

## ■ ■ Chapter 2: Your First Web API Application

1. Visual Studio is able to generate a template set of action methods for Views. Is it True? a. True b. False
2. Which attribute can be used for an action method that can be called only as a child action?  
a. ChildOnly b. ChildActionOnly c. ChildMethodOnly d. ChildOptionOnly
3. Which file ensures that the `_Layout.cshtml` file is applied for all the views that didn't select any layout page?  
a. `_viewStart.cshtml` b. `_ViewStart.cshtml` c. `_viewStarts.cshtml` d. `_ViewStarts.cshtml`
4. Which of the following is valid in views for using a model data?  
a. `@Model IEnumerable<ExampleApp.Models.Product>` b. `@model IEnumerable<ExampleApp.Models.Product>`
5. Which one requires initialization to associate the observables and observable arrays in the data model with the bindings attached to the HTML elements?  
a. Knockoutjs b. Angularjs c. Angular d. jQuery
6. Which one is uses a system of bindings, which are applied to elements through the `data-bind` attribute?  
a. Knockoutjs b. Angularjs c. Angular d. jQuery
7. The default convention is that all URLs for Web API web services are prefixed with \_\_\_\_.  
a. `/api`, followed by the controller name b. `api/` c. `api/controller/action` d. None of the above
8. To enable JavaScript IntelliSense, add a new JavaScript file in the Scripts folder, which is called.  
a. `references.js` b. `_reference.js` c. `reference.js` d. None of the above
9. Data values that are created with the `ko.observable` method are known as *observables*. Is it true? a. Yes b. No
10. Which binding causes the associated DOM element to display the text value of your parameter?  
a. `css` b. `text` c. `value` d. `input`
11. Which bindings cause the associated DOM element to become hidden or visible according to the value you pass to the binding?  
a. `css` b. `style` c. `visible` d. `hidden` e. c and d
12. Which binding duplicates a section of markup for each entry in an array? a. `for` b. `array` c. `value` d. `foreach`
13. Which binding links the associated DOM element's value with a property on your view model?  
a. `text` b. `input` c. `value` d. `foreach`
14. In `knockout.js` Bindings are applied to HTML elements by using \_\_\_\_ attribute.  
a. `ng-bind` b. `data-bind` c. both of them d. None of them
15. Knockout has to process the HTML elements in a document to locate and activate its data bindings by ...  
a. `ko.applyBind()` b. `ko.activeBinding()` c. `ko.activateBindings()` d. `ko.applyBindings()`
16. Knockout can also create observable arrays, using which method:  
a. `observableArray` b. `ObservableArray` c. `observableArrays` d. `ObservableArrays`
17. Which is/are true?  
a. Web API is a framework b. We cannot return view from Web API c. Web API is an open source platform  
d. Web API supports only HTTP protocols e. Web API can be hosted in IIS or in application f. Only a, b & d
18. Which of the following is true about Web service?  
a. It is self-describing via a common XML grammar b. It is discoverable via a simple find mechanism  
c. Both of the above d. None of the above
19. A consumer of a web service is not tied to that web service directly. a. false b. true
20. Web Services is not tied to any one operating system or programming language. a. false b. true
21. The MVC framework and Web API can share a common heritage and the same data models. Is it true or false?  
a. Yes b. No
22. Which makes easy to build an HTML client that responds dynamically to the data returned by a web service or by interactions with the user?  
a. Knockoutjs b. JQuery c. Bootstrap d. Expressjs
23. Which Command is used to Install Knockoutjs in a project?  
a. `Install-Package knockoutjs` b. `Install-Package knockout`  
c. `Install-Package Microsoft.AspNet.KnockoutJs` d. `Install-Package Microsoft.AspNet.Knockout`
24. TCP is a \_\_\_\_\_. a. Protocol b. Package c. Module d. Controller
25. The "*ApiController*" class defined in which namespace?  
a. `System.Web` b. `System.Web.Http` c. `System.Web.Mvc` d. `System.Collections.Generic`
- 26.
- 27.
- 28.
- 29.
- 30.

