

Programming Microsoft ASP.NET MVC

Chapter 01: ASP.NET MVC controllers

12 April 2019

Q1. In ASP.NET MVC, what does each request from the client result in on the server?

- A. Execution of a method of a HTTP handler component
- B. Execution of an action which is a method on a specific controller class
- C. Execution of a method on a model class
- D. Execution a view template by the view engine.

Answer: B

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Q2. What is a route?

- A. a mechanism that makes ordinary URLs into search engine optimization (SEO)-friendly URLs
- B. a pattern-matching string that represents the absolute path of a URL
- C. a HTTP handler and binding it to a URL
- D. a HTTP module processes incoming requests by looking at the URLs and dispatching them to the most appropriate executor

Answer: B

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Q3. Which one is the default route for an ASP.NET MVC application?

- A. {controller}/{action}
- B. {controller}/{action}/*
- C. {controller}/{action}/{id}
- D. {controller}/{action}/{id}

Answer: C

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Q4. Where in a ASP.NET MVC application you register routes?

- A. In the Load event of start up view
- B. In the Application_Start event in the global.asax file
- C. In the Application_BeginRequest event in the global.asax file
- D. In the Session_Start event in the global.asax file

Answer: B

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Q5. Which collection do you add a route a route to?

- A. Routes
- B. RouteTable
- C. RouteTable.Routes
- D. RouteConfig

Answer: C

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Q6. Which method of the RouteTable.Routes collection do you typically use to register a supported route?

-
- A. Add
 - B. Register
 - C. Map
 - D. **MapRoute**

Answer: D

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Q7. Which one is valid route registration

- A. `RouteTable.MapRoute("Default", "{controller}/{action}/{id}",
new {
controller = "Home",
action = "Index",
id = UrlParameter.Optional
});`
- B. `RouteTable.Routes.MapRoute("Default", "{controller}/{action}/{id}",
new {
controller = "Home",
action = "Index",
id = UrlParameter.Optional
});`
- C. `RouteTable.Routes.MapRoute("{controller}/{action}/{id}",
new {
controller = "Home",
action = "Index",
id = UrlParameter.Optional
});`
- D. `RouteTable.Routes.MapRoute("{controller}/{action}/{id}");`

Answer: B

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Q8. Which route apply constraint to url parameter to be numeric and must contain two digits?

- A. `RouteTable.Routes.MapRoute("ProductInfo", "{controller}/{action}/{id}",new { controller = "Product",action = "Index", id=@"\d{2}"});`
- B. `RouteTable.Routes.MapRoute("ProductInfo", "{controller}/{action}/{id}", new{id=@"\d{2}"},
new { controller = "Product",action = "Index" });`
- C. `RouteTable.Routes.MapRoute("ProductInfo", "{controller}/{action}/{id}", new { controller = "Product",action = "Index" }, new{id=@"\d{2}"});`
- D. `RouteTable.Routes.MapRoute("ProductInfo", "{controller}/{action}/{id}", new{id=@"\d{2}"});`

Answer: C

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Q9. Which object processes any requests that match a given route?

- A. Controller
- B. RouteTable
- C. **RouteHandler object that implements the IRouteHandler interface**
- D. View

Answer: C

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Q10. How does ASP.NET MVC behave if a user request URL can be mapped to a file that physically exists on the server?

- A. The ASP.NET MVC routing system delivers the file as static resource without processing
- B. The ASP.NET MVC routing system ignores the request even if the request matches a route
- C. The ASP.NET MVC routing system returns 404 status code response
- D. The ASP.NET MVC routing system rejects the request with unauthorized status code

Answer: B

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Q11. How to force routing system to handle requests for physical files?

- A. By setting the HandleRoute property of the RouteCollection object to true
- B. By setting the RouteExistingFiles property of the RouteCollection object to true
- C. By setting the RouteExistingFiles property of the RouteCollection object to false
- D. By creating a custom HttpHandler

Answer: B

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Q12. Which component of a MVC application governs the processing of a request from the user?

- A. Model
- B. View
- C. ViewModel
- D. Controller

Answer: D

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Q13. How do you create a controller class?

- A. Creating a class inheriting from Controller class
- B. Creating a class inheriting from Page class
- C. Creating a class inheriting from ViewStartPage class
- D. Creating a class inheriting from MvcApplication class

Answer: A

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Q14. By default, the controller class is named after the controller name with _____ added.

- A. a Controller prefix
- B. a Controller suffix
- C. a Ctrl prefix
- D. a Ctrl suffix

Answer: B

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Q15. How can you prevent a public controller method from being implicitly bound to an action name?

- A. By adding the Authorize attribute to the method
- B. By adding the NonAction attribute to the method
- C. By adding the Deny attribute to the method
- D. By adding the RejectVerbs attribute to the method

Answer: B

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Q16. How can you bind a controller method to a different action name?

- A. By adding the Route attribute to the method
- B. By adding the NonAction attribute to the method
- C. By adding the ActionName attribute to the method
- D. By adding the AcceptVerbs attribute to the method

Answer: C

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Q17. How you bind a method to an action for a specific HTTP verb?

- A. By adding the Route attribute to the method
- B. By adding the NonAction attribute to the method
- C. By adding the ActionName attribute to the method
- D. By adding the AcceptVerbs attribute to the method

Answer: D

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can be used HttpGet, HttpPost, and HttpPut]

Q18. From which dictionary you cannot retrieve data using Request.Params in controller action method?

- A. QueryString
- B. Form
- C. Cookies
- D. RouteData

Answer: D

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Q19. Which predefined ActionResult type sends the content of a file to the browser through a Stream object?

- A. ContentResult
- B. FileContentResult
- C. FilePathResult
- D. FileStreamResult

Answer: D

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Q20. Which predefined ActionResult type sends an HTTP 404 response code to the browser?

