FULL STACK WEB DEVELOPER

CORE JAVA

1.   *What is Java and Characteristics of Java?*
2.   *What is class?*
3.   *What is method?*
4.   *How to object created and write is object?*
5.   *JDK ,JRE and JVM. Is java call by value or call by reference?*
6.   *What is type types of memory in java?*
7.   *What is static keyword and difference between static and non static?*
8.   *Difference between return and return value?*
9.   *How many types of variables in Java?*
10. *What is var type in java?*
11. *Why main method is static?*
12. *Garbage collection in java and neet of garbage collection?*
13. *Java pass by value or pass by reference?*
14. *Primitive Datatype vs object Data type.*
15. *What is static, non static and local variable?*
16. *What is Scanner class and its used?*
17. *What is for loop?*
18. *Difference between while loop and switch statement?*
19. *Difference between continuous and break statement?*
20. *Explain main method in Java?*
21. *What is System.Out>println()? Explain*
22. *What is Static block in Java?*
23. *What is Non static block in java?*
24. *Why Java is Platform Independent Language?*
25. *Why Java is not pure object oriented languge?*
26. *Why Pointers are not used in Java?*
27. *What is Ternary operator with example?*
28. *What are unary operators and its Example?*
29. *What are Wrapper class in Java?*
30. *What is Difference between a local variable and an instance variable?*
31. *What is an Infinite loop in Java? Explain with an Example?*
32. *Difference between static and non static methods in java?*
33. *What is use of static?*
34. *What is Jit Compiler in Java?*

Oops concepts

1.   *What are constructors in Java?*
2.   *What is Polymorphism?*
3.   *What is runtime polymorphism or dynamic method dispatch?*
4.   *RUNTIME AND COMPILE TIME POLYMORPHISM*
5.   *WRITE A PROGRAM TO DISPLAY RUNTIME TIME AND COMPILE TIME POLYMORPHISM*
6.   *EXPLAIN RUNTIME POLYMORPHISM WITH A PROGRAM*
7.   *What is abstraction in Java?*
8.   *What do you mean by an interface in Java?*

9. *What is the difference between abstract classes and interfaces?*

10. *What is inheritance in Java?*

11. *What are the different types of inheritance in Java?*

12. *What is method overloading and method overriding?*

13. *Can you override a private or static method in Java?*

14. *What is multiple inheritance? Is it supported by Java?*

15. *What is encapsulation in Java?*

16. *What is a marker interface?*

17. *What is a constructor overloading in Java?*

18. *Can you call a constructor of a class inside another constructor?*

19. *What are access modifiers in Java*

20. *What is Object Oriented Programming?*

21. *What are the main concepts of OOPs in Java?*

22. *What is constructor chaining in Java.?*

23. *SIB v/s IIB?*

24. *Java 8 features.*

25. *Functional interface and Lambda's expression. How these two are related to each other.*

26. *What is Lambdas Expression?*

27. *What is optional class in Java 8?*

28. *What is this keyword?*

29. *. Can we change the visibility of method while overriding*

30. *What is Array? And its type*

31. *What is Serialization with example?*

32. *What is Deserialization with example?*

33. *What is transient keyword?*

34. *What is volatile keyword? .*

35. *Can we overload static method in java?*

36. *Can we override static method in java?*

37. *What is super most class in java?*

38. *What is data hiding and how to achieve?*

39. *What is Super keyword in java?*

40. *Difference between this and Super keyword?*

41. *What is Sam Interface?*

1. *Exception handles in java.*
2. *Throw and Throws keyword.*
3. *Different between Throw, Throws and Throwable.*
4. *Difference between exception and Error.*
5. *How to create custom exception? Write code.*
6. *Can you write multi catch block?*
7. *Before java 8 how null pointer exceptions are handled?*
8. *When null pointer exception occurs?*
9. *Explain collection hierarchy?*
10. *Explain checked and unchecked exception?*
11. *Parent class of exception?*
12. *Can we write try without catch block?*
13. *What should be the hierarchy if we write multi catch block?*
14. *Exception propagation?*
15. *Share some example of check and unchecked exception?*

Threads

What is thread?

Thread life cycle

How we create thread in Java?

What is thread pool?

What is difference between thread and process?

What is thread join?

