

## **Part-1**

### **1.What is client-side and server-side in web development, and what is the main difference between the two?**

**Answer:** The main difference between client-side and server-side is, for client-side the program runs on the user's machine. In contrast, server-side is basically when the program runs on a server computer at a remote location which is connected to the client's computer via the internet.

### **2.What is an HTTP request and what are the different types of HTTP requests?**

**Answer:** HTTP is a request message sent from the client-side to communicate with the server requesting an action or data. There are many types of HTTP requests, a few of them are GET, POST, DELETE, PUT, etc.

### **3.What is JSON and what is it commonly used for in web development?**

**Answer:** JSON is a data format mainly based on JavaScript, also adopted by other languages, which stores data in a key and value format. It's commonly used to get any data from the server. For example, the request data or the query is sent to the server in JSON format. Also, the server sends back the data in the same format.

### **4.What is a middleware in web development, and give an example of how it can be used.**

**Answer:** Middleware is an essential layer in the request and response cycle which stand in the middle of these two. It acts as a bridge between request and response and actively monitor what to exchange and what not to. For example, middleware used in security, user may request for a protected data which middleware can prevent.

### **5.What is a controller in web development, and what is its role in the MVC architecture?**

**Answer:** In MVC architecture controller is a component or module which handles a specific part of the application. Which stand in between model and view component, for a specific request it process all the logic using model component and send It to the view component to render it.