



# Reference Solution for Microsoft.Passguide.70-486.v2014-01- 07.by.DOROTHY.202q 70-486

Exam Code: 70-486

Exam Name: Developing ASP.NET 4.5 MVC Web Applications

Score: 700/1000  
Version: 18.5  
Time Limit: 120 Minutes

## MVC Basics

**(5 questions)**

### Question 1

Question 1

You are developing an ASP.NET MVC application that uses forms authentication. The user database contains a user named LibraryAdmin.

You have the following requirements:

You must allow all users to access the GetBook method.

You must restrict access to the EditBook method to the user named LibraryAdmin.

You need to implement the controller to meet the requirements. Which code segment should you use? (Each correct answer presents a complete solution. Choose all that apply.)

```
[Authorize]
public class LibraryController : Controller
{
    [AllowAnonymous]
    public ActionResult GetBook()
    {
        ...
        return View();
    }
    [Authorize(Users = "LibraryAdmin")]
    public ActionResult EditBook()
    {
        ...
        return View();
    }
}
```

☒

```

[Authorize(Roles = "Anonymous")]
public class LibraryController : Controller
{
    public ActionResult GetBook()
    {
        ...
        return View();
    }

    [Authorize(Users = "LibraryAdmin")]
    public ActionResult EditBook()
    {
        ...
        return View();
    }
}

```

☐
☒

```

[Authorize]
public class LibraryController : Controller
{
    [AllowAnonymous]
    public ActionResult GetBook()
    {
        ...
        return View();
    }

    [Authorize]
    public ActionResult EditBook()
    {
        if (this.HttpContext.User.Identity.Name != "LibraryAdmin")
        {
            return RedirectToAction("Login", "Account", new { returnUrl = "/Library/EditBook" });
        }
        else
        {
            ...
            return View();
        }
    }
}

```

☐

```

[Authorize]
public class LibraryController : Controller
{
    [Authorize(Roles="Anonymous")]
    public ActionResult GetBook()
    {
        ...
        return View();
    }

    [Authorize(Users = "LibraryAdmin")]
    public ActionResult EditBook()
    {
        ...
        return View();
    }
}

```

## Question 2

### Question 2

You are developing an ASP.NET MVC application that takes customer orders.

Orders are restricted to customers with IP addresses based in the United States. You need to implement a custom route handler.

How should you implement the route handler?

(To answer, drag the appropriate line of code to the correct location or locations. Each line of code may be used once, more than once, or not at all. You may need to drag the split bar between panes or scroll to view content.)

```

public class USOnlyRouteHandler : 
{
    public GetHandler(
        requestContext)
    {
        return new USIPHandler(requestContext);
    }
}

```

### Solution:

```

public class USOnlyRouteHandler : IRouteFactory
{
    public IHttpHandler GetHandler(RequestContext requestContext)
    {
        return new USIPHandler(requestContext);
    }
}

```

### Explanation:

<http://msdn.microsoft.com/en-us/library/system.web.routing.iroutehandler.gethttphandler.aspx>

**Question 3**

## Question 3

You are designing an HTML5 website. You need to design the interface to make the content of the web page viewable in all types of browsers, including voice recognition software, screen readers, and reading pens.

What should you do? (Each correct answer presents a complete solution. Choose all that apply.)

- ☒ Annotate HTML5 content elements with Accessible Rich Internet Application (ARIA) attributes.
- ☐ Convert HTML forms to XForms.
- ☒ Ensure that HTML5 content elements have valid and descriptive names.
- ☒ Use HTML5 semantic markup elements to enhance the pages.
- ☐ Use Resource Description Framework (RDF) to describe content elements throughout the entire page.

**Question 4**

## Question 4

You are developing an ASP.NET MVC web application in Visual Studio 2012.

The application has a model named `ReservationLocation` that contains properties named `City` and `State`. The view that displays reservations has a single text box named `loc` for entering the location information. The location is entered as city, state.

There are action methods that have `ReservationLocation` as a parameter type. You need to ensure that the `City` and `State` properties are correctly populated.

How should you implement model binding for the `ReservationLocation` type?

(To answer, drag the appropriate code segment to the correct location or locations. Each code segment may be used once, more than once, or not at all. You may need to drag the split bar between panes or scroll to view content.)

```
bindingContext.ModelType = typeof
(ReservationLocation);
```

```
var raw = bindingContext.ValueProvider.GetValue
("loc");
```

```
dynamic data = bindingContext.ValueProvider.GetValue
("loc");
```

```
dynamic data = raw.RawValue
.ToString().Split(',');
```

```
bindingContext.ModelState.Add("city,state",
new ModelState { Value = data });
```

```
dynamic data = controllerContext.RouteData
.Values[raw + "[city,state]"];
```

```
public class ReservationModelBinder : IModelBinder
{
    public object BindModel(ControllerContext controllerContext,
        ModelBindingContext bindingContext)
    {
        
        return new ReservationLocation
        {
            City = data[0],
            State = data[1],
        };
    }
}
```



Solution:

```
bindingContext.ModelType = typeof
(ReservationLocation);
```

```
var raw = bindingContext.ValueProvider.GetValue
("loc");
```

```
dynamic data = bindingContext.ValueProvider.GetValue
("loc");
```

```
dynamic data = raw.RawValue
.ToString().Split(',');
```

```
bindingContext.ModelState.Add("city,state",
    new ModelState { Value = data });
```

```
dynamic data = controllerContext.RouteData
.Values[raw + "[city,state]"];
```

```
public class ReservationModelBinder : IModelBinder
{
    public object BindModel(ControllerContext controllerContext,
        ModelBindingContext bindingContext)
    {
        var raw = bindingContext.ValueProvider.GetValue
("loc");

        dynamic data = raw.RawValue
            .ToString().Split(',');

        return new ReservationLocation
        {
            City = data[0],
            State = data[1],
        };
    }
}
```

## Question 5

### Question 5

You are developing an ASP.NET MVC application in Visual Studio 2012. The application supports multiple cultures.

The application contains three resource files in the Resources directory:

MyDictionary.resx

MyDictionary.es.resx

MyDictionary.fr.resx

Each file contains a public resource named Title with localized translation. The application is configured to set the culture based on the client browser settings. The application contains a controller with the action defined in the following code segment. (Line numbers are included for reference only.)

```
01 public ActionResult GetProducts()  
02 {  
03  
04     List<ProductModel> products = DataBase.DBAccess.GetProducts();  
05     return View(products);  
06 }
```

You need to set ViewBag.Title to the localized title contained in the resource files. Which code segment should you add to the action at line 03?