## ■ ■ Chapter 3: Essential Techniques

1. Can We choose between asynchronous and synchronous action methods in Web API controllers. Is it True?  
a. True                      b. False
2. If we use some of the advanced features, we will need to implement \_\_\_\_\_ that are written explicitly for asynchronous execution.  
a. class                      b. interfaces                      c. method                      d. None of the above
3. Task.FromResult allows us to generate Task wrappers around results that we generated synchronously. Is it True?  
a. True                      b. False
4. Which is/are true?  
a. Knockout JS is an open source JavaScript library                      b. Knockout JS is an open source JavaScript library
5. What is an observable in KnockoutJS?  
a. Special type of JavaScript object                      b. Special type of JavaScript class  
c. Special type of JavaScript method                      d. Observable is a KnockoutJs property
6. \_\_\_\_\_ helps KnockoutJS to update your UI automatically when the view model changes.  
a. Angular                      b. Observables                      c. JavaScript                      d. Watch tools
7. Knockout js supported which types of binding?  
a. One-way                      b. Two-way                      c. Both a & b                      d. None of the above
8. \_\_\_\_\_ can receive parameters, and optionally write back changes to them or invoke callbacks.  
a. Components                      b. Methods                      c. UI                      d. Server
9. Which is/are true about "ViewModel" in Knockout Js?  
a. ViewModel is a class                      b. ViewModel is created as JavaScript Function  
c. ViewModel is declared as a variable                      c. The member of viewModels are variables and methods
10. The Observable array is a KnockoutJs properties. Is it true?                      a. Yes                      b. No
11. Which is/are true about "Postman"?  
a. Postman is a powerful HTTP client for testing web services                      b. Postman is an API development tool  
c. Postman is a Google Chrome app for interacting with HTTP APIs                      d. All of the above
12. What are the advantages of Ajax?  
a. Bandwidth utilization                      b. More interactive                      c. Speeder retrieval of data                      d. All of the above
13. The \_\_\_\_\_ method in jQuery is used to perform an AJAX request or asynchronous HTTP request.  
a. return()                      b. put()                      c. ajax()                      d. None of the above
14. Which jQuery Ajax Properties are used to specifies the HTTP verb for the Ajax request?  
a. accepts                      b. contentType                      c. headers                      d. type
- 15.
- 16.
- 17.
- 18.
- 19.
- 20.

## ■■Chapter 4: Understanding HTTP Web Services

1. How many types of Web API client have?                      a. 1                      b. 2                      c. 3                      d. 4
2. If we want to bind click event in HTML by knockout.js, we have to call function like  
a. data-click="getFunction()"                      b. data-bind="getFunction()"                      c. data-bind="click: getFunction()"                      d. data-bind="click: getFunction"
3. If we want to provide arguments to the function, then we have to use \_\_\_\_  
a. data-click="getFunction("hello")"                      b. data-bind="getFunction(\$data, "hello")"  
c. data-bind="click: getFunction.bind(\$data, "data")"                      d. data-bind=" click: getFunction.bind("data")"
4. There are \_\_\_\_ different types of Web API client.                      a. One                      b. Two                      c. Threed                      d. Four
5. Correct Syntax for data binding is –                      a. data-bind="click: sendRequest"                      b. data-bind="click- sendRequest"  
c. data-bind='click: sendRequest'                      d. data-bind("click: sendRequest")
6. The \$.ajax method accepts two arguments:  
a. the URL that the request will be sent to                      b. a JavaScript object that contains the settings for the request  
c. a JavaScript object that contains the configuration for the request                      d. both a and b                      d. None of them
7. JSON is simple and easy to work with in JavaScript code, which is why it has become so popular and displaced XML. Is it true?                      a. False                      b. True
8. Which is/are the major Knockout components?                      a. model                      b. bindings                      c. both of them                      d. None of them
9. Which bindings are applied to HTML elements using the which attribute?  
a. data-bind                      b. databind                      c.Data-Bind                      d. data:bind
10. The most commonly used pattern to create loosely coupled web services is \_\_\_\_?

- a. Representational State Transfer      b. Web Api      c. Web Service      d. All of the above
11. REST is a general-purpose pattern that, when applied to a web service, creates RESTful web service.      a. True      b. False
12. The terms verbs and methods are equivalent when referring to Http and can be used interchangeably. Is it true?  
a. True      b. False
13. Which type of web services methods are to be read only & safe?      a. GET      b. POST      c. PUT      d. DELETE
14. Idempotent verbs, such as \_\_\_\_\_ and \_\_\_\_\_, are allowed to modify the data model.  
a. Get, Put      b. Put, Post      c. Put, Delete      d. Post, Delete
15. The web service can ignore the query string and return all of the data objects in the model. Is it true?      a. True      b. False
16. RESTful web services?  
a. Defines its own security      b. Inherits security measures from the underlying transport.correct  
c. Both of the above wrong      d. None of the above
17. What is/are the advantages of RESTful Web Services?  
a. Language and Platform independent      b. REST can use SOAP  
c. Permits different data format      d. All of the above
18. Which of the following component of HTTP response contains metadata for the HTTP Response message as key-value pairs?  
a. Status/Response Code      b. HTTP Version      c. Response Header      d. Response Body
19. Which of the following component of HTTP request is used to identify their source on server?  
a. VERB      b. URI      c. HTTP Version      d. Request Header
20. Which is/are the way to Represent A Resource In REST?      a. text      b. JSON      c. XML      d. All of the above
21. Which Protocol Is Used by RESTful Web Services?      a. HTTP      b. HTTPS      c. Both a & b      d. None of the above
22. Which HTTP method are used to returns meta information about the request URL in REST?  
a. GET      b. POST      c. OPTIONS      d. HEAD
23. Which is/are true?  
a. All Web services are APIs but not all APIs are Web services  
b. A Web service always needs a network to operate while APIs don't need a network for operation  
c. Mobile devices can easily use Web API      d. All of the above
24. REST is stateless. Is it true?      a. Yes      b. No
25. Which one is used to convert your application into Web-Application?  
a. Struts Services      b. Web Services      c. Java Service      d. Browser Action
26. Which of the following is true about Web services?  
a. Web services are open standard (XML, SOAP, HTTP etc.) based Web applications  
b. Web services interact with other web applications for the purpose of exchanging data  
c. Web Services can convert your existing applications into Web-applications      d. All of the above
27. Web Services are  
b. Loosely Coupled      b. Tightly Coupled      c. Either Loosely or Tightly Coupled      d. Both Loosely and Tightly Coupled
28. Which is/are the core components of a HttpRequest?  
a. Verb      b. URI      c. HTTP Version      d. Request Header      e. Request Body
29.  
30.  
31.  
32.  
33.  
34.  
35.