- A. ContentResult
- B. EmptyResult
- C. HttpNotFoundResult
- D. HttpUnauthorizedResult

Answer: C

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Q21. Which predefined ActionResult type sends an HTTP 401 response code to the browser?

- A. ContentResult
- B. EmptyResult
- C. HttpNotFoundResult
- D. HttpUnauthorizedResult

Answer: D

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Q22. By convention, where the view template is located?

- A. In the Shared folder inside the Views folder
- B. In the Controllers folder in a directory that matches the name of the controller
- C. In the Views folder in a directory that matches the name of the controller
- D. In the Models folder in a directory that matches the name of the controller

Answer: C

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Programming Microsoft ASP.NET MVC

Chapter 02: ASP.NET MVC views

12 April 2019

Q1. What is generally returned as result to browsers when the action is invoked over a POST command?

- A. It results in the display of the user interface for the data entry
- B. It results in the display of user interface showing the model data
- C. It results in the display of user interface allowing modifications of the model data
- D. It results in performing the desired server-side tasks and displays this result/status of tasks

Answer: D

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Q2. Which component in ASP.NET MVC application physically builds the HTML output for the browser?

- A. Route engine
- B. View engine
- C. Controller factory
- D. Model binder

Answer: B

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Q3. How is the HTML output is prepared in view engine to be sent to the client browser?

- A. It prepares its output by mixing together a view template for the view and any data the controller passes in
- B. It prepares its output by mixing together a view template for the view and the data pulled in from models
- C. It prepares its output by sending the a view template to the controller and the controller prepares output by mixing the view template with the model data
- D. It prepares its output by sending a view template for the view and any data the controller passes in to the model binder which is responsible for generating the HTML

Answer: A

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Q4. What is actually a view engine is?

- A. A class that implements the interface IView
- B. A class that implements the interface IViewEngine
- C. A class that inherits from the class ViewPage
- D. A class that inherits from the class MvcApplication

Answer: B

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Q5. In ASP.NET MVC 5, which view engine is loaded by default?

- A. Razor
- B. ASPX
- C. Razor and ASPX
- D. None of the above

Answer: C

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Until ASP.NET MVC 4, when you first created an ASP.NET MVC application, the Microsoft Visual Studio project wizard asked you to pick your favorite view engine—whether ASPX or Razor.

But in ASP.NET MVC 5, there's no choice between ASPX and Razor, and all view files are automatically created by using the Razor markup language.

But ASPX still available, by default, any ASP.NET MVC 5 application will always load two view engines: Razor and ASPX.

Although generated views are created using Razor markup]

Q6. What is the default view engine in ASP.NET MVC 5?

A. Razor

B. ASPX

C. Both Razor and ASPX

D. There is no default, you have to choose one from Razor and ASPX

Answer: A

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Q7. In ASP.NET MVC 5, which markup is used automatically in views?

A. ASPX markup language.

B. Razor markup language.

C. XAML markup language.

D. HTML5 markup language.

Answer: B

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Q8. Which component of the ASP.NET MVC infrastructure is responsible for retrieving a view object?

A. Route engine

B. View engine

C. Controller

D. Model binder

Answer: B

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Q9. Which method of the view engine creates and returns a view object that represents an HTML page?

A. View

B. FindPartialView

C. FindView

D. ReleaseView

Answer: C

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Q10. Which method of the view engine creates and returns a view object that represents a fragment of HTML?

A. PartialView

B. FindPartialView

-
- C. FindView
 - D. ReleaseView

Answer: B

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Q11. Which one coordinates communication between the controllers and view engines?

- A. View object
- B. ViewResult object
- C. Action invoker
- D. HTTP handler

Answer: C

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Q12. What does the View method in action method return?

- A. View object
- B. ViewResult object
- C. HttpResponse object
- D. HttpStatusCode object

Answer: B

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Q13. What is a View?

- A. An object of a class that implements the interface IView
- B. An object of a class that implements the interface IViewEngine
- C. An object of a class that inherits from the class ViewPage
- D. An object of a class that inherits from the class MvcApplication

Answer: A

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Q14. Which view is assumed if you do not specify the view name as a parameter in the View method on the controller action?

- A. The system assumes by convention that the name of the view is the same as the controller class name
- B. The system assumes by convention that the name of the view is the same as the action name
- C. The system assumes by convention that the name of the view is the same as the application name.
- D. The system assumes by convention that the name of the view is layout

Answer: B

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Q15. What is displayed on the client browser as a response of a request?

- A. results from a view as described in a view template
- B. results from a view as described in a layout template
- C. results from a model as described in a view template
- D. results from a route as described in a view template

Answer: A

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Q16. What is file extension of view template for the Razor view engine?

- A. .aspx
- B. .ascx
- C. .cshtml or vbhtml
- D. .master

Answer: C

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Q16. What is the location of a view page by convention?

- A. In the Views folder
- B. In the Shared folder under the Views folder
- C. In a folder named as same as the controller name in the Views folder
- D. In the root folder

Answer: C

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Q17. Consider the controller and its action method?

```
public class HomeController: Controller
{
    public ActionResult Index()
    {
        return View();
    }
}
```

Which physical file will be searched first for rendering the result?

- A. ~/Views/Index.cshtml
- B. ~/Views/Shared/Index.cshtml
- C. ~/Views/Home/Index.cshtml
- D. ~/Views/Home/Default.cshtml

Answer: C

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Q18. Consider the controller and its action method?

```
public class HomeController: Controller
{
    public ActionResult Index()
    {
        return View("Welcome");
    }
}
```

Which physical file will be searched first for rendering the result?

- A. ~/Views/Index.cshtml
- B. ~/Views/Welcome.cshtml
- C. ~/Views/Home/Index.cshtml
- D. ~/Views/Home/Welcome.cshtml

Answer: D

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Q19. Where should you store the view template file when multiple controllers are expected to invoke the same **view** (or partial view)?