- ☐ ViewBag.Title = HttpContext.GetGlobalResourceObuect("MyDictionary", "Title");
- ☐ ViewBag.Title = HttpContext.GetGlobalResourceObject("MyDictionary", "Title", new System.Globalization.CultureInfo("en"));
- ☒ ViewBag.Title = Resources.MyDictionary.Title;
- ☐ ViewBag.Title = HttpContext.GetLocalResourceObject("MyDictionary", "Title");

## Case 1. Olympic Marathon Runners

### *Olympic Marathon Runners (5 questions)*

#### TESTLET OVERVIEW

Title: Olympic Marathon Runners

For help on how to answer the questions, click the Instructions button on the question screen.

### **Background**

You are developing an ASP.NET MVC application in Visual Studio 2012 that will be used by Olympic marathon runners to log data about training runs.

### **Business Requirements**

The application stores date, distance, and duration information about a user's training runs.

The user can view, insert, edit, and delete records.

The application must be optimized for accessibility.

All times must be displayed in the user's local time.

### **Technical Requirements**

Data Access:

Database access is handled by a public class named RunnerLog.DataAccess.RunnerLogDb. All data retrieval must be done by HTTP GET and all data updates must be done by HTTP POST.

Layout:

All pages in the application use a master layout file named \Views\Shared\\_Layout.cshtml.

Models:

The application uses the \Models\LogModel.cs model.

Views:

All views in the application use the Razor view engine. Four views located in \Views\RunLog are named:

\_CalculatePace.cshtml

EditLog.cshtml

GetLog.cshtml

InsertLog.cshtml

The application also contains a \Views\Home\Index.cshtml view.

Controllers:

The application contains a \Controllers\RunLogController.cs controller.

Images:

A stopwatch.png image is located in the \Images folder.

Videos:

A map of a runner's path is available when a user views a run log. The map is implemented as an Adobe Flash application and video. The browser should display the video natively if possible, using H264, Ogg, or WebM formats, in that order. If the video cannot be displayed, then the Flash application should be used.

Security:

You have the following security requirements:

The application is configured to use forms authentication.

Users must be logged on to insert runner data.

Users must be members of the Admin role to edit or delete runner data.

There are no security requirements for viewing runner data.

You need to protect the application against cross-site request forgery.

Passwords are hashed by using the SHA1 algorithm.

RunnerLog.Providers.RunLogRoleProvider.cs contains a custom role provider. Relevant portions of the application files follow. (Line numbers are included for reference only.)

## ***Application Structure***

### ***Controllers\RunLogController.cs***

### ***Models\LogModel.cs***

### ***Views\RunLog\\_CalculatePace.cshtml***

### ***Views\RunLog\EditLog.cshtml***

### ***Views\RunLog\GetLog.cshtml***

**Views\RunLog\InsertLog.cshtml****Views\Shared\\_Layout.cshtml****Question 31**

Question 1

You need to implement the Views\RunLog\\_CalculatePace.cshtml partial view from Views\Runlog\GetLog.cshtml to display the runner's average mile pace.

How should you implement the view?

(To answer, drag the appropriate code segments to the correct location or locations. Each code segment may be used once, more than once, or not at all. You may need to drag the split bar between panes or scroll to view content.)

The interface shows a list of code segments on the left and a target view template on the right.

**Available Code Segments (Left):**

- @Html.Partial(
- @Html.Action(
- "\_CalculatePace.cshtml", log)
- "\_CalculatePace", log)
- "\_CalculatePace")

**Target View Template (Right):**

```

<td>
    @Html.DisplayFor(model => log.Time)
</td>
<td>
    [Empty Cell]
    [Empty Cell]
</td>
<td>
    @Html.ActionLink(
        "Delete", "DeleteLog",
        new { id = log.Id })
</td>
  
```

Solution:

<pre>@Html.Partial( @Html.Action(     "_CalculatePace.cshtml", log)     "_CalculatePace", log)     "_CalculatePace")</pre>	<pre>&lt;td&gt;     @Html.DisplayFor(model =&gt; log.Time) &lt;/td&gt; &lt;td&gt;     @Html.Partial(         "_CalculatePace", log)     &lt;/td&gt; &lt;td&gt;     @Html.ActionLink(         "Delete", "DeleteLog",         new { id = log.Id })     &lt;/td&gt;</pre>
--	--

**Question 32**

Question 2

You need to implement security according to the business requirements. How should you modify RunLogController?

(To answer, drag the appropriate code segment to the correct location or locations. Each code segment may be used once, more than once, or not at all. You may need to drag the split bar between panes or scroll to view content.)

The interface shows a list of authorization attributes on the left and the RunLogController class structure on the right.

**Available Attributes:**

- [Authorize(Roles = "Admin")]
- [Authorize]
- [Authorize(Users = "Admin")]
- [AllowAnonymous]
- [Authorize(Users = "\*")]

**RunLogController Class Structure:**

```
public class RunLogController : Controller
{
    [ ]
    public ActionResult GetLog()
    ...
    public ActionResult InsertLog()
    ...
    [ ]
    public ActionResult DeleteLog(int id)
    ...
    [ ]
    public ActionResult EditLog(int id)
    ...
}
```

Solution:

```

[Authorize(Roles = "Admin")]
[Authorize]
[Authorize(Users = "Admin")]
[AllowAnonymous]
[Authorize(Users = "*")]

[Authorize]
public class RunLogController : Controller
{
    [AllowAnonymous]
    public ActionResult GetLog()
    ...

    public ActionResult InsertLog()
    ...

    [Authorize(Roles = "Admin")]
    public ActionResult DeleteLog(int id)

    [Authorize(Roles = "Admin")]
    public ActionResult EditLog(int id)
    ...
}

```

### Question 33

Question 3

You need to make the "Distance" header of the table bold in the Views/RunLog/GetLog.cshtml view. Which code segment should you use?

- ☐ `table > tr { font-weight: bold; }`
- ☐ `table > th:last-child { font-weight: bold; }`
- ☐ `table + first-child { font-weight: bold; }`
- ☒ `table > tr > th:nth-child(2) { font-weight: bold; }`

Explanation:

Answer is wrong:

<th> is bold by default

[http://www.w3schools.com/tags/tag\\_th.asp](http://www.w3schools.com/tags/tag_th.asp)

The text in <th> elements are bold and centered by default.

The text in <td> elements are regular and left-aligned by default.

2. `table > tr` selects no element, should be simply "table tr"

3. `nth-child(2)` is 2nd column, i.e. "Date"



**Question 34**

Question 4

You need to extend the edit functionality of RunLogController. Which code segment should you use?

- ```

    [HttpGet]
    [ActionName("EditLog")]
    [ValidateAntiForgeryToken]
    public ActionResult EditLog(LogModel log)
    {
        ...
    }

```
- ☐
- ```

    [HttpPost]
    [ActionName("EditLog")]
    public ActionResult EditLogValidated(LogModel log)
    {
        ...
    }

```
- ☒
- ```

    [HttpPost]
    [ActionName("EditLog")]
    [ValidateAntiForgeryToken]
    public ActionResult EditLogValidated(LogModel log)
    {
        ...
    }

```
- ☐
- ```

    [HttpPost]
    [ActionName("EditLog")]
    [RequireHttps]
    public ActionResult EditLogValidated(LogModel log)
    {
        ...
    }

```

### Question 35

#### Question 5

You need to ensure that the application uses RunLogRoleProvider custom role provider. How should you modify the web.config file?