## ■■Chapter 9: The Anatomy of ASP.NET Web API

1. Web API builds on which namespace?  
a. System.Web      b. System.Web.Http      c. System.Net      d. System.Net.Http
2. The *System.Net.Http* namespace was introduced in which version of .NET framework?  
a. 4.0      b. 4.5      c. 4.5.1      d. 4.5.2
3. Which ASP.NET classes are used to develop HTTP web services with Web API?  
a. HttpRequest      b. HttpResponseMessage      c. HttpContext      d. None of the above
4. What is the name of the configuration files that the *App\_Start* folder contains?  
a. BundleConfig.cs      b. FilterConfig.cs      c. RouteConfig.cs      d. All of these
5. Web API is only supporting request/response pattern. Is it true?      a. Yes      b. No

6. \_\_\_\_\_ allows the server to share the resources being requested by the client application by overcoming the problem of same-origin policy. a. Web API b. CORS c. WCF Service d. REST Service
7. Which namespace is used to serialize data sent to the client and to create model objects from requests? a. System.Net.Http b. System.Web.Http c. System.Net.Http.Formatting d. None
8. *ApiController* action only return data that is serialized and sent to the client. Is it true? a. Yes b. No
9. A Web API controller action can return which values? a. Void b. HttpResponseMessage c. IHttpActionResult d. All of the above
10. Which is/are the new features introduced in ASP.NET Web API framework v2.0? a. Attribute Routing b. External Authentication c. CORS d. All of the above
11. Which Web API context class is used to provide a controller with the information it needs to process a request? a. HttpContext b. HttpContext b. HttpContext c. HttpContext d. HttpContextDescriptor
12. Web API configuration is performed in which file? a. WebApiConfig.cs b. Global.asax.cs c. Web.config d. All of the above
13. ASP.NET Web API defines a set of interfaces and classes that are used to process requests, and these are known as \_\_\_\_\_. a. action b. HTTP verb c. service d. view
14. Services are set up and accessed through the which property? a. HttpConfiguration.Service b. HttpConfiguration.Services c. ServiceController d. None
15. ASP.NET Web API uses a completely different set of namespaces and types than the MVC framework. Is it True or False? a. True b. False
16. Which is/are True About Asp.Net Web Api and MVC Framework? a. The classes and interfaces are equivalent, but there isn't a one-to-one mapping of methods and properties b. The classes and interfaces are equivalent, but there is a one-to-one mapping of methods and properties
17. Which is the Web Api Equivalent Namespace of the MVC Namespace (*System.Web.Mvc.Controller*)? a. System.Web.Http.ApiController b. System.Web.Http.Controller c. System.Http.ApiController d. System.Web.ApiController
18. What is the difference between *System.Net.Http* and *System.Web.Http* Namespaces? a. Functionality that is specified to Web API is contained in the *System.Web.Http* namespace and its children b. Web API uses the types from the *System.Net.Http* namespace to represent requests and responses, HTTP status codes and HTTP verbs c. Both a and b d. None of the above
19. Which one is not a property defined by the *HttpRequestMessage* Class? a. Headers b. Methods c. Version d. Properties e. None of the above
- 20.
- 21.
- 22.
- 23.
- 24.
- 25.

## ■Chapter 10: Creating and Configuring a Web API Application

1. Which file is exclusively used for configuring ASP.NET routes? a. WebApiConfig.cs b. RouteConfig.cs c. WebConfig.cs d. App\_Start
2. WebApiConfig.cs file contains \_\_\_\_\_. a. Web Api Configuration b. Web Api specific routes c. Web Api Services d. All of the above
3. ApiController action method not only return data that is serialized and sent to the client. a. True b. False
4. Which class provides the entry point for configuring Web API and defines the static members? a. GlobalConfiguration b. HttpConfiguration c. Application\_Start d. WebApiConfig
5. Web API configuration settings are defined in the \_\_\_\_\_ class. a. GlobalConfiguration b. HttpConfiguration c. Application\_Start d. WebApiConfig
6. Where do you register your WebConfig.Register method? a. Startup.cs b. Global.asax.cs c. any of these d. none of the above
7. Dependency injection in Web API is handled by the which interface? a. IDependencyResolver b. IDependencyScope c. IDependencyInjection d. Only a and b
8. IDependencyScope interface has \_\_\_\_ methods. a. One b. Two c. Three d. Four
9. Which of the following IoC Container are available for dependency injection? a. StructureMap b. Unity c. Ninject d. Castle Windsor
10. Which package is needed for additional features required by the MVC framework? a. Ninject.MVC4 b. Ninject.MVC3 c. Ninject.MVC5 d. Ninject.MVC

