**Jaydeep : MODULE 2**

**1. What is role of client?**

**Ans :**

**The Client Profile is designed to run client applications and to enable the fastest possible deployment for Windows Presentation Foundation (WPF) and Windows Forms technology.**

**2. What is role of server?**

**Ans :**

**The Role of Server is To Share Data as well as To share Resources And Distribute Work.**

**A server role is a set of software programs that, when they are installed and properly configured, lets a computer perform a specific function for multiple users or other computers within a network.**

**3. What is client server architecture?**

**Ans :**

**client-server architecture, architecture of a computer network in which many clients request and receive service from a centralized server . Client computers provide an interface to allow a computer user to request services of the server and to display the results the server returns.**

**4. What is role of compiler?**

**Ans :**

**In computing , a compiler is a computer program that translates computer code written in one programming language into another language .**

**The name "compiler" is primarily used for programs that translate source code from a high-level programming language to a lower level language (machine code) to create an executable program.**

**5. What is difference between Compiler and Interpreter?**

**Ans :**

|  |  |
| --- | --- |
| **Compiler** | **Interpreter** |
| **Scans the entire program and translates it as a whole into machine code.** | **Translates program one statement at a time.** |
| **Compilers usually take a large amount of time to analyze the source code. However, the overall execution time is comparatively faster than interpreters.** | **Interpreters usually take less amount of time to analyze the source code. However, the overall execution time is comparatively slower than compilers.** |
| **Generates Object Code which further requires linking, hence requires more memory.** | **No Object Code is generated, hence are memory efficient.** |
| **Programming languages like C, C++, Java use compilers.** | **Programming languages like JavaScript, Python, Ruby use interpreters.** |

**6.What is MVC?**

**Ans :**

**The Model-View-Controller (MVC) is an architectural pattern that separates an application into three main logical components: the model, the view, and the controller. Each of these components are built to handle specific development aspects of an application. MVC is one of the most frequently used industry-standard web development framework to create scalable and extensible projects.**

**The Model-View-Controller (MVC) is a WEB Application Framework Developed By Microsoft that Implements the MVC Pattern.**

**7. What is communication protocol and what is difference between HTTP and HTTPS?**

**Ans :**

**HTTPS is HTTP with encryption. The difference between the two protocols is that HTTPS uses TLS (SSL) to encrypt normal HTTP requests and responses. As a result, HTTPS is far more secure than HTTP. A website that uses HTTP has HTTP:// in its URL, while a website that uses HTTPS has HTTPS://.**

**8. What is .net?**

**Ans :**

**NET is a software development framework and ecosystem designed and supported by Microsoft to allow for easy desktop and web application engineering.**

**9. What is CLR?**

**Ans :**

**COMMON LANGUAGE RUNTIME(CLR) is the Virtual Machine Component OF Microsoft.NET Framework , Manages the Execution Of .NET Programs.**

**10. What is difference between CLS and CTS?**

**Ans :**

|  |  |
| --- | --- |
| **CLS** | **CTS** |
| **CLS stands for Common Language Specification.** | **CTS stands for Common Type System.** |
| **It is meant for language interoperability i.e program written in one language can communicate with any other language, having full advantages of all object oriented concepts such as Polymorphism, Inheritance etc.** | **It is meant for declaring different data types, how they are managed in runtime with cross language integration, type safety with great performance execution.** |

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**13. What do you mean by design pattern?**

**Ans :**

**In software development, a pattern (or design pattern) is a written document that describes a general solution to a design problem that recurs repeatedly in many projects. Software designers adapt the pattern solution to their specific project.**

**14. What is client server architecture?**

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**15. What is difference between Asp.Net and MVC.Net?**

**Ans :**

**The primary difference between ASP.NET MVC and ASP.NET Core is their cross-platform approach. ASP.NET Core can be used on Windows, Mac, or Linux, whereas ASP.NET MVC can only be used for applications on Windows.**