(To answer, drag the appropriate line of code to the correct location or locations. Each line of code may be used once, more than once, or not at all. You may need to drag the split bar between panes or scroll to view content.)

"RunnerLog.Providers.RunLogRoleProvider"	<roleManager
"System.Web.Providers.RunLogRoleProvider"	enabled="true" >
"System.Web.Providers.DefaultRoleProvider"	<providers>
defaultProvider="DefaultProvider"	<add name="RLRoleProvider"
defaultProvider="RLRoleProvider"	type=
	Application="RunnerLog"/>
	</providers>
	</roleManager>

#### Solution:

"RunnerLog.Providers.RunLogRoleProvider"	<roleManager defaultProvider="RLRoleProvider"
"System.Web.Providers.RunLogRoleProvider"	enabled="true" >
"System.Web.Providers.DefaultRoleProvider"	<providers>
defaultProvider="DefaultProvider"	<add name="RLRoleProvider"
defaultProvider="RLRoleProvider"	type= "RunnerLog.Providers.RunLogRoleProvider"
	Application="RunnerLog"/>
	</providers>
	</roleManager>

## Case 2. Shopping Web Application

### ***Shopping Web Application (5 questions)***

#### TESTLET OVERVIEW

Title: Shopping Web Application

For help on how to answer the questions, click the Instructions button on the question screen.

### ***Background***

You are developing an online shopping web application.

### ***Business Requirements***

A user is not required to provide an email address. If a user enters an email address, it must be verified to be a valid email address.

Information about the first product on the product page must fade out over time to encourage the user to continue browsing the catalog.

Administrators must be able to edit information about existing customers.

Administrators also must be able to specify a default product on the product page.

### ***Technical Requirements***

General:

The web store application is in a load-balanced web farm. The load balancer is not configured to use server affinity.

The web store application is an ASP.NET MVC application written in Visual Studio 2012.

Products:

The value of the productId property must always be greater than 0.

The Products page for mobile devices must display to mobile users.

The Products page for desktop devices must display to desktop users.

Storage:

The data must be stored in a serialized XML data format.

Serialized objects must be schema-independent.

Exception handling:

Exceptions originating from IIS must display a page with support contact information.

Some page links expire, and users who access these links encounter 404 errors.

Exceptions must be logged by using the WriteLog method of the Utility class.

Browser and device support:

The application must support image format conversions from .bmp to .jpeg for mobile devices.

The application must support image format conversions from .bmp to .png for desktop devices.

### ***Application Structure***

**Customer.cs****Product.cs****web.config****Question 42**

Question 1

You need to ensure that new customers enter a valid email address. Which code should you use?  
(Each correct answer presents part of the solution. Choose all that apply.)

- ☒

```
[RegularExpression(EmailRegex, ErrorMessage = EmailErrorMessage)]
[DataType(DataType.EmailAddress)]
public string Email { get; set; }
```
- ☐

```
[RegularExpression(EmailRegex, ErrorMessage = EmailErrorMessage,
    ErrorMessageResourceType = DataType.EmailAddress)]
[ComplexType]
public string Email { get; set; }
```
- ☐ `<%: Html.Raw(m => m.Email) %>`
- ☒ `<%: Html.TextBoxFor(m => m.Email) %>`

Explanation:

spaceconte from Italy - Jul 18, 2013:

[ComplexType] is not correct.

Rick from Netherlands - Nov 05, 2013:

Answers are A + D (in this dump):

Andy: I noticed a mistake in answers on question about validation of email address. Correct answers are A and D.

B which is marked as the right answer is completely messed up.

**Question 43**

## Question 2

You are designing a Windows Communication Foundation (WCF) service that uses the Product class. You need to update the class to meet the storage requirement. What should you do? (Each correct answer presents part of the solution. Choose all that apply.)

- ☒ Mark the Product class with the DataContract attribute.
- ☐ Mark the public members of the Product class with the DataContractFormat attribute.
- ☐ Mark the Product class with the CollectionDataContract attribute.
- ☒ Mark the public members of the Product class with the DataMember attribute.

Explanation:

So as of .NET 3.5 SP1, you don't have to add data contract or data member attributes anymore - if you don't then the data contract serializer will serialize all public properties on your class, just like the XML serializer would.

HOWEVER: by not adding those attributes, you lose a lot of useful capabilities:

without [DataContract], you cannot define an XML namespace for your data to live in

without [DataMember], you cannot serialize non-public properties or fields

without [DataMember], you cannot define an order of serialization (Order=) and the DCS will serialize all properties alphabetically

without [DataMember], you cannot define a different name for your property (Name=)

without [DataMember], you cannot define things like IsRequired= or other useful attributes

without [DataMember], you cannot leave out certain public properties - all public properties will be serialized by the DCS

**Question 44**

Question 3

You need to implement the requirements for handling IIS errors. What should you do?

☒ Update the customErrors attribute in the web.config file as follows.☒

```
<customErrorsmode="On"defaultRedirect="CustomErrorView">  
<errorstatusCode="404"redirect="Error/Error404"/>  
</customErrors>
```

☐ Update the customErrors attribute in the app.config file as follows.☐

```
<customErrorsmode="On"defaultRedirect="CustomErrorView">  
<errorstatusCode="404"redirect="Error/Error404"/>  
</customErrors>
```

☐ Update the customErrors attribute in the app.config file as follows.☐

```
<customErrorsmode="On"defaultRedirect="CustomErrorView">  
<errorstatusCode="401"redirect="Error/Error401"/>  
</customErrors>
```

☐ Update the customErrors attribute in the web.config file as follows.☐

```
<customErrorsmode="On"defaultRedirect="CustomErrorView">  
<errorstatusCode="403"redirect="Error/Error403"/>  
</customErrors>
```

**Question 45**

Question 4

You need to add a method to the ProductController class to meet the exception handling requirements for logging. Which code segment should you use?