11. **IDependencyResolver** lies on which namespace?  
 a. System.Web.Mvc                      b. System.Web.Http.Dependencies                      c. Both a and b                      d. None of the above
12. **Mvc framework dependency resolution** is handled by with interface?  
 a. IResolver                      b. INinjectResolver                      c. IDependencyResolver                      d. None of the above
13. **How many available methods on IDependencyResolver?**                      a. One                      b. Two                      c. Three                      d. Four
14. **GetService(type)** and **GetServices(method)** lies on which interface?  
 a. IDependencyResolver                      b. IDependencyScope                      c. Both a and b                      d. None of the above
15. **IDependencyScope** lies on which namespace?  
 a. System.Web.Http.Dependencies                      b. System.Web.Mvc                      c. System.Web.Http                      d. None of the above
16. **Which one is responsible to mediate between the data source layer and the business layers of the application?**  
 a. Web API                      b. Repository                      c. Controller                      d. ApiController
17. **Is Web API controller provide the HTTP web service?**                      a. Yes                      b. No
18. **When two classes or two modules are fully dependent upon each other in an application, then the two classes are \_\_\_\_.**  
 a. loosely coupled                      b. tightly coupled
19. **The dependency injection (DI) plays the same role for Web API as it does in the MVC framework. Is it true?**  
 a. Yes                      b. No
20. **The fundamental requirement of dependency injection is .....**  
 a. passing service to the client                      b. Allowing client to find service  
 c. Allowing client to build service                      d. Giving the client part service
21. **Dependency injection can describe as a form of .....**  
 a. Automated control                      b. Inversion control                      c. Total control                      d. Direct control
22. **The basic unit of dependency injection is .....**                      a. Injection                      b. Codes                      c. Variables                      d. Service
23. **An object that use other objects in dependency injection is .....**                      a. Client                      b. Service                      c. Injector                      d. Command
24. **Ninject is not an open source dependency injector for .Net applications. Is it true?**                      a. Yes                      b. No
- 25.
- 26.
- 27.
- 28.
- 29.
- 30.

## ■■Chapter 11: Action Method Results

1. **Which is not a property of HttpRequestMessage?**                      a. Version                      b. Properties                      c. RequestUri                      d. Url
2. **BadRequest()** method, creates a *BadRequest* object that uses \_\_\_\_ status code.                      a. 400                      b. 500                      c. 200                      d. 302
3. **BadRequest(message)** method, *contains* the specified message in the \_\_\_\_ body.                      a. Header                      b. Response
4. **Conflict()** method creates a *ConflictResult*, which uses \_\_\_\_ status code.                      a. 409                      b. 500                      c. 400                      d. 404
5. **InternalServerError()** method, creates an *InternalServerError*, which uses \_\_\_\_ status code.  
 a. 409                      b. 500                      c. 400                      d. 404
6. **Redirect(target)** method, creates a *RedirectResult*, which uses \_\_\_\_ status code to redirect the client to the URL.  
 a. 409                      b. 500                      c. 400                      d. 302
7. **Unauthorized(headers)** method, creates a *UnauthorizedResult*, which uses the \_\_\_\_ status code.  
 a. 401                      b. 500                      c. 200                      d. 302
8. **The HttpResponseMessage class** has a constructor that takes a value from the \_\_\_\_ class to specify the status code.  
 a. Web API                      b. HttpStatusCode                      c. Controller                      d. StatusCode
9. **If We frequently need to return a result for which there is no controller convenience method, then we can define a custom implementation of the \_\_\_\_ interface, that yields the response we need.**  
 a. IRepository                      b. IHttpActionResult                      c. IEnumerable                      d. IHttpAction
10. **In Content Negotiation, Web API serializes the data into the format JSON or XML or another format. Is it true?**  
 a. Yes                      b. No
11. **In Accept-Header Application/xml; q=0.9, Here q is .....**  
 a. Version No.                      b. data value                      c. measure of hierarchy                      d. measure of preference
12. **Web API has built-in support for ..... (Choose Best One)**  
 a. JSON, XML                      b. XML, BSON                      c. JSON, BSON, XML                      d. JSON, BSON, XML, TEXT
13. **Postman sets the Accept Header to \_\_\_\_ by default. So, it receives the default Web API data format, which is \_\_\_\_.**  
 a. application/json, JSON                      b. application/xml, XML                      c. \*/\*, JSON                      d. c. \*/\*, XML e. application/text, text
14. **The image/webp MIME type refers to an image format called WebP. Which was developed by \_\_\_\_.**  
 a. W3C                      b. ECMA                      c. Google                      d. Apple
15. **How many properties are available in ContentNegotiationResult class?**                      a. One                      b. Two                      c. Three                      d. Four