- A. In the Views folder
- B. In the **Shared folder under the Views folder.**
- C. In the root folder.
- D. In the Controllers folder.

Answer: B

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Q20. Which predefined dictionaries are available for the controller method to **send data to a view**?

- A. **ViewData**
- B. ViewBag
- C. **ViewData and ViewBag**
- D. ViewData and RouteData

Answer: C

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Q21. What is the extension of the master page if you use Razor views?

- A. aspx
- B. .ascx
- C. **.cshtml or vbhtml**
- D. .master

Answer: C

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Q22. In ASP.NET MVC, which one is the equivalent to ASP. NET server control?

- A. View
- B. Controller
- C. Layout page
- D. **HTML helper**

Answer: D

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Q23. What does a HtmlHelper method do?

- A. outputs a basic HTML page structure
- B. outputs necessary JavaScript to validate model data
- C. outputs an **HTML string** based on the provided input data
- D. locates a view template and renders HTML based on the template

Answer: C

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Q24. Which Html helper method is used to create an HTML link

- A. Action
- B. **ActionLink**
- C. Partial
- D. Url

Answer: B

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Q25. Which Html helper method is used to insert a partial view inside a view?

- A. Html.Action or Html.RenderAction
- B. Html.**Partial** or Html.RenderPartial
- C. Html.Section or Html.RenderSection
- D. Html.Action or Url.Action

Answer: B

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Q26. Which Html helper native method is used for generating the HTML string for a hidden input field stored with the antiforgery token?

- A. ValidateAntiForgeryToken
- B. **AntiForgeryToken**
- C. Encode
- D. Hidden

Answer: B

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Q27. How do you denote the start of a Razor code block?

- A. By enclosing code within <% %>
- B. By enclosing **code** within <@ @>
- C. by using the # character
- D. by using **the** @ character

Answer: D

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Q28. Which one is the valid Razor expression block?

- A. **@{ var author = "Dino";}**
- B. @var author = "Dino"
- C. @(var author = "Dino")
- D. @(var author = "Dino") <p>@author</p>

Answer: A

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Q29. Which one is razor comment?

- A. **@* comment *@**
- B. <!-- comment - - >
- C. /* comment */
- D. // comment

Answer: A

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Q30. Which helper method should you use if you want to emit as-is without being automatically encoded?

- A. Html.Encode
- B. Html.Text
- C. **Html.Raw**
- D. Html.Render

Answer: C

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Q32. Which property of a Razor view object the central repository to gain access to various ASP.NET intrinsic objects: Request, Response, Server, User etc.?

- A. Page
- B. Html
- C. Context
- D. Model

Answer: C

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Q33. Which property of a view object to convert virtual paths that you create in server code to paths that the browser understands?

- A. Context.Server.MapPath
- B. Href
- C. Path
- D. MapPath

Answer: B

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Q34. Which property of the view object is used to determine if the current request was placed through an HTTP POST verb?

- A. IsPostBack
- B. Post
- C. IsPost
- D. Verb

Answer: C

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Q35. Which property of the view object is used to get or set the path to the file containing the master view template?

- A. Master
- B. Layout
- C. MasterPageFile
- D. LayoutPageFile

Answer: B

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Q36. Which property of the view object gets a reference to the view model object containing data for the view passed by the action method?

- A. ViewBag
- B. ViewData
- C. Model
- D. RouteData

Answer: C

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Q37. Which one do you use to declare the actual type of model data in the view?

- A. @using
- B. @model

- C. @layout
- D. @import

Answer: B

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Q38. With Razor, which special file in the Views folder is processed before each view is built and rendered?

- A. _ViewStart.cshtml
- B. _Layout.cshtml
- C. _Default.cshtml
- D. _Start.cshtml

Answer: A

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Q39. Which one creates a placeholder in layout page for injecting the code of a specific view?

- A. Render
- B. RenderSection
- C. RenderBody
- D. Html.Action

Answer: C

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Q40. Which method causes any code in the actual view to flow into the layout template?

- A. Render
- B. RenderSection
- C. RenderBody
- D. Html.Action

Answer: C

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Q41. In the layout template, how do you define an injection point where a view can place specific content?

- A. by placing a call to Render
- B. by placing a call to RenderSection
- C. by placing a call to RenderBody
- D. by placing a call to Html.Action

Answer: B

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Q42. Which method you can use in a layout template to determine whether a given section has been specified by the view or not?

- A. HasSection
- B. RenderSection
- C. IsSection
- D. IsSectionDefined

Answer: D

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Q42. How can you create Html helper using Razor markup?

-
- A. Using extension method
 - B. Using declarative helper
 - C. Using custom editor template
 - D. Using Razor template

Answer: B

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Q43. Which one is key/value pair container that controller action uses to pass data to a view?

- A. ViewData
- B. ViewBag
- C. ViewState
- D. ViewModel

Answer: A

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Q43. Which helper method is used to call an action method from within a view?

- A. Html.Action or Html.RenderAction
- B. Html.Partial or Html.RenderPartial
- C. Html.Render or Html.RenderSection
- D. Html.ActionLink or Html.Link

Answer: A

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Programming Microsoft ASP.NET MVC

Chapter 03: The model-binding architecture

13 April 2019

Q1. Which distinct type model describes the data in the presentation layer?

- A. domain model
- B. view model
- C. input model
- D. Data Transfer Object (DTO)

Answer: B

Q2. Which distinct type model describes the data in the business layer?

- A. domain model
- B. view model
- C. input model
- D. Data Transfer Object (DTO)

Answer: A

Q3. Through which distinct type model the posted data is exposed to controllers and subsequently received by the application?