What is multithreading?

What is thread synchronization?

Difference between wait and sleep?

What is the difference between wait(),notify() and notifyAll()?

How to Thread created

How to Thread work in the background of java

Thread Scheduler

•First level catch and second level catch

1. *What is singleton class in Java and how can we make a class singleton?*
2. *What do you mean by aggregation.?*
3. *. What is composition in Java?*
4. *. What is an object in Java and how is it created?*
5. *. What is a classloader in Java & Types?*
6. *Replace Vs Replace All vs ReplaceFirst*
7. *What is SOLID principle with advantages?*
8. *. What is anonymous class?*
9. *What is type casting and its type explain each?*
10. *What is cloning?*
11. *What are implicit object?*
12. *What is HTML and feature of HTML5?*
13. *What are Http methods explain each?*
14. *Identifier in java*
15. *What is idempotent?*
16. *What is boxing and unboxing?*

String

1. *Difference between .equals() &==.?*
2. *STRING POOL CONCEPTs*
3. *What is immutable class?*
4. *Give example in java and how can create it.*
5. *What is mutable? How to created?*
6. *Difference between mutable and Immutable class.*
7. *Why Java Strings are immutable in nature? WHAT code inside used.?*
8. *Difference between String, String Buffer and String Builder.*
9. *Difference logical question on String(.equals() and ==)*
10. *Why we use immutable class over mutable class.*
11. *How is the creation of a String using new() difference from that of a Literal?*
12. *INBUILD FUNCTION*
13. *How to find non repeating character from a string.*
14. *What is string tokenizer?*

   Program Question
   1. *WAP to Reverse the String?*
   2. *Palindrome String*
   3. *Find the Length of given String.*
   4. *Occurrence of character in a given String.*
   5. *Remove Duplicate characters from String.*

6. *Give a String in Alpha Numeric Chart, Filter out only Alphabets "A".*
7. *"RAM SHYAM" Remove space and print.*
8. *"RAM SHYAM" Print Both words in Different line.*

Collection

1. *Difference btw Collection and Collections?*
2. *. What is collection?*
3. *Difference between List and Map.*
4. *Difference between List and Set*
5. *Difference between Vector and Queue.*
6. *Collections full hierarchy?*
7. *Iterators and types?*
8. *List iterator?*
9. *Difference between Array and Arraylist.*
10. *Difference between Hash Set and Linked Hash Set.*
11. *Hashmap and Hashtable.Which one is used for better performance.*
12. *Program to retrieve 2nd element of the list from the bucket of Hashtable(Collision).*
13. *Difference between Hashmap, Hashtable and HashSet.*
14. *Program to store and retrieve data from the Hashtable.*
15. *Internal working of Hashmap.*
16. *What is Hashcode and Hashing technique.*
17. *Difference between Arraylist & Vector*
18. *Hash Map Vs Hash Set Vs Hashing.*
19. *Map v/s FlatMap?*
20. *. Internal Algorithm working of Hashmap?*
21. *How hash table works internally?*
22. *. What is the difference between an array and an array list?*
23. *If we don't override hashcode() method then what will happen.*
24. *Explain List, Set and Queue?*
25. *Difference between ArrayList vs LinkedList and Vector?*
26. *Explain HashSet and HashMap?.*
27. *Internal working of HashMap?*
28. *What is Collision and how to overcome this?*
29. *Difference between synchronized hashmap and concurrent hashmap?*
30. *Difference between comparable and comparator?*
31. *Where to use comparable and where use comparator and why*
32. *Difference between Enumeration and Iterator?*
33. *Difference between Iterator and List Iterator?*
34. *What is Fail fast and fail safe?*
35. *•Iterate value and key one by one in hashmap*
36. *How to remove duplicate from and Array List using stream api?*
37. *WHAT IS LOCK STRIPPING(COLLECTION CONCEPT IN HASHMAP RELATED TO THREAD)*
38. *HOW CAN YOU VALIDATE ANY DATA LIKE NAME MOBILE (REGULAR EXPRESSION CONCEPT)*
39. *EXPLAIN DOUBLY LINKEDLIST STRUCTURE*