16. Which method defines in *ApiController* for Bypass content Negotiation?

- a. Content(status, data, formatter, mimeType)                      b. Content(status, data, formatter, mimeType)
- c. Json(data)                      d. Content(status, data, formatter)                      e. All of the above

17. Content returns a *FormattedContentResult*, which bypasses the content negotiation process and uses the specified formatter to serialize the data.                      a. True                      b. False

18. Which formatter is responsible for setting the value of the Content-Type header?

- a. True                      b. False

19. Which method returns an *OkNegotiatedContentResult* object?

- a. Ok(result)                      b. Ok(data)                      c. Ok(content, result)                      d. Ok(content, data)

20. Which result status code return from OK(data) method?                      a. 200                      b. 201                      c. 202                      d. 203

21. Which method returns 201 response status code?

- a. Ok(data)                      b. Created(url, data)                      c. CreatedAtRoute(name, values, data)                      d. Content(staus, data)

22. How many *ApiController* methods Return negotiable action Results?                      a. one                      b. two                      c. three                      d. four

23.

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## ■■Chapter 12: Creating Media Type Formatters

1. Media type formatters are the \_\_\_\_\_ responsible for serializing model data so that it can be sent to the client.

- a. class                      b. component                      c. module                      d. function

2. Web API includes built-in media type formatters & those formatters can generate which types of data?

- a. JSON                      b. XML                      c. MIME                      d. All of the above

3. Which is/are true?

- a. A media type identifies the format of a piece of data
- b. In HTTP, media types describe the format of the message body
- c. A media type consists of two strings, a type and a subtype                      d. All of the above

4. When MIME types are prefixing the subtype with "x.", then the content type will be -----

- a. public                      b. private                      c. Any one                      d. None of the above

5. Which method is used to break up the string into an array?                      a. split                      b. break                      c. pop                      d. deserialize

6. Which type of headers name start with X?

- a. standard                      b. nonstandard                      c. any one                      d. None of the above

7. Which method/methods defined by the *MediaTypeHeaderValue* Class?

- a. CharSet                      b. MediaType                      c. MediaTypeHeader                      d. All of the above

8.

9.

## ■■Chapter 13: Using the Built-in Media Formatters

1. Web API includes a set of \_\_\_\_\_ built-in media formatters.                      a. Two                      b. three                      c. four                      d. five

2. The built-in media type formatters are responsible for \_\_\_\_\_ data into the JSON and XML formats.

- a. serializing                      b. deserializing                      c. both a & b                      d. None of the above

3. Which is/are true?

- a. BSON is a computer data interchange format                      b. BSON stands for binary JSON
- c. Both a & b                      d. None of the above

4. Which is/are the Built-in Media Type Formatters?

- a. JsonMediaTypeFormatter                      b. XmlMediaTypeFormatter
- c. FormUrlEncodedMediaTypeFormatter                      d. JQueryMvcFormUrlEncodedFormatter

5. By default, the Web API framework supports which media types?

- a. JSON                      b. XML                      c. Both a & b                      d. None of the above

6. Which class is slower and less fully featured compared to other?

- a. DataContractJsonSerializer                      b. Json.Net

7. The Json.Net classes are defined in which namespace?

- a. System      b. System.Net      c. Newtonsoft.Json      d. System.Data

8. Which JavaScript method is used to return the time portion of a Date object as a string by using locale conventions?

- a. LocaleTimeString()      b. toLocaleTimeString()      c. ToString()      d. toConvertLocalTime()

9. Which is the default value of *DefaultValueHandling* Enumeration?

- a. Include      b. Ignore      c. Populate      d. IgnoreAndPopulate

10. The *DataContractSerializer* class was introduced in .NET \_\_\_\_.

- a. 3.0      b. 4.0      c. 4.5      d. 4.5.1

11. In Web API controller, we can't return dynamic objects from action methods. Is it true?      a. Yes      b. No

12.

13.

## ■Chapter 14: Understanding Parameter and Model Binding

1. Which process is used to extract values from the HTTP request to provide values for the arguments needed to invoke action methods in Web API?      a. Parameter binding      d. Model binding      c. Formatters      d. Only a & b

2. How many available ways in Web API to bind parameters?      a. One      b. Two      c. Three      d. Four

3. Which is/are the available ways in Web API to bind parameters?

- a. Parameter binding      d. Model binding      c. Formatters      d. All of the above

4. Which one is used to read from the query string in Web API?

- a. Parameter binding      d. Model binding      c. Formatters      d. All of the above

5. Which one is used to read from the request body in Web API?

- a. Parameter binding      d. Model binding      c. Formatters      d. All of the above

6. In Web API, the \_\_\_\_\_ attribute is prefixed to the parameter to specify that the value should be read from the URI of the request.      a. [FromUri]      b. [FromBody]      c. [FromForm]      d. [FromUrl]

See the code snippet & answer the below three(03) questions

```
[HttpGet]
```

```
public int SumNumbers(int first, int second) {
```

```
    return first + second;
```

```
}
```

7. Which type of binding in Web API is used to extract values from the response?

- a. Parameter binding      d. Model binding      c. Formatters      d. All of the above

8. Which type of URLs that will target the action method?

- a. /api/bindings/sumnumbers/10/12      b. /api/bindings/sumnumbers?first=10&second=12  
c. Both a & b      d. None of the above

9. When you are implementing a browser-based client, which type of URL usually used?

- a. /api/bindings/sumnumbers/10/12      b. /api/bindings/sumnumbers?first=10&second=12

10. \_\_\_\_\_ binding is the counterpart to \_\_\_\_\_ binding and is used for complex types.