- A. domain model
- B. view model
- C. input model
- D. Data Transfer Object (DTO)

Answer: C

Q4. Which distinct type model defines the DTOs the application uses to receive data from input forms?

- A. domain model
- B. view model
- C. input model
- D. Data Contract

Answer: C

Q5. Which type of model do you use to pass input data to a controller?

- A. domain model
- B. view model
- C. input model
- D. Data Transfer Object (DTO)

Answer: C

Q6. Which component in ASP.NET MVC maps the raw request data from any value providers to properties of input model classes?

- A. Model
- B. View
- C. Model Binder
- D. View Engine

Answer: B

Q7. How many types of models you use in ASP.NET MVC applications for various purposes?

- A. 1
- B. 2
- C. 3
- D. 4

Answer: C

[domain model for entities in business layer, view model for representation of data in presentation layer, input model-for exposing data input to controller]

Q8. Which type of model provides the representation of the data being posted to the controller?

- A. domain model
- B. view model
- C. input model
- D. Data Transfer Object (DTO)

Answer: C

Q9. Which type of model is the representation of the domain-specific entities operating in the middle tier?

- A. domain model
- B. view model
- C. input model
- D. Data Transfer Object (DTO)

Answer: A

Q10. What is the process of binding values posted over an HTTP request to the parameters used by the controller's methods called?

- A. Strongly typed model
- B. Model Binding
- C. Input validation
- D. Action filter

Answer: B

Q11. Which class ASP.NET MVC uses as a built-in binder object?

- A. DefaultModelBinder class which inherits from BindableObject class
- B. DefaultModelBinder class which inherits from ModelBindingContext class
- C. DefaultModelBinder class which implements IModelBinder iteface
- D. DefaultModelBinder class which implements IHttpHandler interface

Answer: C

Q12. How can you make a parameter of primitive type in Action method optional?

- A. Change the parameter type to a nullable type
- B. Use a default value for the parameter
- C. Either A or B
- D. Both A and B

Answer: C

Q13. How should you express a Boolean type in a URL so that default model binder can bind it correctly in action method parameter?

- A. Use the true or false strings
- B. Use the yes or no strings
- C. Use the 0 or 1 strings
- D. Use the empty or non-empty strings

Answer: A

Q14. How many Request collections are there for which a default value provider exists?

- A. 1
- B. 2
- C. 3
- D. 4

Answer: D

[Form - Contains values posted from an HTML form, if any

RouteData - Contains values excerpted from the URL route

QueryString - Contains values specified as the URL's query string

Files - A value is the entire content of an uploaded file, if any]

Q15. Which one is not a default value provider in Request collection?

- A. Forms
- B. QueryString
- C. Cookies
- D. Files

Answer: C

Q16. Which value provider in Request collections contains values specified as the URL's query string?

- A. Forms
- B. QueryString
- C. RouteData
- D. Files

Answer: B

Q17. Which value provider in Request collections contains values excerpted from the URL route?

- A. Forms
- B. QueryString
- C. RouteData
- D. Files

Answer: C

Q18. Consider the following form

```
<form action="/Home/Process" method="post">
    Name: <input type="text" name="FullName" />
    <br />
    Age: <input type="text" name="Age" />
    <button type="submit">Submit</button>
</form>
```

The form sends request to action Process in Home controller.
Which action method will **not** work?

- A.

```
public ActionResult Process(FormCollection formData)
{
    String name =formData["FullName"];
    Int age = int.Parse(formData["Age"]);
    // code
}
```
- B.

```
public ActionResult Process(string name, int age)
{
    // code
}
```
- C.

```
public ActionResult Process()
{
    String name =Request.Form["FullName"];
    Int age = int.Parse(Request.Form["Age"]);
    // cde
}
```
- D.

```
public ActionResult Process(string FullName, int Age)
{
    String name =formData["FullName"];
    Int age = int.Parse(formData["Age"]);
    // cond
}
```

Answer: B

[There is no value in request collection with key name and age]

Q19. What should be the type of parameter to bind content from uploaded file?

- A. File
- B. HttpPostedFile
- C. HttpPostedFileBase
- D. FileStream

Answer: C

Q20. What is maximum request length in ASP.NET by default?

- A. 1 MB
- B. 2 MB
- C. 4 MB
- D. Unlimited

Answer: C

Q21. How can you change maximum request length in ASP.NET?

- A. By setting the maxRequestLength entry in the appSettings section of the web.config file
- B. By setting the maxRequestLength entry in the **httpRuntime** section of the web.config file
- C. By setting the maxRequestLength entry in the pages section of the web.config file
- D. By setting the maxRequestLength entry in the config section of the web.config file

Answer: B

Q22. How can you customize some aspects of the binding process of default model binder to control over the posted data?

- A. Using Bind attribute on action method parameters
- B. Using AcceptVerbs attribute on action method
- C. Using HttpPost attribute on action method
- D. Using Validate attribute on action method parameters

Answer: A

Q23. Which property of Bind is used to create whitelists of properties of model objects?

- A. Include
- B. Exclude
- C. Prefix
- D. Suffix

Answer: A

Q24. Which property of Bind is used to create blacklists of properties of model objects?

- A. Include
- B. Exclude
- C. Prefix
- D. Suffix

Answer: B

Q25. How do you create a custom binder from scratch?

- A. Create a class that inherits from the DefaultModelBinder class
- B. Create a class that implements the IModelBinder interface
- C. Create a class implements the IBindingContext class
- D. Create a class that inherits from the ModelBindingContext

Answer: B

Q26. How can you can associate a model binder with its target type globally?

- A. Register the binder in Application_BeginRequest event handler method in the Global.asax file
- B. Register the binder in Application_Start event handler method in the Global.asax file
- C. Register the binder in pages element in Web.config file
- D. Register the binder in _ViewStart page

Answer: B

Q27. How can you can associate a model binder with its target type locally?