- ☒ `protected override void OnException(ExceptionContext filterContext)`  
`{`  
`Utility.WriteLog(filterContext.Exception);`  
  
`if (filterContext.HttpContext.IsCustomErrorEnabled)`  
`{`  
`filterContext.ExceptionHandled = true;`  
`this.View("Error").ExecuteResult(this.ControllerContext);`  
`}`  
`}`
- ☐ `protected override void OnException(ExceptionContext filterContext)`  
`{`  
`Utility.WriteLog(filterContext.Exception);`  
  
`if (System.Diagnostics.Debugger.IsAttached)`  
`{`  
`filterContext.ExceptionHandled = true;`  
`this.View("Error").ExecuteResult(this.ControllerContext);`  
`}`  
`}`
- ☐ `protected override void OnException(ExceptionContext filterContext)`  
`{`  
`if (!System.Diagnostics.Debugger.IsLogging())`  
`{`  
`Utility.WriteLog(filterContext.Exception);`  
`filterContext.ExceptionHandled = true;`  
`this.View("Error").ExecuteResult(this.ControllerContext);`  
`}`  
`}`
- ☐ `protected override void OnException(ExceptionContext filterContext)`  
`{`  
`Utility.WriteLog(filterContext.Exception);`  
  
`if (filterContext.HttpContext.IsDebuggingEnabled)`  
`{`  
`filterContext.ExceptionHandled = true;`  
`this.View("Error").ExecuteResult(this.ControllerContext);`  
`}`  
`}`



**Question 46**

Question 5

An advertising campaign was recently launched. Some of the ads contain a link to products that no longer exist or have IDs that have changed.

You need to ensure that all product links display a product. Which code segment should you use to configure the route?

- ☐

```
routes.MapRoute(
    "Product",
    "{productName}/{action}/{id}",
    new { action = "Show", productName = DefaultProduct }
);
```
- ☒

```
routes.MapRoute(
    "Product",
    "Product/{action}/{productName}",
    new { action = "Show", productName = DefaultProduct }
);
```
- ☐

```
routes.MapPageRoute(
    "Product",
    "Product/{action}/{productName}",
    "~/product.aspx",
    false,
    new RouteValueDictionary { { "action", "Show" }, { "productName", DefaultProduct }
    });
```
- ☐

```
routes.MapPageRoute(
    "Product",
    "{productName}/{action}/{id}",
    "~/product.aspx",
    false,
    new RouteValueDictionary { { "action", "Show" }, { "productName", DefaultProduct }
    });
```

Explanation:

Also slightly another question:

You need to update the routes to ensure that a product is always displayed on the product page.  
Which code segment should you use?



## Case 3. Video Transcoding Service

### *Video Transcoding Service (5 questions)*

#### TESTLET OVERVIEW

Title: Video Transcoding Service

For help on how to answer the questions, click the Instructions button on the question screen.

### **Background**

You are developing a video transcoding service. This service is used by customers to upload video files, convert video to other formats, and view the converted files. This service is used by customers all over the world.

### **Business Requirements**

The user-facing portion of the application is an ASP.NET MVC application. It provides an interface for administrators to upload video and schedule transcoding. It also enables administrators and users to download the transcoded videos. When videos are uploaded, they are populated with metadata used to identify the video. The video metadata is gathered by only one system when the video upload is complete. Customers require support for Microsoft Internet Explorer 7 and later. The application contains a header that is visible on every page. If the logged-on user is an administrator, then the header will contain links to administrative functions. This information is read from a cookie that is set on the server. The administrative links must not be present if an error condition is present.

### **Technical Requirements**

User Experience:

The front-end web application enables a user to view a list of videos. The main view of the application is the web page that displays the list of videos. HTML elements other than the list of videos are changed with every request requiring the page to reload.

Compatibility:

Some customers use browsers that do not support the HTTP DELETE verb. These browsers send a POST request with an HTTP header of X-Delete when the intended action is to delete.

Transcoding:

The video transcoding occurs on a set of Windows Azure worker roles. The transcoding is performed by a third-party command line tool named transcode.exe. When the tool is installed, an Environment variable named transcode contains the path to the utility. A variable named license contains the license key. The license for the transcoding utility requires that it be unregistered when it is not in use.

The transcoding utility requires a significant amount of resources. A maximum of 10 instances of the utility can be running at any one time. If an instance of the role cannot process an additional video, it must not prevent any other roles from processing that video.

The utility logs errors to a Logs directory under the utilities path.

A local Azure directory resource named perf is used to capture performance data.

Development:

Developers must use Microsoft Remote Desktop Protocol (RDP) to view errors generated by the transcode.exe utility.

An x509 certificate has been created and distributed to the developers for this purpose.

Developers must be able to use only RDP and not any other administrative functions.

## ***Application Structure***

***TranscodeWorkerRole.cs***

***ThumbnailGenerator.cs***

***VideoController.cs***

***DeleteHandler.cs***

***VideoAdminAttributes.cs***

***AdminVerifierFactory.cs***

***ImageConverter.cs***

## ***Question 56***

## Question 1

You need to ensure that developers can connect to a Windows Azure role by using RDP. What should you do?

- ☐ Export a certificate without a private key. Upload the .cer file to the Management Certificates section on the Azure Management Portal.
- ☐ Export a certificate with a private key. Upload the .pfx file to the Management Certificates section on the Azure Management Portal.
- ☐ Export a certificate without a private key. Upload the .cer file to the Certificates section under the TranscodeWorkerRole hosted service on the Azure Management Portal.
- ☒ Export a certificate with a private key. Upload the .pfx file to the Certificates section under the TranscodeWorkerRole hosted service on the Azure Management Portal.

**Question 57**

## Question 2

Customers download videos by using HTTP clients that support various content encodings. You need to configure caching on the DownloadVideo action to maximize performance. Which attribute should you add?

- ☐ `[OutputCache(Location = OutputCacheLocation.Downstream, VaryByParam = "videoId", VaryByCustom = "browser")]`
- ☐ `[OutputCache(Location = OutputCacheLocation.Any, VaryByCustom = "compressionMethod", VaryByContentEncoding = "all")]`
- ☐ `[OutputCache(Location = OutputCacheLocation.ServerAndClient, VaryByHeader = "Cache-Control")]`
- ☐ `[OutputCache(Location = OutputCacheLocation.Downstream, VaryByContentEncoding = "gzip;q=1.0, compress; q=0.5, *;q=0")]`
- ☒ `[OutputCache(Location = OutputCacheLocation.Any, VaryByParam = "videoId", VaryByContentEncoding = "gzip;q=1.0, compress; q=0.5, *;q=0")]`

**Question 58**

Question 3

You need to ensure that all the MVC controllers are secure. Which code segment should you use as the body for the CreateController method in AdminVerifierFactory.es?

- ☐ `var controller = base.CreateController(requestContext, controllerName) as Controller;  
var attributes = controller.GetType().Attributes.ToString();  
if (!attributes.Contains("VideoAdminAttribute"))  
 throw new Exception("Not an Administrator");  
return controller;`
- ☐ `if (requestContext.HttpContext.Items["Administrator"] == null)  
 throw new Exception("Not an Administrator");  
return base.CreateController(requestContext, controllerName) as Controller;`
- ☒ `var controller = base.CreateController(requestContext, controllerName) as Controller;  
var hasFilter = controller.GetType().CustomAttributes.Any  
 (x => x.AttributeType.Name == "VideoAdminAttribute");  
if (hasFilter == null)  
 throw new Exception("Not an Administrator");  
return controller;`
- ☐ `if (requestContext.RouteData.Values["Administrator"] == null)  
 throw new Exception("Not an Administrator");  
return base.CreateController(requestContext, controllerName) as Controller;`

**Question 59**

Question 4

You are creating a new authentication system that uses an HTTP header value. The existing authentication system must continue to operate normally.