- a. Model, Parameter      b. Parameter, Model      c. Formatters, Model      d. Formatters, Parameter

11. Model binding does require the client to have any knowledge about the data type that the action method requires. Is it true?      a. Yes      b. No

12. Which is/are the Model Binding Pitfall?

- a. Extract only one object from the request body      b. Create objects only from data in the request body  
c. Both a & b      d. None of the above

13. Which attribute is used to create a tight coupling between the client and the web service?

- a. [FromUri]      b. [FromBody]      c. [FromForm]      d. [FromUrl]

14. The \_\_\_\_\_ attribute requires the request body to be in a specific format that contains only one data value.

- a. [FromUri]      b. [FromBody]      c. [FromForm]      d. [FromUrl]

15. Which namespace are required to use "*FromUri*" attribute?

- a. System.Web      b. System.Web.Http      c. System      d. System.Net

16. Is it possible to apply "*FromUri*" attribute in multiple parameter in single action? As like as ---

```
public int SumNumbers([FromUri] Numbers calc, [FromUri] Operation op) { }
```

- a. Yes      b. No

17. Is it possible to apply "*FromBody*" attribute in multiple parameter in single action? As like as ---

```
public int SumNumbers([FromBody] Numbers calc, [FromBody] Operation op) { }
```

- a. Yes      b. No

18. We know that, the *HttpConfiguration.ParameterBindingRules* property returns a collection of parameter binding rules.

See the code snippet

```
config.ParameterBindingRules.Insert()
```

Here, the insert method takes how many arguments?

- a. One      b. Two      c. Three      d. Four

19. Which method is used to returns the contents of the request body as a string?

- a. ReadAsStreamAsync()    b. ReadAsStringAsync()    c. ReadAsFormDataAsync()    d. ReadAsMultipartAsync()

20. Which method is used to returns a **NameValueCollection** containing name-value pairs parsed from **x-www-form-urlencoded** data?

- a. ReadAsStreamAsync()    b. ReadAsStringAsync()    c. ReadAsFormDataAsync()    d. ReadAsMultipartAsync()

21.

22.

## ■■Chapter 15: Binding Simple Data Types

1. Web API binds action method parameters with \_\_\_\_\_ depending on the parameter type.

- a. URL's query string    b. request body    c. Both a & b    d. None of the above

2. If the parameter type is complex type then Web API tries to get the value from \_\_\_\_\_ by default.

- a. request body    b. query string    c. Both a & b    d. None of the above

3. The **HttpHeaders** class is defined in which namespace?

- a. System.Net    b. System.Net.Http    c. System.Web    d. System.Web.Http

4. Which method of **HttpHeaders** Class is used to adds the specified header and value to the collection?

- a. Add(header, IEnumerable<value>)    b. Add(header, value)    c. Contains(header)    d. Clear()

5. Which one is/are responsible for getting a single simple data value?

- a. Value Providers    b. Value Provider Factories    c. Both a & b    d. None of the above

6. A \_\_\_\_\_ is responsible for deciding whether the \_\_\_\_\_ is able to provide a value and provide an instance of it to Web API.

- a. Value Provider, Value Provider Factory    b. Value Provider Factory, Value Provider    c. None of the above

7. Which properties of **HttpContext** class is used to returns a **ModelStateDictionary** object used in the model validation process?

- a. Model    b. State    c. ModelState    d. Valid

8. When Web API needs a value for a simple type parameter, it tries to find one in \_\_\_\_\_ different ways.

- a. two    b. three    c. four    d. five

9. The "**ActionName**" properties defined by which class?

- a. HttpParameter    b. HttpDescriptor    c. HttpParameterDescriptor    d. HttpClient

10. Which one is true?

- a. The **ModelBindingAttribute** class is derived from **ParameterBindingAttribute**  
b. The **ParameterBindingAttribute** class is derived from **ModelBindingAttribute**

11. A parameter binding is used to pass -----

- a. a set of values    b. a single value

12. If there is no directly applied parameter binding attribute and no binding rule, then binding proceeds as though the parameter had been decorated with the \_\_\_\_\_ attribute, even if it has not.

- a.FromBody    b. FromUri    c. Both a & b    d. None of the above

13.

14.