- A. Using the ModelBinder attribute in the Action method parameter
- B. Using the ModelBinder attribute in the Action method
- C. Using the ModelBinder attribute in the Controller class
- D. Using the ModelBinder attribute in the Model class

Answer: A

Programming Microsoft ASP.NET MVC

Chapter 05: Input forms

16 May 2019

Q1. Which one is used in ASP.NET Web forms applications but not supported in MVC applications?

- A. Ajax
- B. Sessions
- C. Server control
- D. Output caching

Answer: C

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Q2. Which state management feature is supported in ASP.NET Web applications but not in MVC applications?

- A. Application state
- B. Session state
- C. View state
- D. Cookie

Answer: C

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Q3. Which component in ASP.NET MVC applications allows you to automatically generate HTML for creating functional viewers and editors for any primitive or complex type?

- A. Route
- B. View and partial view
- C. Model binder
- D. Html helpers

Answer: D

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Q4. What are the two main patterns of input forms?

- A. Get-and-Post and Get-Edit-Post
- B. Select-and-Post and Select-Edit-Post
- C. Edit-and-Post and Select-Edit-Post
- D. Edit-and-Post and Edit-Validate-Post

Answer: C

[Page: 104]

Q5. In your view you have created a former like below

```
<form method="post" action="/Customers/Search">  
  Country: <input type="text" name="txtCountry" />  
  <input type="submit" value="Search" />  
</form>
```

Now which action method will not bind posted data?

- A. `public ActionResult Search(string country){/*code*/}`
- B. `public ActionResult Search(string txtCountry){/*code*/}`
- C. `public ActionResult Search([Bind (Prefix="txtCountry")]string country){/*code*/}`

D. [HttpPost]public ActionResult Search(string txtCountry){/*code*/}

Answer: A

[Page: 105]

Parameter name must match with input field name for default binder to work.
You can Bind attribute to instruct which input field to bind with parameter]

Q6. Which Html helper do you use to generate a form in a view?

- A. Html.Form
- B. Html.RenderForm
- C. **Html.BeginForm**
- D. Html.CreateForm

Answer: C

[Page: 106]

Q7. You created a form in Edit.cshtml view for the Edit action of the Trainees controller. Your code is like below

using (Html.BeginForm ()){

..
}

How the form will be submitted?

- A. To the Edit action of the **Trainees** controller via **post** method
- B. To the Edit action of the Trainees controller via get method
- C. To the Edit action of the default controller via get method
- D. To the Edit action of the default controller via post method

Answer: A

[Page: 107]

Default is post. If not specified form action url will be the same as action name which rendered the view]

Q8. Which helper is used to render a partial view inside a view?

- A. **Html.Partial**
- B. **Html.RenderPartial**
- C. Html.Render
- D. Html.RenderSection

Answer: A, B

[Page: 108]

Q9. You want to render a partial view _partialView.cshtml inside a view page. Which one of the following is **not a valid** syntax?

- A. @Html.Partial("_partialView")
- B. **@Html.RenderPartial("_partialView")**
- C. @{ Html.RenderPartial("_partialView"); }
- D. @{string view="_partialView"; }

Answer: B

[Page: 108]

Html.Partial returns MvcString and Html.RenderPartial is void. Html.RenderPartial must be in code block within @{ }

Q10. Which Html helper displays any message that originates as a result of invalid values being entered in the field?

- A. ErrorMessage
- B. Error
- C. Validation
- D. **ValidationMessage**

Answer: D

[Page: 109]

Q11. Which dictionary collection **stores messages** that relate to the state of the **model behind** the view?

- A. ViewBag
- B. ViewData
- C. TempData
- D. **ModelState**

Answer: D

[Page: 110]

Q12. Which dictionary collection stores data for two consecutive request?

- A. ViewBag
- B. ViewData
- C. **TempData**
- D. ModelState

Answer: C

[Page: 115]

Q13. Which Html helper creates predefined editable form input fields based on the type of model data passed to it?

- A. **Html.EditorXxx**
- B. **Html.DisplayXxx**
- C. Html.TextBoxXxx
- D. Html.BeginForm

Answer: A

[Page: 117]

Q14. How templated helpers decide how to display or edit your data?

- A. By using the data type of class members
- B. By using **metadata** associated with class members
- C. By using reflection api to access class members
- D. By using templates associated with class members

Answer: B

[Page: 117]

Q15. Which data annotations attribute is to indicate the type of data will be editing through the member?

- A. Type
- B. **DataType**
- C. Column
- D. Format

Answer: B
[Page: 118]

Q16. Which one is not a supported data type of the DataType enumeration?

- A. Text
- B. Password
- C. MultilineText
- D. Url

Answer: A
[Page: 118]

Q17. Which data annotations attribute is to indicate the name of the custom HTML template to use when displaying or editing the value?

- A. DataType
- B. Display
- C. DisplayName
- D. UIHint

Answer: D
[Page: 118]

Q18. How the boolean data is made editable by default editor?

- A. Radio button
- B. Checkbox
- C. Drop down
- D. Text box

Answer: B
[Page: 119]

Q19. How the nullable Boolean value is made editable by default editor?

- A. Radio button
- B. Checkbox
- C. Dropdown
- D. Tri-state dropdown

Answer: D
[Page: 119]

Q20. For which data type no predefined display template does not exist?

- A. Decimal
- B. Date
- C. EmailAddress
- D. Html

Answer: B
[Page: 120]

Predefined display templates exist for the following data types: Boolean, Decimal, EmailAddress, HiddenInput, Html, Object, String, Text, and Url.]

Q21. For which data type no predefined editor does not exist?

- A. Decimal
- B. Date

-
- C. Object
 - D. MultilineText

Answer: B

[Page: 121]

ASP.NET MVC provides a few predefined editors for Boolean, Decimal, HiddenInput, Object, String, Password, and MultilineText.]

