

MVC_70_486.73q

Number: 70-486

Passing Score: 700

Time Limit: 120 min

File Version: 0

Exam : 70-486

ASP.NET MVC Web Applications

Testlet 1

Olympic Marathon

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

```
RC01  public class RunLogController : Controller
RC02  {
RC03      public ActionResult GetLog()
RC04      {
RC05          List<LogModel> log = RunnerLogDb.GetLogsFromDatabase();
RC06          return View(log);
RC07      }
RC08
RC09      public ActionResult InsertLog()
RC10      {
RC11          LogModel log = new LogModel();
RC12          log.RunDate = DateTime.Now;
RC13          return View(log);
RC14      }
RC15
RC16      [HttpPost]
RC17      public ActionResult InsertLog(LogModel log)
RC18      {
RC19          RunnerLogDb.InsertLog(log);
RC20          return RedirectToAction("GetLog");
RC21      }
RC22
RC23      public ActionResult DeleteLog(int id)
RC24      {
RC25          RunnerLogDb.DeleteLog(id);
RC26          return RedirectToAction("GetLog");
RC27      }
RC28
RC29      public ActionResult EditLog(int id)
RC30      {
RC31          LogModel log = RunnerLogDb.GetRunnerLog(id);
RC32          return View(log);
RC33      }
RC34 }
```

Models\LogModel.cs

```
LM01  public class LogModel
LM02  {
LM03      [Required]
LM04      public int Id { get; set; }
LM05
LM06      [Required]
LM07      public DateTime RunDate { get; set; }
LM08
LM09      [Required]
LM10      [Range (0.01, 1000.00)]
LM11      public double Distance { get; set; }
LM12
LM13      [Required]
LM14      public TimeSpan Time { get; set; }
LM15
LM16      public string ShortDate
LM17      {
LM18          get
LM19          {
LM20              return RunDate.ToLocalTime().ToString("yyyy-MM-dd");
LM21          }
LM22      }
LM23 }
```

Views\RunLog_CalculatePace.cshtml

```
CP01  @model RunnerLog.Models.LogModel
CP02  @(Convert.ToInt32(Model.Time.TotalMinutes / Model.Distance)) Min
CP03  @(Convert.ToInt32(Model.Time.TotalSeconds % 60 / Model.Distance))
```

Views\RunLog>EditLog.cshtml

```
EL01  @model RunnerLog.Models.LogModel
EL02  <h2>Edit Log Item</h2>
EL03  <script src="@Url.Content("~/Scripts/jquery.validate.min.js")"></script>
EL04  <script src="@Url.Content("~/Scripts/jquery.validate.unobtrusive.min.js")"></script>
EL05  @using (Html.BeginForm()) {
EL06      @Html.AntiForgeryToken()
EL07      @Html.ValidationSummary(true)
EL08      <fieldset>
EL09          <legend>LogModel</legend>
EL10          <h3>
EL11              Log Id: @Model.Id
EL12          </h3>
EL13          <div>
EL14              @Html.LabelFor(model => model.Distance)
EL15          </div>
EL16          <div>
EL17              @Html.EditorFor(model => model.Distance)
EL18              @Html.ValidationMessageFor(model => model.Distance)
EL19          </div>
EL20          <div>
EL21              @Html.LabelFor(model => model.Time)
EL22          </div>
EL23          <div>
EL24              @Html.EditorFor(model => model.Time)
EL25              @Html.ValidationMessageFor(model => model.Time)
EL26          </div>
EL27          <p>
EL28              <input type="submit" value="Save" />
EL29          </p>
EL30      </fieldset>
EL31  }
```

Views\RunLog\GetLog.cshtml

```
GL01  @model List<RunnerLog.Models.LogModel>
GL02  <h2>View Runs </h2>
GL03  <table>
GL04      <tr>
GL05          <th>Id </th>
GL06          <th>Date </th>
GL07          <th>Distance </th>
GL08          <th>Duration </th>
GL09          <th>Avg Mile Pace </th>
GL10      </tr>
GL11  @foreach (RunnerLog.Models.LogModel log in Model)
GL12  {
GL13      <tr>
GL14          <td>
GL15              @Html.DisplayFor(model => log.Id)
GL16          </td>
GL17          <td>
GL18
GL19          </td>
GL20          <td>
GL21              @Html.DisplayFor(model => log.Distance)
GL22          </td>
GL23          <td>
GL24              @Html.DisplayFor(model => log.Time)
GL25          </td>
GL26          <td>
GL27
GL28          </td>
GL29          <td>
GL30              @Html.ActionLink("Edit", "EditLog", new { id = log.Id })
GL31          </td>
GL32          <td>
GL33              @Html.ActionLink("Delete", "DeleteLog", new { id = log.Id })
GL34          </td>
GL35      </tr>
GL36  }
GL37  </table>
```