40. *What will happen if you don't override hashCode() method and equals() method?*
41. *How hash table works internally?*
42. *. What is Collison?*
43. *What is Iterator?*
44. *How to iterate list?*
45. *How to iterate map?*
46. *What is Fail Safe Iterator and Fail Fast Iterator?*
47. *How to remove duplicate entries from an Array List using stream?*
48. *How to add only unique records in Array List?*
49. *. How to sort a collection?*
50. *How many ways to sort a collection?*
51. *How to add a collection in another collection particular index?*
52. *How to compare two collection?*

PROGRAMMING QUESTIONS

1.Sorting of Array. Sort array using only one for loop

2. Palindrome of string, integer.

3. Armstrong Number

4. Sort an ArrayList.

5. Find second largest value in array without using any sorting algorithm and with only one for loop

6. Write a code to check either a number is Prime or not.

7. Swap two numbers without third variable.

8. From an array list print only unique records using stream api.

9. Find whether an array is subset of another array

10 Subarray coding questons

11. How to Remove Duplicate Elements an arrayList

12. FIND 2ND LARGEST NO FROM AN INTEGER ARRAY

13. FIBONACCI SERIES

ADVANCE JAVA

. JDBC –

1. *What database you used?*
2. *Database view*
3. *About RDBMS*
4. *Use of index in database.*
5. *How you will insert value in database.*
6. *What are the steps to connect to a database in java?*
7. *JDBC code to connected to the database?*
8. *What is the difference between execute, executeQuery, executeUpdate?*
9. *Give me partically example where finally block can be used?*
10. *What is CRUD operation?*

Servlets

1. What is a servlet?

2. What are the differences between Get and Post methods?

3. What is INTER SERVLET COMMUNICATION.?

4. What is session variables.

5. What is Request Dispatcher?

6. What is the life-cycle of a servlet?

7. How does cookies work in Servlets?

8. What are the different methods of session management in servlets?

JSP –

1.What is jsp. JSP lifecycle?

2. What are the JSP implicit objects?

3. What are the different tags in JSTL?

4. Explain the jspDestroy() method.

Spring

Difference between spring and SpringBoot?

. What is Spring Boot?

2. What are the important Goals of Spring Boot?

What are the important Features of Spring Boot?

Compare Spring Boot vs Spring MVC?

37. What is Spring?

What is Maven?

What are Spring IOC and Its type?

What is spring IOC Container?

What is spring security?

What are JPA annotations used in your project explain each ?

What are spring boot annotation used in your project explain each?

What is Dependency injection?

Types of Autowired and explain each?

Difference between @Controller and @RestController?

Difference between @Autowiring and @Bean?

What is @Qualifier and @Services and @Component and @Value and @Query ?

Explain @SpringBootApplication?

Difference between BeanFactory and ApplicationContext?

What is Auto Configuration?

Which annotation starts the SpringBoot Project.

How can we find more information about Auto Configuration?

What is an embedded server? Why is it important?

What is the default embedded server with Spring Boot?

What are the other embedded servers supported by Spring Boot?

What is Spring Initializer?

What is Unit testing?

What is Junit?

38. Tell some of the important annotations ?(ex.@Auitowired,@Qualifier)

39. Explain Bean in Spring and List the different Scopes of Spring bean.

40. Write a program for a thread safe singleton class?

41. What is autowiring in Spring?

What are the autowiring modes?(modes ex. byName,byType).

Spring MVC?

Session management in spring boot?

How to create session object?

Difference between session and sessionFactory?

42. How to handle exceptions in Spring MVC Framework?(@ExceptionHandler).

43. Spring v/s SpringBoot?

Explain Session Tracking System

Explain types of spring bean scope?

What is Bean Life Cycle and what is Spring IOC.

44. Which one will you prefer among spring and springboot to create a program from scratch?

Status codes of postman?

Different errors codeslike 404,400,500,200?

What are response codes of POSTMAN? 200/201/204/400/401/403/404/405/500/503

Lazy loading v/s Eager loading

Session, session factory?

Reduce() method?

Intermediate and Terminal operations in stream

What are Starter Projects? Can you give examples of important starter projects?

What is spring boot starter?

Spring Actuators?

Spring Vs Spring Boot (Advantages, Disadvantages, Which one is better)

Spring Initializer.

What is application.properties?

Advantages of Spring MVC over other framework.