Q22. Which annotation is used to indicate which **custom editor template** to use for editing the value of the class members?

- A. DataType
- B. Display
- C. DisplayName
- D. **UIHint**

Answer: D

[Page: 122]

Q23. What are the main categories of data annotations attribute?

- A. Format and Validation
- B. **Display and Validation**
- C. Display and Error trapping
- D. Display and Format

Answer: B

[Page: 130]

Q24. What is the main purpose of a data annotation attribute for validation?

- A. Express a logic to verify on a model class
- B. Express a **condition** to verify on a model class
- C. Specify the method to verify on a model class
- D. Specify the formatting rule to apply on a model class

Answer: B

[Page: 131]

Q25. Which data annotations attribute checks whether the value can be matched to any of the values in the specified **enumerated type**?

- A. Range
- B. RegularExpression
- C. **EnumDataType**
- D. Enum

Answer: C

[Page: 131]

Q26. What type of data the Range data annotations attribute can work on?

- A. Number
- B. Number and string
- C. **Number and date**
- D. Number and boolean

Answer: C

[Page: 131]

Q27. Which data annotations attribute should you use to validate the value through an Ajax call to a server-side function?

- A. CustomValidation
- B. RegularExpression
- C. Remote
- D. Required

Answer: C

[Page: 131]

Q28. Which class all the data annotations attribute inherit from?

- A. ValidatableObject
- B. ValidationAttribute
- C. Validation
- D. Validator

Answer: B

[Page: 131]

Q29. How do you **declaratively** apply input validation on members of a model class?

- A. Implement the IValidatableObject in you model class
- B. Add Validation logic to setters of the public properties of the model class
- C. Decorate the public properties of the model class with data annotations attribute
- D. Use custom methods to validate

Answer: C

[Page: 132]

Q30. What does the model binder do when it finds an error while binding posted values to properties of the model class instance?

- A. It throws exception which is handles global error handler method
- B. It immediately creates exception instance and returns HttpStatusCodeResult with status code 500
- C. It creates an entry in the Errors collection of the ModelState dictionary
- D. It sets all the public members of the model class instance to null

Answer: C

[Page: 132]

Q31. Look at the property decoration of a model class

```
[StringLength(50)]  
public String Text { get; set; }
```

Now, what validation rule is applied to the value of the property?

- A. Text property can be within 1 to 50 characters
- B. Text property can be within 0 to 50 characters
- C. Text property must not be less than 50 characters
- D. Text property must contain exactly 50 characters

Answer: B

[Page: 132]

StringLength (length) - here length is maximum length]

Q32. Look at the property decoration of a model class

```
[Range(1, 5)]
```

```
public Int32 Rating { get; set; }
```

Now, what is the acceptable value of the Rating property?

- A. 1 to 5
- B. 1 to 4
- C. 2 to 5
- D. 2 to 4

Answer: A

[Page: 132]

Range - extreme values are included]

Q33. You want a property value of a model class be 4 to 20 characters long. How should you decorate the property?

- A. [StringLength(4, 20)]
- B. [StringLength(20, 4)]
- C. [StringLength(4, MaximumLength=20)]
- D. [StringLength(20, MinimumLength=4)]

Answer: D

[Page: 132]

StringLength (MaximumLength)

StringLength (MaximumLength, MinimumLength=number)

StringLength (MaximumLength, MinimumLength=number, ErrorMessage="string")]

Q34. Which property of **data annotations attributes** is used to specify what message to display when **validation fails**?

- A. Message
- B. Error
- C. **ErrorMessage**
- D. ValidationMessage

Answer: C

[Page: 134]

Q35. How do you apply self-validation to your model class?

- A. Create a customer attribute inheriting from the ValidationAttribute class
- B. Implement the **IValidatableObject** interface in your model class
- C. Implement the IClientValidatable interface in your model class
- D. Add Validate method in your class

Answer: B

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Programming Microsoft ASP.NET MVC

Chapter 05: Aspects of ASP.NET MVC applications

19 May 2019

Q1. You use some objects like `request`, `response`, `cache` etc to low-level access to Web application framework. What do you call these objects collectively?

- A. Application objects
- B. Framework objects
- C. `Intrinsic objects`
- D. Web objects

Answer: C

[Page: 151]

Q2. Which intrinsic objects wraps the HTTP response being sent back to the browser at the end of request processing?

- A. `HttpContext`
- B. `HttpRequest`
- C. `HttpResponse`
- D. `ViewPage`

Answer: C

[Page: 152]

Q3. Which intrinsic objects is used to set cookies and content type, append headers to the response data that is to be sent back to the browser at the end of request processing?

- A. `HttpContext`
- B. `HttpRequest`
- C. `HttpResponse`
- D. `HttpCookie`

Answer: C

[Page: 152]

Q4. How can enable caching all action method of a controller?

- A. `Attach OutputCache attribute to the controller class`
- B. Attach `OutputCache` attribute to all action methods of the controller class
- C. Attach `@OutputCache` directive to the views that are returned by the action methods of the controller class
- D. Configure caching in the `Web.config` file

Answer: A

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Q5. You attached `OutputCache` attribute to an action method like below

`[OutputCache(Duration=10, VaryByParam="None")]`

How long the response will be cached?

- A. 10 milliseconds
- B. 10 seconds
- C. 10 minutes
- D. 10 hours

Answer: B
[Page: 161]

Q6. Which property of the OutputCache attribute is used to cache different versions of response for each unique values in a query string post parameter?

- A. VaryByCustom
- B. VaryByHeader
- C. **VaryByParam**
- D. VaryByContentEncoding

Answer: C
[Page: 161]

Q7. What is a **child action**?