## ■■Chapter 16 & 17: Binding Complex Data Types Part I & II

1. Built-in model binder classes are defined in which namespace?

- a. System.Web.Http    b. System.Web.Http.Binders  
c. System.Web.Http.Binders.ModelBinding    d. System.Web.Http.ModelBinding.Binders

2. Which is/are not built-in model binder class?

- a. ArrayModelBinder    b. CollectionModelBinder    c. MutableObjectModelBinder    d. None of the above

3. Which is/are true about **FromUri** attribute?

- a. Isn't a model binder    b. Responsible for creating a specific type of object  
c. Both a & b    d. None of the above

4. Is it possible to create a model class property with a type of another class?

- a. Yes    b. No

5. Which one is a broker between a set of value provider factories and the model binding classes that can create different types.

- a. Controller    b. Action method    c. Browser    d. Model binding attribute

6. Which attribute uses all of the available value provider factories?

- a. ModelBinder    b. FromUri    c. FromBody    d. All of the above

7. Which type of URL is acceptable by Web Api?

- a. /api/bindings/sumnumbers?numbers[]=2&numbers[]=5&numbers[]=100

- b. /api/bindings/sumnumbers?numbers=2&numbers=5&numbers=100

- c. Both a & b    d. None of the above

8. Which is the main limitation of the built-in model binders?



- a. Classes can be instantiated only if they have a parameterized constructor  
b. Classes can be instantiated only if they have a parameter less constructor      c. Both a & b      d. None of the above
9. Which is the main reason to create a custom binder?  
a. To instantiate a class      b. To bind controller      c. To bind element      d. None of the above
10. The *IMoelBinder* interface defined in which namespace?  
a. System.Web.Http      b. System.Web.Http.Binders  
c. System.Web.Http.ModelBinding      d. System.Web.Http.ModelBinding.Binders
11. Which attribute is used to returns the name of the action method?  
a. ActionName      b. ReturnType      c. SupportedHttpMethods      d. GetParameters()
12. Which properties of the *ModelBindingContext* class are used to returns a *ModelStateDictionary* object that is used to perform validation?  
a. Validation      b. Model      c. ModelState      d. IsValid
13. How many model binders' categories are available in web api?      a. Two      b. Three      c. Four      d. Five
14. Why we use *IValueprovider* interface in Web API?  
a. To implement custom value provider      b. To implement *IExceptionFilter* interface  
c. To implement *IMoelBinders* interface      d. None of the above
15. Which is/are true about *ValueProviders* & *ModelBinders*?  
a. *ValueProviders* are for getting data from different sources in the request  
b. *ModelBinders* take the data from the *ValueProviders* to create an object      c. Both a & b      d. None of the above
16. If the parameter is a *simple type*, Web API tries to get the value from the \_\_\_\_\_.  
a. URI      b. message body      c. Both a & b      d. None of the above
17. Where we can apply a Custom Model Binder in Web API?  
a. The ModelBinder attribute applied to the action method parameter  
b. The ModelBinder attribute applied to the model class      c. Both a & b      d. None of the above
18. Which one is used to convert from your type to another type and also form another type back to your type? (Choose Best One)  
a. Converters      b. Type converters      c. Casting      d. None of the above
19. Which *Web API Type Converter* method should return null if the data cannot be converted into a model object.  
a. CanConvertFrom()      b. ConvertFrom()      c. ConvertTo()      d. CanConvertTo()
20.  
21.

## ■■Chapter 18: Model Validation

1. Which is/are the main problems when dealing with data in a web service?  
a. under-posting      b. Over-posting      c. Unusable data (bad data)      d. All of the above
2. \_\_\_\_\_ occurs when the request doesn't contain values for all of the properties defined by a model object.  
a. Under-posting      b. Over-posting      c. unusable data (bad data)      d. IsValid
3. Which type of posting isn't always malicious and can occur when clients send values for all the properties defined by a model object even when the user hasn't directly provided a value?  
a. Under-posting      b. Over-posting      c. Both a & b      d. None of the above
4. Which properties is/are not defined by the *ModelStateDictionary* Class Used to Check Validation?  
a. IsValid      b. Count      c. Key      d. None of the above
5. The *ModelState* property returns the which object?  
a. Model      b. ModelState      c. Dictionary      d. ModelStateDictionary
6. Which properties is/are not the defined by the *ModelState* Class?  
a. Errors      b. Value      c. Both a & b      d. None of the above
7. Which binding control attribute is used to reports a validation error if the request does not contain a value for the property to which it has been applied?  
a. HttpBindNever      b. HttpBindRequired      c. Both a & b      d. None of the above
8. Is it possible to perform validation by using media type formatter?      a. Yes      b. No
9.  
10.