You need to implement the custom authentication. What should you do?

(Each correct answer presents a complete solution. Choose all that apply.)

- ☐ Create a class derived from ActionResult and check for a valid HTTP header value in the ExecuteResult method. Change all actions to return this new class.
- ☐ Create an HttpHandler to check for a valid HTTP header value in the ProcessRequest method.
- ☒ Create an HttpModule and check for a valid HTTP header value in the AuthenticateRequest event.
- ☒ Create a class derived from AuthorizeAttribute and check for a valid HTTP header value in the AuthorizeCore method. Change usages of the existing AuthorizeAttribute to use the new class.

## Question 60

### Question 5

The designer for the website gave you the following image as the design for the page.



The normal color for the tab is #2da4c2, and the color when the mouse is over the tab is #ffd800. The HTML that implements the navigation tab is as follows.

```
<ul id="nav">
  <li><a href="/">Home</a></li>
  <li><a href="/">About</a></li>
  <li><a href="/">Contact</a></li>
</ul>
```

You need to implement the design. What should you do? (To answer, select the appropriate options in the answer area.)

```
float: left;
background-color: #ffd800;
background-color: #2da4c2;
text-decoration: none;
list-style: none;
border-radius: 15px;
word-wrap: break-word;
background-clip: padding-box;
cursor: pointer;
background-origin: border-box;
```

```
ul#nav {
  font-size: 1.3em;
  font-weight: 600;
}
ul#nav li {
  text-align: center;
}
ul#nav li a {
  color: #FFF;
  border-radius: 12px 12px 0 0;
  padding: 0 12px 0 12px;
  margin: 0 4px 0 4px;
}
ul#nav li a:hover {
  color: #333;
```

Solution:

```

float: left;
background-color: #ffd800;
background-color: #2da4c2;
text-decoration: none;
list-style: none;
border-radius: 15px;
word-wrap: break-word;
background-clip: padding-box;
cursor: pointer;
background-origin: border-box;

```

```

ul#nav {
  font-size: 1.3em;
  font-weight: 600;
}
ul#nav li {
  float: left;
  list-style: none;
  text-align: center;
}
ul#nav li a {
  background-color: #2da4c2;
  color: #FFF;
  text-decoration: none;
  border-radius: 12px 12px 0 0;
  padding: 0 12px 0 12px;
  margin: 0 4px 0 4px;
}
ul#nav li a:hover {
  color: #333;
  background-color: #ffd800;
  text-decoration: none;
}

```

## Braindump

### **Case Study (5 questions)**

Cycling Club

### **Background**

You are making use of Visual Studio 2012 to create an ASP.NET MVC application to log training information for a cycling club.

### **Business Requirements**

The application needs to host data regarding training dates, distances, and duration. Application users must be able to view and modify data. The application itself should be highly accessible. The application should also allow for times to be presented in the user's native time.

### **Technical Requirements**

A public class, named `CyclistLog.DataAccess.CyclistLogDb`, deals with database access. HTTP GET should be used for all data retrieval. HTTP POST should be used for all data updates.

A master layout file, named `Views\Shared\_Layout.cshtml`, is used by all pages in the application.

The application makes use of the `\Models\LogModel.cs` model.

The Razor view engine is used for all views in the application. The `Views\CyclingLog` includes the `_CalculateSpeed.cshtml`, `EditLog.cshtml`, `GetLog.cshtml`, and `InsertLog.cshtml` views. The application, however, includes a `Views\li-lomelindex.cshtml` view.

The controller included in the application is `\Controllers\CyclingLogController.cs`. You have also included a `timer.png` image in the `\Images` folder.

When a user examines a cycling log, the users trail map is accessible. This map is configured as a video and an Adobe Flash application. The browser should using H264, Ogg, or WebM formats (in this order) to present the video natively. The Flash application should be used in the event that the video cannot be presented.

### **Security**

The application should make use of forms authentication, and requires user logon for entering information. The editing or deleting of cyclist information requires a user to be a member of the Admin role. Users must be members of the Admin role to. You need to the application should be defended against cross-site request forgery. The SHA1 algorithm should be used to hash passwords.

A custom role provider must be included in `CyclistLog.Providers.CyclingLogRoleProvider.cs`.



**Question 65**

Question 1

You have received instructions to make sure that the Views\CyclingLog\\_CalculateSpeed.cshtml partial view, from the Views\Cyclelog \GetLog.cshtml, is configured to show the cyclist's average speed per kilometer.

You need to write the necessary code to apply the view.

Which of the following is a method that should be included in your code?

- ☒ The DisplayFor method.
- ☐ The ExhibitFor method.
- ☐ The PresentFor method.
- ☐ The ConcealFor method.

**Question 66**

Question 2

You have been instructed to meet the business requirements with regards to security.

You are required to make changes to the CyclingLogController.

Which of the following actions should you take?

- ☒ You should consider adding code to assign users the Administrator role.
- ☐ You should consider adding code to assign users the Advanced Operator role.
- ☐ You should consider adding code to assign users the Author role.
- ☐ You should consider adding code to assign users the Report Security Administrator role.

**Question 67**

Question 3

You have been instructed to insert a line of code into your existing code that allows for the "Distance" header of the table to be displayed in bold in the Views/CyclingLog/GetLog.cshtml view.

Which of the following should be included in the line of code?

- ☐ You should consider including the :first-child pseudo-class.
- ☐ You should consider including the :last-child pseudo-class.
- ☒ You should consider including the :nth-child pseudo-class.
- ☐ You should consider including the :nth-last-child(n) pseudo-class.

**Question 68**

Question 4

You have been asked to make sure that the edit action of RunLogController is extended.

You start by writing the following lines of code:

```
[HttpPost]
[ActionName ("Editlog")]
```

You are required to make use of a specific attribute next.

Which of the following is the attribute in question?

- ☐ The [ValueProviderCollection] attribute.
- ☐ The [ValidateInput] attribute.
- ☒ The [ValidateAntiForgeryToken] attribute.
- ☐ The [ValidatableObjectAdapter] attribute.

**Question 69**

Question 5

You have been tasked with making sure that the application is configured to make use of a custom role provider, named CyclingLogRoleProvider.

Which of the following actions should you take?

- ☐ You should consider making changes to the machine.config file.
- ☐ You should consider making changes to the app.config file.
- ☒ You should consider making changes to the web.config file.
- ☐ You should consider making changes to the client.config file.

## **Case Study (5 questions)**

Online Retail Web Application

### **Background**

You are making use of Visual Studio 2012 to create an ASP.NET MVC online retail web application.

### **Business Prerequisites**

The entering of user e-mail addresses should not be compulsory. In the event that a user does provide an e-mail address, the validity of the address should be authenticated. To motivate users to keep on browsing the item list, you have to make sure that the first item on the item page gradually disappears.