- A. a method on the controller that is called inside another method on the same controller
- B. a method on the controller that the view can **call back by using the** `Html.RenderAction` helper
- C. a method on the controller that the layout view only can call back by using the `Html.RenderAction` helper
- D. a method on the controller that returns only partial view

Answer: B
[Page: 162]

Q8. In which component you write **most of the code**?

- A. **controller**
- B. model
- C. view
- D. view Model

Answer: A
[Page: 163]

Q9. Which one is **not** an option of handling exception in controller classes?

- A. directly via try/catch blocks
- B. overriding the `OnException` method of the controller class
- C. **overriding the `OnError`** method of the global application class
- D. using the `HandleError` attribute

Answer: C
[Page: 163]

Q10. What is the extension resource file?

- A. .res
- B. .rex
- C. **.resx**
- D. .resource

Answer: C
[Page: 177]

Programming Microsoft ASP.NET MVC

Chapter 06: Securing your application

21 May 2019

Q1. How do you setup the **authentication** mechanism in ASP.NET MVC applications?

- A. **By using the <authentication> section in the root web.config file**
- B. By using the <authorization> section in the root web.config file
- C. By using the <authentication> section in the web.config files in the subfolders where your restricted pages are located
- D. By using the <authentication> section in the machine.config file

Answer: A

[Page: 190]

Q2. Which authentication is the most commonly used way to collect and validate user credentials against a database of user accounts?

- A. Windows authentication
- B. **Forms authentication**
- C. Digest authentication
- D. Basic authentication

Answer: B

[Page: 190]

Q3. In your MVC application, you use Forms authentication and you want to redirect the user to the specified Login view through Account controller every time the user attempts to access a URL reserved to authenticated users.

How do you configure elements in the Web.config?

- A. `<authentication mode="Forms" loginUrl="~/Auth/LogOn">`
`</authentication>`
- B. `<authentication>`
`<forms loginUrl="~/Auth/LogOn" />`
`</authentication>`
- C. **`<authentication mode="Forms">`**
`<forms loginUrl="~/Auth/LogOn" />`
`</authentication>`
- D. `<authentication mode="Forms">`
`</authentication>`
`<forms loginUrl="~/Auth/LogOn" timeout="2880" />`

Answer: C

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Q4. Which authentication mechanism is suitable for Web applications that can be accessed from anywhere through Internet?

- A. Windows authentication
- B. **Forms authentication**
- C. Digest authentication
- D. Basic authentication

Answer: B

[Page: 190]

Q5. Which authentication mechanism is suitable for Web applications that is accessed through intranet?

- A. Windows authentication
- B. Forms authentication
- C. Digest authentication
- D. Social network authentication

Answer: A

[Page: 190]

Q6. Which attribute do you use to restrict access to an action method and ensure that only authenticated users can execute it?

- A. Authenticate
- B. Authorize
- C. AcceptVerbs
- D. Deny

Answer: B

[Page: 190]

Q7. How can you restrict access to any resource?

- A. Using the <authorize> element in the root web.config. Configure file
- B. Using the Authorize attribute as a global filter
- C. Using a custom handler module
- D. None of the above

Answer: B

[Page: 191]

Q8. Which security-related attribute instructs the ASP.MVC runtime to let it pass if the caller is not authenticated?

- A. Allow
- B. AllowAnonymous
- C. AcceptVerbs
- D. Authorize

Answer: B

[Page: 191]

Q9. You applied Authorize attribute at the controller but you want to enable free access to an action. Which attribute should work for you?

- A. [Allow]
- B. [Allow (Users="?")]
- C. [Authorize (Users="?")]
- D. [AllowAnonymous]

Answer: D

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Q10. Which one allows users in Admin and PowerUsers access to an action?

- A. [AuthorizeRoles ("Admin,PowerUsers")]
- B. [Authorize("Admin,PowerUsers")]

-
- C. [Authorize (Users="Admin,PowerUsers")]
 - D. [Authorize(Roles="Admin,PowerUsers")]

Answer: D

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Q11. Which filter takes precedence when you apply Authorize and **OutputCache** attribute to an action?

- A. **The Authorize attribute takes precedence over output caching**
- B. The output caching attribute takes precedence over Authorize
- C. The attribute is applied first takes precedence over the other
- D. You cannot use both in the same action

Answer: A

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Q12. In MVC5, what is an Authentication filter?

- A. a class that inherits from Attribute class
- B. a class that inherits from AuthenticationAttribute class
- C. a class that implements **IAuthenticationFilter interface**
- D. a class that implements IActionFilterAttribute interface

Answer: C

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Q13. With ASP.NET Identity, which class performs the task of signing users in and out?

- A. **UserManager**
- B. IdentityUser
- C. UserStore
- D. RoleStore

Answer: A

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Programming Microsoft ASP.NET MVC

Chapter 07: Design considerations for ASP.NET MVC controllers

21 May 2019

Q1. Which one is NOT the responsibility of the controllers in a MVC Applications?

- A. getting posted data
- B. executing the related action
- C. preparing and requesting the view
- D. rendering the view

Answer: D

Q2. Which component of a MVC Applications is comparable to the code-behind class in Web Forms applications?

- D. ViewModel

Answer: D

Q3. In Responsibility-Driven Design (RDD), what is the role of a service provider?

- A. Holds (or knows how to get) information and provides information.
- B. Performs a particular action upon request
- C. Manages relations between objects
- D. Represents a façade to implement communication between objects.

Answer: B

Q4. In Responsibility-Driven Design (RDD), what is the role of an Interfacier?

- A. Holds (or knows how to get) information and provides information.
- B. Performs a particular action upon request
- C. Manages relations between objects
- D. Represents a façade to implement communication between objects.

Answer: D

Q5. Which one of the following represents the data model you have in the presentation layer?

