**Interview Question**

**Java**

1. HashMap and its internal working
2. SOLID principles
3. What is aggregation and composition in Java?
4. What are checked and unchecked exceptions is java?
5. What are immutable classes?
6. What is thread pool and why it is used?
7. In how many ways can we create thread? Which way is better and why?
8. There is 1 class with synchronous method m1. Two threads are there, and two objects are created. Will these threads run parallelly or sequentially?
9. What are features of Java 8?
10. What are functional interfaces?
11. What are streams in java 8?
12. Can a functional interface extend another functional interface?

**Spring/Spring Boot**

1. How to handle exceptions in Springboot and how globalExceptionHandler work?

Ans: GlobalExceptionHandler. <https://www.youtube.com/watch?v=JhL4aI454fI>

1. What is correlation ID? How do you fetch and log it?

Ans: correlation ID, serves the purpose of identifying the various requests performed at the various services to serve one final client request. A common mechanism to provide that ID in the world of web applications is through an http header.

<https://medium.com/@d.lopez.j/spring-boot-setting-a-unique-id-per-request-dd648efef2b>

1. Difference between @RequestParam and @PathVariable.

Ans: <http://localhost:8080/shop/order/1001/receipts?date=12-05-2017>

@RequestParam is used to retrieve query parameter date and @PathVariable to extract orderId from URL

1. What are the annotations which you used in springboot?
2. What are different bean scopes?
3. What is @conditional annotation used for?
4. Explain Spring MVC architecture.
5. What is IOC and dependency injection? What is the advantage of DI?

**Rest Api**

1. How do you make async rest calls?

Ans: @EnableAsync in main SpringBootConfigurationClass and @Async in service method performing thread’s task.The @EnableAsync annotation will look for methods marked with @Async annotation and run them in background thread pools.

1. What are synchronous and asynchronous calls?
2. How do you make synchronous REST calls?

**Junits/Others**

1. When do you create a mock?
2. How will you write test cases static method?
3. What is microservice architecture?
4. What is TDD (Test Driven Drive)?

**Coding**

1. Given an array of integers find the first non-repeating element with O(n) complexity.
2. Given a class of Products with 3 parameters – product id, product category and product rate. Write a java 8 program to get product id of the product with category as ‘Books’ having lowest price.