## ■■Chapter 19: Dispatching Requests

1. The Web API Framework uses some built-in message handlers. How many *MessageHandler* classes are used to as like as the gatekeepers to the world of Web API?      a. Two      b. Three      c. Four      d. Five
2. A response message always contains \_\_\_\_\_.  
a. a header and a body      b. a request line and a header

- c. a status line and a header                      d. none of the above

## ■■Chapter 20 & 21: URL Routing: Part I & II

- The purpose of URL routing is to match HTTP requests to \_\_\_\_\_.**  
a. Controller      b. Domain Class      c. Routes      d. None of the above
- How many properties have IHttpRouteData Interface.**      a. two      b. three      c. four      d. five
- In IHttpRoute Interface, Constraints property are usually defined as a/an \_\_\_\_\_**  
a. string      b. object      c. dynamic object      d. All of above
- The RouteAttribute class lies on which namespace?**  
a. System.Web.Http      b. System.Net.Http.Routing      c. System.Web.Http.Routing      d. None of above
- Which is not the constraints class in the System.Web.Http.Routing.Constraints namespace?**  
a. AlphaRouteConstraint      b. RegexRouteConstraint      c. HttpRequestConstraint      d. FloatRouteConstraint
- Which properties are defined by the RouteAttribute Class?**  
a. Name      b. Template      c. RoutePrefix      d. defaults
- How can we define default segment values within the route template?**  
a. [Route("dayofweek/{1}")]      b. [Route("dayofweek/day = 1")]  
c. [Route("dayofweek/{day = 1}")]      d. None of above
- How to apply a Constraint to a Direct Route?**  
a. [Route("dayofweek/{int:1}")]      b. [Route("dayofweek/day:int = 1")]  
c. [Route("dayofweek/{day:int = 1}")]      d. None of above
- Which one gets the higher precedence of each segment in the route template of each direct route.**  
a. Variable segment without a constraint      b. Catchall segment without a constraint  
c. Catchall segment with a constraint      d. Variable segment with a constraint
- 

## ■ ■ Chapter 22: Controllers and Actions

1. Where Web API delivers `HttpRequestMessages` into custom application logic so that anyone can transform them into `HttpResponseMessages`?
  - a. Controllers
  - b. Functions
  - c. Classes
  - d. Interfaces
2. Controllers are defined by the which interface and which namespace?
  - a. `IHttpController` and `System.Web.Http.Controllers`
  - b. `IHttpController` and `System.Web.Http`
  - c. `IHttpController` and `System.Web.Controllers`
  - d. `IController` and `system.Http.Controllers`
3. How many Properties are Defined by the `HttpControllerContext` Class?
  - a. Six
  - b. Four
  - c. Five
  - d. Three
4. Which one is the built-in implementation of the `IHttpController` Interface?
  - a. `ApiController` class
  - b. Action Methods
  - c. Action Results
  - d. Filters
5. Which one is not the methods defined by the `HttpActionDescriptor` class?
  - a. `GetResults ()`
  - b. `GetFilters ()`
  - c. `GetParameters ()`
  - d. `GetFilters ()`

**6. Which is not Web API Attributes That Implement the IHttpMethodProvider Interface?**

- a. AcceptVerbs
  - b. HttpGet
  - c. HttpPost
  - d. All of them
7.  
8.  
9.  
10.

**■■Chapter 23 & 24: Filters Part I & II**

**1. Which is/are true?**

- a. OnActionExecutingAsync Invoked After the action method is executed
- b. OnActionExecutedAsync Invoked After the action method is executed
- c. OnActionExecutingAsync Invoked before the action method is executed
- d. OnActionExecutedAsync Invoked before the action method is executed

**2. Who many filters are available in Web Api?**

- a. two
- b. three
- c. four
- d. five

**3. Which values Defined by the FilterScope Enumeration?**

- a. Global
- b. Action
- c. Scope
- d. Both a and b

**4. ASP.NET uses two interfaces to identity users, IPrincipal and IIdentity, both of which are defined in which namespace?**

- a. System.Security.Principal
- b. System.Security
- c. System.Identity.Security
- d. System.Web.Security

**5. Which Properties Defined by the IPrincipal Interface?**

- a. AuthenticationType
- b. IsAuthenticated
- c. IsInRole(role)
- d. Both a and b

6.  
7.

**■■Chapter 25: Error Handling**

**1. Which one is the Internal Server Error Status Code?**

- a. 504
- b. 501
- c. 500
- d. 503

**2. Which one is the Bad Request Status Code?**

- a. 400
- b. 300
- c. 301
- d. 402

**3. The HttpError class defined in which Namespace?**

- a. System.Web.Http
- b. System.Web
- c. System. HTTP
- d. System.Net

**4. How many properties are defined by the HttpError Class?**

- a. Three
- b. Four
- c. Six
- d. Seven

**5. Which is/are the Values Defined by the IncludeErrorDetailPolicy Enumeration?**

- a. Always
- b. Default
- c. LocalOnly
- d. None of the above

6.  
7.

**■■Chapter 26: Using OWIN**

**1. Which class done through the configuration for OWIN-hosted applications?**

- a. Startup
- b. Configuration
- c. Service
- d. Configuration Service

**2. Which has gets an HttpError that contains details of model validation errors?**

- a. ModelState
- b. Message
- c. MessageDetail
- d. StackTrack

**3. Which Values Used for the CatchBlock Property?**

- a. HttpServer
- b. HttpControllerDispatcher
- c. IExceptionHandler
- d. All of The above

4.  
5.