Furthermore, you have to make sure that administrators have the ability to manage current client data, and also identify a default item on the item page.

### **Technical Prerequisites**

General:

A load-balanced web farm, where the load balancer has not been configured to employ server affinity, hosts the application

With regards to items, you are informed that the itemId property value should not be less than or equal to 0. Furthermore, the Items page for mobile devices should be presented to mobile users and the Items page for desktop computers should be presented to desktop users

Storage:

You are informed that information should be saved in a serialized XML data format, and that serialized objects should be independent of the schema.

Exception handling:

A page showing support contact details should be presented for IIS exceptions. 404 errors resulting from expired links cause exceptions to be thrown. Some page links expire, and users who access these links encounter 404 errors. The WriteLog method of the Utility class should be used to log these exceptions.

Browser and device support:

The application should allow for .bmp format images to be changed to .jpeg format images for mobile devices, and to .png format images for desktop computers.

## **Question 72**

Question 1

You have been tasked with creating a Communication Foundation (WCF) service that makes use of the Item class. You are informed that the Item class should be updated in such a way that it satisfies storage prerequisites.

You start by marking the Item class with the DataContract attribute.

Which of the following actions should you take NEXT?

- ☐ You should consider making sure that the public members of the Item class is marked with the EnumMember attribute.
- ☐ You should consider making sure that the private members of the Item class is marked with the DataMember attribute.
- ☐ You should consider making sure that the private members of the Item class is marked with the EnumMember attribute.
- ☒ You should consider making sure that the public members of the Item class is marked with the DataMember attribute.

### Question 73

Question 2

You have received instructions to make sure that IIS errors are handled in accordance with the prerequisites.

Which of the following actions should you take?

- ☒ You should consider bringing the customErrors attribute in the web.config file up to date.
- ☐ You should consider bringing the customErrors attribute in the machine.config file up to date.
- ☐ You should consider bringing the customErrors attribute in the app.config file up to date.
- ☐ You should consider bringing the customErrors attribute in the client.config file up to date.

### Question 74

Question 3

You have been instructed to write code that creates a method for the ItemController class. The method must satisfy the prerequisites to handle exceptions related to logging.

Which of the following actions should you take?

- ☐ You should consider creating an OnResultExecuted method.
- ☐ You should consider creating an OnAuthorization method.
- ☒ You should consider creating an OnException method.
- ☐ You should consider creating an OnActionExecuting method.

**Question 75**

Question 4

You have received instructions to make sure that the prerequisites with regards to the ItemId are suitably met.

Which of the following actions should you take?

- ☒ You should consider changing a method of ItemController.
- ☐ You should consider changing a method of ItemProperty.
- ☐ You should consider changing a method of ItemObject.
- ☐ You should consider changing a method of ItemAttribute.

**Question 76**

Question 5

You are preparing to make sure that the prerequisites for client information management are suitably met.

You start by configuring the Controllers folder to include a class, named ClientController.

Which of the following actions should you take NEXT?

- ☒ You should consider configuring the ClientController to include the Edit method.
- ☐ You should consider configuring the ClientController to include the Run method.
- ☐ You should consider configuring the ClientController to include the Client method.
- ☐ You should consider configuring the ClientController to include the Reword method.

## **Case Study (5 questions)**

Digital Data Conversion

### **Background**

You are developing a service that allows for the direct digital-to-digital data conversion of one encoding to another. Users currently employs the service for the uploading of audiovisual media files for conversion to different formats, as well as for the viewing of the converted files.

### **Business Requirements**

The client-side section of the application has been created as an ASP.NET MVC application using Visual Studio 2012. The client-side of the application allows for the uploading of audiovisual media and the planning of transcoding by administrators. Furthermore, administrators and users are allowed to download the audiovisual medias that have gone through the direct digital-to-digital data conversion process.

Metadata is attached to uploaded audiovisual medias for identification purposes. As soon as the audiovisual media upload is complete, this metadata is collected by a single system.

User computers must have Microsoft Internet Explorer 7 installed, as a minimum.

The application excludes a header that can be viewed on all pages. The header has been configured to display links to administrative functions for users logged in as administrators. A cookie, which is configured on the server, supplies this data. In the event of an error condition existing, the administrative links should not be displayed.

### **Technical Requirements**

User Experience:

Users are able to scrutinize a list of audiovisual medias via the front-end web application. The presented page is configured as the application's principal view. Every request causes the HTML elements, other than the list of audiovisual medias, to change. This, in turn, causes the page to reload.

Compatibility:

Some user browsers, which do not support the HTTP DELETE verb, sends a POST request with an HTTP header of X-Delete when the expected operation is to delete.

Transcoding:

A set of Windows Azure worker roles has been configured for transcoding purposes. A third-party command line tool must be installed for transcoding. The path to the utility is hosted by an Environment variable, subsequent to tool installation. The license key is included in a variable, named license. When the utility is not in use, it has to be unregistered. Furthermore, a substantial quantity of resources is consumed by the utility.

At any given time, the utility can have ten instances of the utility running, at most. An instance of the role must allow other roles to process the additional audiovisual media that it cannot.

Errors are logged to a Logs directory under the utilities path by the utility.

Performance information is collected by a local Azure directory resource, named perf.

Development:

Errors generated by the utility must be examined by developers via Microsoft Remote Desktop Protocol (RDP). This functionality has been provided by the creation of an x509 certificate that has been distributed to the developers. Only RDP must be used by developers for this function.

## **Question 81**

Question 1

You have been instructed to make sure that developers have the ability to access a Windows Azure role via RDP.

You start by exporting a certificate with a private key.

Which of the following actions should you take NEXT?

- ☐ You should consider uploading the .cer file to the Certificates section of the TranscodeWorkerRole hosted service on the Azure Management Portal.
- ☐ You should consider downloading the .cer file from the Certificates section of the TranscodeWorkerRole hosted service on the Azure Management Portal.
- ☐ You should consider downloading the .pfx file from the Certificates section of the TranscodeWorkerRole hosted service on the Azure Management Portal.
- ☒ You should consider uploading the .pfx file to the Certificates section of the TranscodeWorkerRole hosted service on the Azure Management Portal.

**Question 82**

Question 2

You have been instructed to maximize performance for users who download audiovisual media via

HTTP clients that support different content encodings by configuring caching on the DownloadAudiovisualMedia action.

You want to write code to include the necessary attribute.

Which of the following is a property that should be included in your code?

- ☐ The VaryByControl property.
- ☐ The VaryByCustom property.
- ☐ The VaryByHeader property.
- ☐ The VaryByParam property.
- ☒ The VaryByContentEncoding property.

**Question 83**

Question 3

You have received instructions to create a new authentication strategy. The new strategy must make use of an HTTP header value. Furthermore, you are informed that the operation of the current authentication strategy should not be disrupted.

After creating the new strategy, you are required to apply it.

