

10 Interview Questions to Become a Full Stack Developer



Question 1: Which architectural designs do you use to design applications?

Answer:

- Model View Controller
- Master-Slave Pattern
- Layered Pattern
- Model View Presenter
- Monolithic Architecture
- Event-Driven Architecture Pattern

Question 2: How can you enhance a website's efficiency?

Answer:

Below are some of the solutions, which will help to enhance the site's speed.

- Reducing DNS lookup
- Avoiding URL redirects
- Avoiding duplicate codes
- Avoiding unnecessary images
- Leveraging browser caching

Question 3: What is the SOLID principle in Java?

Answer:

The SOLID principle refers to:

- Single Responsibility Principle (SRP)
- Open-Closed Principle (OCP)
- Liskov Substitution Principle (LSP)
- Interface Segregation Principle (ISP)
- Dependency Inversion Principle (DIP)

Question 4: What is Multi-threading?

Answer:

In general, multi-threading refers to a program's ability to be managed by numerous users at the same time or to manage various requests by the same user. Multi-threading is achieved by running numerous processes at the same time, as long as the operating system allows it.

Question 5: Explain Inversion of Control.

Answer:

Inversion of Control is a software engineering approach that involves handing over control of objects or portions of a program to a container or framework. Programmers use it while applying object-oriented programming.

Question 6: What is referential transparency in functional programming?

Answer:

Referential transparency is a property of a program in which any two expressions in the program with the same value can be swapped for one another anywhere in the program without changing the program's result.

It's a programming language that's utilized in functional programming. Take, for example, the following code snippet:

1. `count1 = (fun(x) + y) * (fun(x) - z);`
2. `temp = fun(a);`
3. `count2 = temp + y * temp - z;`

If the value of `fun(x)` is not reflected, the variables `count1` and `count2` will be equal. The referential transparency is broken if the variable `count1` is not equal to the variable `count2`.

Question 7: What do you mean by promise, also explain its states?

Answer:

An asynchronous function can return a promise, which is an object that can be returned synchronously. It could be possible in the below states

- **Fulfilled:** A promise will be in the fulfilled state if it has invoked the `onFulfilled()` method.
- **Rejected:** A promise will be in the rejected state if it calls the `onRejected()` method.
- **Pending:** A promise is in pendency status if it has not yet been fulfilled or rejected.

Question 8: What are continuous integration and continuous delivery (CI/CD)?

Answer:

CI/CD is a best practice for developing apps with frequent and quick code changes. It is sometimes referred to as the CI/CD pipeline. It is a DevOps and agile methodology that is frequently utilized.

Continuous Integration:

Continuous integration is a coding philosophy or deployment strategy in which developers integrate their code numerous times per day in a common repository. Because modern applications necessitate the development of code across multiple platforms. Continuous integration aims to create an automated process for building, testing, and packaging an application.

Continuous Delivery:

Where CI ends, continuous delivery begins. It distributes the application to the infrastructure of your choice automatically. If any modifications are made to the code, CD guarantees that it is delivered automatically.

Question 9: Explain Blackboard pattern.

Answer:

This approach is useful for the problem which does not have any specific strategy solutions.

There 3 main components of blackboard pattern.

Blackboard: It is a structured global memory, which contains objects from the solution space.

Knowledge Source: Modules that are specialized and have their own representation.

Control Components: Modules are selected, configured, and executed by the control component.

Question 10: What are the different methods of session management in Servlet?

Answer:

A session is a conversational state between the client and the server, and it might include several requests and responses.

As a result, both HTTP and web servers are stateless, and the only way to keep a session alive is for some unique session information (session-id) to be transmitted between server and client in each request and response.

To maintain the session, you can use the following methods.

- User Authentication
- HTML Hidden Field
- Cookies
- URL Rewriting
- Session Management API

We hope the above interview question may help you to ace your full-stack developer interview. If you have any other questions, please feel free to email us at sales@spaceotechnologies.com. Our team will be glad to help you.