keys

How to tune MongoDB query which is taking time in execution

Time complexity of the given problem and optimization

Questions on what version of java used and features.

Project architecture of current project

Questions of current project architecture based on explanation.

Questions on kafka implementation in the current project

In what cases immutable objects will not be good?

Completeable feature - Advantages of completeable feature

What will you use to push data to UI from backend

Resiliency patterns - have u used in microservices?