Which of the following actions should you take? (Choose all that apply.)

- ☒ You should consider creating a class based on the AuthorizeAttribute class.
- ☐ You should consider creating a class based on the AuthorizationContext class.
- ☒ You should consider checking for a valid HTTP header value in the AuthorizeCore method.
- ☐ You should consider checking for a valid HTTP header value in the OnAuthorization method.
- ☐ You should consider checking for a valid HTTP header value in the OnCacheAuthorization method.



**Question 84**

Question 4

You have received instructions to improve the execution of the audiovisual media transfer.

You are preparing to write the necessary code.

Which of the following actions should you take?

- ☐ You should consider making use of the DeflateStream Class.
- ☐ You should consider making use of the ZipArchive Class.
- ☐ You should consider making use of the ZipFile Class.
- ☒ You should consider making use of the GZipStream Class.

**Question 85**

Question 5

You have received instructions to make sure that the utility registration occurs in accordance with it license.

To achieve this, you are preparing to write code that includes a method in the TranscodeWorkerRole class.

Which of the following is a process method that should be included in your code?

- ☐ The OnExited method.
- ☒ The WaitForExit method.
- ☐ The WaitForInputIdle method.
- ☐ The Kill method.

**(5 questions)****Question 88**

Question 1

You are employed as a developer at PassGuide.com. PassGuide.com has a single Active Directory domain, named PassGuide.com.

You have received instructions to create a new PassGuide.com website, using HTML5. You have been informed that the interface has to allow for the web page content to be accessible to disabled users.

Which of the following actions should you take?

- ☐ You should consider including the use of File API attributes.
- ☐ You should consider including the use of WebSocket API attributes.
- ☒ You should consider including the use of Accessible Rich Internet Application (ARIA) attributes.
- ☐ You should consider including the use of Geolocation attributes.
- ☐ You should consider including the use of Indexed Database API attributes.

**Question 89**

Question 2

You are employed as a developer at PassGuide.com. PassGuide.com has a single Active Directory domain, named PassGuide.com.

You are making use of Visual Studio 2012 to create a new ASP.NET MVC web application for PassGuide.com. You want to make sure that the new application has access to content files located on the same IIS instance as the application.

Subsequent to initializing the application, you find that there are problems relating to the application's performance.

Which of the following actions should you take fix the problem?

- ☐ You should consider including the use of WebSocket API attributes.
- ☒ You should consider making use of ASP.NET MVC bundling to join the content files.
- ☐ You should consider including the use of Accessible Rich Internet Application (ARIA) attributes.
- ☐ You should consider making use of ASP.NET MVC bundling to separate the content files.

**Question 90**

Question 3

You are employed as a developer at PassGuide.com. PassGuide.com has a single Active Directory domain, named PassGuide.com.

You are making use of Visual Studio 2012 to create a new ASP.NET MVC web application for PassGuide.com. The new application allows for users from various countries to access the application based on their respective cultures.

As a result, the application includes various resource files in the Resources directory. These files include a public resource with localized translation.

You are required to make use of a specific WebViewPage property so that the application sets the user's client browser according to the settings.

Which of the following actions should you take?

- ☐ You should consider making use of the ViewContext property.
- ☐ You should consider making use of the Html property.
- ☒ You should consider making use of the ViewBag property.
- ☐ You should consider making use of the ViewData property.

**Question 91**

Question 4

You are employed as a developer at PassGuide.com. PassGuide.com has a single Active Directory domain, named PassGuide.com.

You have recently developed an ASP.NET application for PassGuide.com. You are planning to assess the new application by running tests that target the application's business layer.

Which of the following actions should you take?

- ☐ You should consider making use of a Windows Forms Control.
- ☐ You should consider making use of a Coded UI Test Project.
- ☒ You should consider making use of a Unit Test Project.
- ☐ You should consider making use of a Web Performance and Load Test Performance Project.

**Question 92**

Question 5

You are employed as a developer at PassGuide.com. PassGuide.com has a single Active Directory domain, named PassGuide.com.

You are in the process of creating unit tests that makes use of sealed classes. You want to make sure that dependencies in the unit tests are suitably created, maintained, and injected.

You want to configure the use of a suitable isolation method.

Which of the following actions should you take?

- ☐ You should consider making use of counterfoil type isolation methods.
- ☐ You should consider making use of remnant type isolation methods.
- ☒ You should consider making use of shim type isolation methods.
- ☐ You should consider making use of stump type isolation methods.

## ExamRef

### (5 questions)

#### Question 115

##### Question 1

You are designing an application in which a section of the main page will be populated by content from a third-party provider. You do not have control over the responsive-ness of the client or how much information will be returned with each request.

The call is to a RESTful service and will return the information formatted in Extensible Markup Language (XML). What is the best way to implement this application?

- ☒ Design a model that handles the data call to populate the model. Create a partial view containing only this display area and put an asynchronous service call that returns this model in the partial view controller.
- ☐ Put a synchronous service call into the main page controller.
- ☐ Create a partial view containing only this display area and put a synchronous service call in the partial view controller.
- ☐ Create a partial view containing only this display area and put an asynchronous service call in the partial view controller.

##### Explanation:

A. Correct: Because you do not have control over the responsiveness of the third-party provider and you do not know how much data might be returned from each call, you should wrap the call in the asynchronous framework. Providing the data in a strongly-typed model gives it more flexibility than working with the raw XML on the client side.

B. Incorrect: You do not know how long the call to the third party will take, and putting a synchronous call into the main page will not give any response until the call is completed.

C. Incorrect: You do not want to use a synchronous call in this case due to the unknown response time.

D. Incorrect: Although you can take this approach, it infers that you will manipulate the third-party response data in either the controller or the view. SoC recommends that this manipulation occur in a model.

1.1.1

**Question 116**

## Question 2

You have been given requirements for a dashboard page that will contain summary information from your order processing system in a single display table.

However, this summarization needs to be done by combining data requests from the order system, the shipping system, and the accounting system. The dashboard page will be the only place you use this combined data. What is the best way to implement this requirement?

- ☐ Make the various data requests and compile the information in the controller for display.
- ☒ Create an individual model for each of the data requests, and then create a view-specific model that calls those models and merges the data.
- ☐ Create a model for the summary data and handle the various data requests within that model as well as the merging of the data.
- ☐ Create an individual model for each of the data requests and then merge the data on the client side for display.

Explanation:

- A. Incorrect: You should not perform any data manipulation in the controller.
- B. Correct: You will have a better chance of code reuse if you break down the separate calls into their own models and then create another model to pull them together and compile them.
- C. Incorrect: Although this would be a plausible way to implement the solution, it is not the best. If any other work came up that uses any of the calls within this model, you will either have to refactor the code to extract it at that point or have duplicate code.
- D. Incorrect: The fact that this data can be merged into a single table display shows there is some intrinsic business worth to the information in this format. Merging on the client side goes against SoC considerations.

