**MODULE 4**

**1. What is model?**

**🡺** The Model is the part of MVC which implements the domain logic. In simple terms, this logic is used to handle the data passed between the database and the user interface (UI).

**2. What is routing in MVC?**

**🡺** ASP.NET MVC routing is a pattern matching system that is responsible for mapping incoming browser requests to specified MVC controller actions.

**3. What is the difference between Temp data, View, and View Bag?**

**🡺** ViewData is a dictionary object while ViewBag is a dynamic property. ViewData being a dictionary object is accessible using strings as keys and also requires typecasting for complex types. On the other hand, ViewBag doesn’t have typecasting and null checks.

🡺TempData is also a dictionary object that stays for the time of an HTTP Request. So, Tempdata can be used to maintain data between redirects i.e from one controller to the other controller.

**4. What is difference between MVC and Web Forms?**

**🡺** MVC focuses on separation of concern, i.e., there is no fixed code behind page for every view. A view can be called from multiple action. Web form based on functions and page behind code, i.e., there is code behind page for each view. You have to write code in that class related to this view only.

**5. What is session? What is the default time for session?**

**🡺** Specifies the number of minutes that a session can remain idle before the server terminates it automatically. The default is 20 minutes. Session.

**6. What is Partial View in MVC? With example?**

**🡺** Partial view in ASP.NET MVC is special view which renders a portion of view content. It is just like a user control of a web form application. Partial can be reusable in multiple views. It helps us to reduce code duplication.

**7. What is the difference between View and Partial View?**

**🡺** Views are the general result of a page that results in a display. It's the highest level container except the masterpage. While a partial view is for a small piece of content that may be reused on different pages, or multiple times in a page.

**8. Explain the concept of MVC Scaffolding?**

**🡺** Scaffolding is a technique used by many MVC frameworks like ASP.NET MVC, Ruby on Rails, Cake PHP and Node. JS etc., to generate code for basic CRUD (create, read, update, and delete) operations against your database effectively. Further you can edit or customize this auto generated code according to your need.

**9. How to change time of session?**

**🡺** Select Default Web Site > Properties > Home Directory > Application Settings > Configuration > Options. 2. Enable the session state time-out and set the Session timeout for 60 minutes.

**10. What is query string? What are disadvantages of query string?**

**🡺** A Query String is information sent to the server appended to the end of a page URL which means that Query String is way to transfer information from one page to another through the URL.

Disadvantages:

1. There is a limit to URL length of 255 characters.

2. Query String data is directly visible to user thus leading to security problems

**11. What is cookie? What are limitations for cookie?**

**🡺** The cookies can not store complex information as they are limited to simple string information, Many limitations exist on the size of the cookie text, The individual cookie can contain a very limited amount of information (not more than 4 kb).

**13. Explain MVC application life cycle.**

**🡺** Application life cycle generally means the time at which the process of the application begins to run. To denote the MVC application life cycle, the start and the end of the application are marked. The request life cycle The request life cycle means the series of events that happen whenever the application handles an HTTP request.

**14. List out different return types of a controller action method**

**🡺** The types of controller action methods -

1. ViewResult – It is used to renders a specified view to the response stream

2. PartialViewResult – It is used to renders a specified partial view to the response stream

3. EmptyResult - It is used to returns an empty response

4. RedirectResult - It is used to performs an HTTP redirection to a specified URL

5. RedirectToRouteResult - It is used to performs an HTTP redirection to a URL that is determined by the routing engine, based on given route data

6. JsonResult - It is used to serializes a given object to JSON format

7. JavaScriptResult - It is used to returns a piece of JavaScript code that can be executed on the client

8. ContentResult - Writes content to the response stream without requiring a view

9. FileContentResult - It is used to returns a file to the client

10. FileStreamResult - It is used to returns a file to the client, which is provided by a Stream

11. FilePathResult - It is used to returns a file to the client

**15. What are filters in MVC?**

**🡺** Filters are used to execute custom logic before or after executing the action method.

**16. What are HTML helpers in MVC?**

**🡺** An HTML Helper in MVC is an extension method of the HTML Helper class which is used to generate HTML content in a view.

**17. Differences between Razor and ASPX View Engine in MVC?**

**🡺** ASPX View Engine is the default view engine for the ASP.NET MVC that comes with ASP.NET MVC from the start (MVC 1.0) but Razor View Engine is introduced with MVC3 or latter version. In Razor View Engine we use Layouts and in ASPX View Engine we use masterPages. In Razor View Engine we use PartialPage and in ASPX View Engine we use WebUserControls.