H. Declaration of different layer in Spring Boot.

. What are some of the important things that can customized in application.properties?

What is a profile?

How do you define beans for a specific profile?

How do you create application configuration for a specific profile?

What is Actuator in spring boot?

Spring context, spring scope

•Exception handling in spring

SPRING SECURITY-HOW YOU HAVE ENABLED

SPRING BOOT AND HIBERNATE ANNUTATIONS COVER ALL

GO THROUGH ANT MATCHER CONCEPT OF SPRING SECURITY ALONG WITH AUTHORIZATION AND AUTHENTICATION

. How do you monitor web services using Spring Boot Actuator?

How do you find more information about your application envrionment using Spring Boot?

What is Starter tag in spring boot?

I. How to connect Spring Boot application to database using JDBC.

k. What is spring starter parent dependency tag.

L. 6.How you exposing data and how do you consuming it.

Beanfactory vs Applicationcontext .

How to read application. Properties in any class?

How to encrypt and decrypt password in spring boot

HIBERNATE

. What is ORM ?

Hibernate Vs JDBC.

What is Session in hibernate?

What is persistance ? What is persistent in Hibernate?

Session and SessionFactory in hibernate.

What are the key components are in Hibernate?

What is transaction in Hibernate?

3.which pdf integration jar used in ur project

4.What are some of the important interfaces of Hibernate framework

Difference between get and load method of hibernate?

. What is caching and hibernate and explain 1st level and 2nd level caching?

What are Core interface of hibernate?

Types of hibernate mapping explain each?

How many types of association mapping are there in Hibernate?

Types of inheritance in hibernate?

. Explain Bean in Spring and List the different Scopes of Spring bean.

106. Write a program for a thread safe singleton class?

107. What is autowiring in Spring?

What are the autowiring modes?

108. How to handle exceptions in Spring MVC Framework?(@ExceptionHandler).

109. Which one will you prefer among spring and springboot to create a program from scratch?

. What is Jenkins?

Lazy Loading in hibernate.

Caching in hibernate

45. What is Hibernate Framework?

. How to create immutable class in hibernate.

Hibernate Architecture.

OC Container.

get() Vs load().

All Hibernate annotations.

What is HQL.

M. Lazy Loding vs Eager Loading.

States of Object in Hibernate.

First Level Cache Vs Second Level Cache.

47. What are the differences between get and load methods?

48. What are the advantages of Hibernate over JDBC?

49. What is JPA can you directly implement it?

•How to configure hibernate.cfg.xml

JPAs

What is JPA?

What is Hibernate JPA?

Difference between JPA and Hibernate?

What is JPA can you directly implement it?

What are the different tags in JSTL?

JPA annotations?

WEBSERVICES&MICROSERVICES

1. *. Define webservice and microservices briefly?*
2. *What methods were you using in REST?*
3. *Xml v/s JSON?*
4. *Microservices v/s Monolith architecture ?*
5. *What is Web Services and its type?*
6. *. How to expose and consume web services?*
7. *Difference between SOAP and RESTFull web services?*
8. *Difference between micro services and monolithic applications?*

STREAM API

1. *Stream API with example?*
2. *What is POSTMAN?*
3. *REST and SOAP API's.*
4. *STREAM API CONCEPT*
5. *PROGRAMS ON STREAM API USING IN BUILT FUNCTION (GO THROUGH CONFIGURATING OF STREAM USING MAP AND FILTER)*
   (GO THROUGH PROCESSING OF STREAM USING Function max(),min(),sort(),compare to(),to array()
)HOW CONNECTION IS ESTABLISHED BETWEEN SMALL MODULES
   WHICH API HAVE YOU USED

OTHER QUESTIONS

1. Is it possible to change default port number.

2. How to integrate email API in project.

3. Which all API'S you used in your project.

4. Why would you prefer STS on other applications.

5. (Project explanation)

PROJECT QUESTION

1. Explain briefly your project. START WITH TECHNICAL FLOW AND THEN PROCEED WITH PROJECT STRUCTURE)

2. How many tables are present in your project.

3. Which type of collection you use in your project.

4. What was your day to day work in your company.

5. oops concepts and where to implement in your project

6. TELL ME THE STARTER DEPENDENCIES OF YOUR PROJECT

SQL

AGILE