1.1.2

**Question 117**

Question 3

A significant change has been requested in an application maintained within your company. The application is a classic ASP application that uses custom Open Database Connectivity (ODBC) drivers to connect to a relational data repository on a mainframe computer. The CIO decided that the company needs to replace this 30-year-old system. The team that worked on the original project is made up of developers who have never worked with an object-oriented approach before.

Which approaches would be the best to use when designing your initial schema in Entity Framework? (Choose all that apply.)

- ☐ Create your own custom design because it's too much work to manage an inexperienced staff.
- ☐ Use Code First.
- ☒ Use Model First.
- ☒ Use Database First.

Explanation:

A. Incorrect: You should incorporate your team into the project as soon as possible.

B. Incorrect: Because the team has no experience with object-oriented programming, the Code First approach is unlikely to be the most efficient way to create the new schema.

C. Correct: The use of the Entity Designer as an integral component in the Model First approach will help unfamiliar users to walk through the process.

D. Correct: There is already a working relational database for the application, although it is in a system that will be replaced. A port of the design should be considered.

1.1.3

**Question 118**

Question 4

You are designing an application that allows employees to change their human resources (HR) information, such as next of kin and direct deposit information. The requirements state that the application should talk directly to the HR systems' database.

However, at a recent company meeting, the CFO announced that the company will be converting to a new HR system over the next two years. They will take an additional year to move employees to the new system, one department at a time. How will this affect your design?

- ☐ It won't; the requirements state that the application should talk directly to the HR systems' database.
- ☐ You should ensure your naming convention for the database as clearly as possible so you can rework your data calls with minimal changes.
- ☒ You should implement the Repository pattern with the current HR system being the first repository that is built. When the second system comes online, you implement that data access using the same pattern.
- ☐ You should map the model directly to the database calls, anticipating that you will have to change the model as the new system rolls out.

Explanation:

- A. Incorrect: It is the designer's job to ensure that any known enhancements or future changes are accounted for. Although this approach follows the requirements, it is not the best long-term solution.
- B. Incorrect: This solution does not provide the proper level of abstraction; it requires either a "one or the other" approach to supporting the HR system, or an approach in which you have to manage which database you are calling from within each data call.
- C. Correct: Using the Repository pattern will give you a level of abstraction into the data layer. When you create the second data access component for the new HR system, you can then differentiate on a user or departmental level which implementation to use.
- D. Incorrect: This solution does not provide the proper level of abstraction; it requires either a "one or the other approach" to supporting the HR system, or an approach in which you have to manage which database you are calling from within each data call.

1.1.4



**Question 119**

Question 5

You are developing an application. One requirement is that part of your data access layer needs to be available to a third party, that wants to get this information from a REST URL in XML.

Your company does not have experience with web services, but you have several websites running ASP.NET MVC 4. How could you design and provide these new services? (Choose all that apply.)

- ☐ Task an individual on staff to learn WCF, and have this individual develop and deploy these new services using WCF.
- ☒ Use the Web API to create REST services using ApiController in which the serialization type is defined by the Accepts property of the browser.
- ☒ Build a basic ASP.NET MVC 4 project in which the view simply passes through the information provided by the controller, and the controller manages the code for serializing the response.
- ☒ Create an ASP.NET ASMX services file to get, serialize, and return the data.

Explanation:

A. Incorrect: Although you would eventually be able to get a WCF REST services, it would not be efficient.

B. Correct: Using the Web API is a straightforward way to present REST services.

C. Correct: Using ASP.NET MVC is another way to create a controller that will return XML.

D. Incorrect: An ASMX web service is SOAP-based, not REST-based.

1.2.1

## Obsolete

**(4 questions)**

### Question 199

Question 1

You are developing an ASP.NET MVC application by using Visual Studio 2012. The application throws and handles exceptions when it runs.

You need to examine the state of the application when exceptions are thrown. What should you do?

- ☒ From the DEBUG menu in Visual Studio 2012, select Exceptions. Enable the Thrown check box for Common Language Runtime Exceptions.
- ☐ From the DEBUG menu in Visual Studio 2012, select Exceptions. Disable the User-unhandled check box for Common Language Runtime Exceptions.
- ☐ Add the following code to the Web.config file of the application:  
☐  
☐ `<customErrors mode="On">`  
☐ `<error statusCode="500" redirect="CustomErrors.html" />`  
☐ `</customErrors>`
- ☐ Add the following code to the Web.config file of the application:  
☐  
☐ `<customErrors mode="On" >`  
☐ `<error statusCode="404" redirect="CustomErrors.html"/>`  
☐ `</customErrors>`

### Question 200

Question 2

You are developing an ASP.NET MVC web application in Visual Studio 2012. The application requires several thousand content files. All content is hosted on the same IIS instance as the application.

You detect performance issues when the application starts. You need to resolve the performance issues.

What should you do?

- ☐ Enable compression in IIS.
- ☐ Move the content to a second server.
- ☒ Combine the content files by using ASP.NET MVC bundling.
- ☐ Implement HTTP caching in IIS.

**Question 201**

Question 3

Scenario ASP.NET MVC application

Business Requirements

The application stores date, distance, and duration information about a user's training runs. The user can view, insert, edit, and delete records.

The application must be optimized for accessibility.

All times must be displayed in the user's local time.

The date of the run must be displayed in ViewsRunlogGetLog.cshtml. The timestamp must not be displayed. You need to display the date of the run according to the business requirements.

Which code segment should you use?

- ☐ `@Html.DisplayFor(model => log.RunDate)`
- ☐ `@log.RunDate.ToShortDateString()`
- ☐ `@log.RunDate.ToString()`
- ☒ `@Html.DisplayFor(model => log.ShortDate)`

Explanation:

Azad, 16.10.2016

**Question 202**

Question 4

You are developing an ASP.NET MVC web application for viewing a list of contacts. The application is designed for devices that support changes in orientation, such as tablets and smartphones.

The application displays a grid of contact tiles in portrait mode. When the orientation changes to landscape, each tile in the grid expands to include each contact's details. The HTML that creates the tiled interface resembles the following markup.

```
<ul class="contacts">
  <li>
    
    <div>Details</div>
  </li>
</ul>
```

The CSS used to style the tiles in landscape mode is as follows.

```
ul.contacts > li {
  width: 150px;
}

ul.contacts > li > div {
  display: block;
}
```

If this CSS is omitted, the existing CSS displays the tiles in portrait mode. You need to update the landscape-mode CSS to apply only to screens with a width greater than or equal to 500 pixels.

Which code segment should you use?

- ☐ @media screen and (width >= 500px) { . . . }
- ☒ @media screen and (min-width: 500px) { . . . }
- ☐ @media screen (min-width: 500px, max-width: 1000px) { . . . }
- ☐ @media resolution (min-width: 500px) { . . . }

Explanation:

<http://www.javascriptkit.com/dhtmltutors/cssmediaqueries.shtml>