- A. Service provider
- B. View
- C. ViewModel
- D. ModelBuilder

Answer: C

Q6. Which one of the following is used to pass data around layers in MVC applications?

- A. Domain Object
- B. View
- C. ViewModel

D. **DTO**

Answer: D

[data-transfer object]

Q7. What are the ways to inject dependencies into a class?

- A. Using the constructor
- B. Using a settable property
- C. Using the parameters of a method
- D. Using an interface

Answer: A, B, C

Q8. What one is the best way to inject dependencies into a class **when the dependency is optional?**

- A. Using the constructor
- B. Using a settable property
- C. **Using the parameters of a method**
- D. Using an interface

Answer: C

Q9. Where do you register a custom controller factory in your MVC application?

- A. **In the Application_Start method of the Global.aspx file?**
- B. In the Configure method of the OWIN startup file
- C. In the Web.config file
- D. In the _ViewStart.chnml file

Q10. Which method you should override of the **DefaultControllerFactory** class, at a minimum, to create a Unity-based custom controller?

- A. CreateController
- B. **GetControllerInstance**
- C. GetControllerType
- D. ReleaseController

Answer: B

Programming Microsoft ASP.NET MVC

Chapter 08: Customizing ASP.NET MVC controllers

21 May 2019

Q1. Which value dictionary stores data that logically belongs to the current request and persist across a redirect?

- A. ViewData
- B. RouteData
- C. TempData
- D. ViewBag

logically data TempData

Answer: C

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Q2. How do you register a custom controller factory?

- A. In global.asax, Application_Start, write code `ControllerBuilder.Current.SetControllerFactory(new YourControllerFactory ());`
- B. In global.asax, Application_Start, write code `ControllerBuilder.Current = new YourControllerFactory ();`
- C. In the constructor of a controller class, write statement `ControllerBuilder.Current.SetControllerFactory(new YourControllerFactory ());`
- D. You cannot change the default controller factory in MVC5.

Answer: A

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Q3. How do you register a custom controller model binder?

- A. In global.asax, Application_Start, write code `ModelBinders.Binders.Add(typeof(new YourTypeBinder()));`
- B. In global.asax, Application_Start, write code `ModelBinders.Binders.Add(typeof(YourType), new YourTypeBinder());`
- C. In the constructor of a controller class, write statement `ModelBinders.Binders.Add(typeof(YourType), new YourTypeBinder());`
- D. You cannot change the default model binder in MVC5.

Answer: C

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Q4. Which one contains code that runs around the execution of an action method?

- A. Action invoked
- B. Action filter
- C. Model binder
- D. Model validator

Answer: B

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Q5. When does an action filter executes code?

- A. Before the execution of the action
- B. After the execution of the action
- C. Both before and after the execution of the action

D. None of the above

Answer: C

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Q6. Which one provides a declarative means to attach some behavior to a controller's action method?

- A. Action invoked
- B. Action filter
- C. Model binder
- D. Model validator

Answer: B

[Page: 264]

Q7. Which filter method of the controller class is invoked just before an action result is executed?

- A. OnActionExecuting
- B. OnActionExecuted
- C. OnResultExecuting
- D. OnResultExecuted

Answer: C

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Q8. Which predefined filter marks an action method as one that requires a secure request?

- A. Authorize
- B. Https
- C. RequiresHttps
- D. ValidateAntiForgeryToken

Answer: C

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Q9. Which method do you use to serialize a .net Object as JSON from an action method?

- A. JsonConvert.Seiralize
- B. Json
- C. JavaScript
- D. JSON.Stringify

Answer: B

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Q10. What is the action result type should be to return the content is of a file through a stream?

- A. FilePathResult
- B. FileContentResult
- C. FileStreamResult
- D. String

Answer: C

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Programming Microsoft ASP.NET MVC

Chapter 10: An executive guide to Web API

21 May 2019

Q1. Which one provides an ideal framework for web services over HTTP?

- A. ASP.NET MVC
- B. XML Web service
- C. Web Api
- D. ASP.NET Core Razor pages

Answer: C

[Page: 337]

Q2. Web Api works over _____.

- A. TOP
- B. HTTP
- C. MSMQ
- D. UDP

Answer: B

[Page: 337]

Q3. What is the Base class of a Web Api controller?

- A. ControllerBase
- B. Controller
- C. ApiController
- D. DefaultControllerFactory

Answer: C

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Q4. What does the Web API controllers return to callers?

- A. View
- B. PartialView
- C. Data
- D. StatusCode

Answer: C

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Q5. Which method of the Routes table do register a web api route?

- A. Add
- B. MapRoute
- C. MapHttpRoute
- D. Register

Answer: C

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Q6. Which one does the Web API framework uses to select the action?

- A. Url
- B. The HTTP method

- C. Route data
- D. Query string

Answer: B

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Get request tries to match Get or GetXxx]

Q7. In Web Api, what is typically a HTTP **POST** method used for?

- A. To return an existing resource from some back-end store
- B. **To add a** new resource to some back-end store
- C. To update an existing resource in some back-end store
- D. To delete an existing resource in some back-end store

Answer: B

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Post --> Add
Put --> Update

Q8. In Web Api, what is typically a HTTP **PUT** method used for?

- A. To return an existing resource from some back-end store
- B. **To add a** new resource to some back-end store
- C. **To update** an existing resource in some back-end store
- D. To delete an existing resource in some back-end store

Answer: C

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Q9. Which attribute do you use to set an attribute **based route on the action** of Web Api controllers?

- A. Action
- B. Action name
- C. HttpXxx where Xxx replaces HTTP verb
- D. **Route**

Answer: D

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Q10. Which one you need to configure to call Web Api actions from different domain?

- A. Use Bind
- B. AntiForgery token validation
- C. Https
- D. **CORS**

Answer: D

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Diff Domain = CORS