Views\RunLog\InsertLog.cshtml

```
IL01 @model RunnerLog.Models.LogModel
IL02 <script src="@Url.Content("~/Scripts/jquery.validate.min.js")"></script>
IL03 <script src="@Url.Content("~/Scripts/jquery.validate.unobtrusive.min.js")"></script>
IL04 @using (Html.BeginForm())
IL05 {
IL06     @Html.ValidationSummary(true)
IL07     <fieldset>
IL08         <legend>LogModel</legend>
IL09
IL10         <div>
IL11             @Html.LabelFor(model => model.RunDate)
IL12         </div>
IL13         <div>
IL14             @Html.EditorFor(model => model.RunDate)
IL15             @Html.ValidationMessageFor(model => model.RunDate)
IL16         </div>
IL17         <div>
IL18             @Html.LabelFor(model => model.Distance)
IL19         </div>
IL20         <div>
IL21             @Html.EditorFor(model => model.Distance)
IL22             @Html.ValidationMessageFor(model => model.Distance)
IL23         </div>
IL24         <div>
IL25             @Html.LabelFor(model => model.Time) HH:MM:SS
IL26         </div>
IL27         <div>
IL28             @Html.EditorFor(model => model.Time)
IL29             @Html.ValidationMessageFor(model => model.Time)
IL30         </div>
IL31         <p>
IL32             <input type="submit" value="Create" />
IL33         </p>
IL34     </fieldset>
IL35 }
```

Views\Shared_Layout.cshtml

```
L001  <!DOCTYPE html>
L002  <html lang="en">
L003  <head>
L004  ...
L005  </head>
L006  <body>
L007  ...
L008  <footer>
L009
L010     <script type="text/javascript">
L011         var c = document.getElementById('myCanvas');
L012         var ctx = c.getContext('2d');
L013         ctx.font = '30pt Calibri';
L014         ctx.strokeStyle = 'gray';
L015         ctx.lineWidth = 3;
L016         ctx.strokeText('London 2012', 80, 30);
L017     </script>
L018     </footer>
L019     </body>
L020     </html>
```

QUESTION 1

You need to make the "Distance" header of the table bold in the Views/RunLog/GetLog.cshtml view.

Which code segment should you use?

- A. table>tr{ font-weight: bold; }
- B. table>th:last-child{ font-weight: bold; }
- C. table+first-child{ font-weight: bold; }
- D. table>tr>th:nth-child (2) { font-weight: bold; }

Correct Answer: D

Section: [none]

Explanation

Explanation/Reference:

QUESTION 2

You need to extend the edit functionality of RunLogController.

Which code segment should you use?

- C A.

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

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

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

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

- A. Option A
- B. Option B
- C. Option C
- D. Option D

Correct Answer: C

Section: [none]

Explanation

Explanation/Reference:

QUESTION 3

If the canvas element is supported by the client browser, the application must display "London 2012" in the footer as text formatted by JavaScript at the end of the _Layout.cshtml file.

You need to modify the layout to ensure that "London 2012" is displayed as either formatted text or as plain text, depending on what the client browser supports.

Which code segment should you add?

- A. <canvas id="myFooter">
 @{Request.Browser.JavaApplets ? new HtmlString("London 2012") : null} </canvas>
- B. <canvas id="myFooter"London 2012</canvas>
- C. <canvas id="myCanvas">London 2012</canvas>
- D. <canvas id="myCanvas"><canvas>
 <p>London 2012</p>

Correct Answer: C

Section: [none]

Explanation

Explanation/Reference:

QUESTION 4

You need to add an action to RunLogController to validate the users' passwords.

Which code segment should you use?

C A. `public ActionResult Login(string username, string password)`
{
 `byte[] buffer = Encoding.UTF8.GetBytes(password + username);`
 `byte[] hash = MD5.Create().ComputeHash(buffer);`
 `ComparePassword(username, hash);`
 `return ContextDependentView();`
}

C B. `[RequireHttps]`
`public ActionResult Login(string username, string password)`
{
 `byte[] buffer = Encoding.UTF8.GetBytes(password + username);`
 `byte[] hash = SHA1.Create().ComputeHash(buffer);`
 `ComparePassword(username, hash);`
 `return ContextDependentView();`
}

C C. `public ActionResult Login(string username, string password)`
{
 `byte[] buffer = Encoding.UTF8.GetBytes(password + username);`
 `byte[] hash = SHA1.Create().ComputeHash(buffer);`
 `ComparePassword(username, hash);`
 `return ContextDependentView();`
}

C D. `[RequireHttps]`
`public ActionResult Login(string username, string password)`
{
 `byte[] buffer = Encoding.UTF8.GetBytes(password + username);`
 `byte[] hash = MD5.Create().ComputeHash(buffer);`
 `ComparePassword(username, hash);`
 `return ContextDependentView();`
}

- A. Option A
- B. Option B
- C. Option C
- D. Option D

Correct Answer: B

Section: [none]

Explanation

Explanation/Reference:

QUESTION 5

You need to make all of the rows in the table bold in the Views\RunLog\GetLog.cshtml view.

Which code segment should you use?

- A. Table > th:last-child { font-weight: bold; }
- B. Table+first-child{ font-weight: bold; }
- C. Table>tr>th:nth-child{2}{font-weight: bold; }
- D. Table > tr { font-weight: bold; }

Correct Answer: D

Section: [none]

Explanation

Explanation/Reference:

QUESTION 6

You need to display the "miles" unit description after the distance in the GetLog view.

Which line of code should you use to replace line GL21? (Each correct answer presents a complete solution. Choose all that apply.)

- A. @log.Distance miles
- B. @Hrml.DisplayFor(model => log.Distance) miles
- C. @log.Distance.ToStringO @Html.TextArea ("miles")
- D. @Htmli.DisplayFor(model => log.Distance.ToString() + " miles")

Correct Answer: AB

Section: [none]

Explanation

Explanation/Reference:

QUESTION 7

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.)

Select and Place:

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

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

Correct Answer:

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

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

Section: [none]

Explanation

Explanation/Reference:

QUESTION 8

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.)

Select and Place:

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

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

Correct Answer:

```
[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)
    ...
}
```

Section: [none]

Explanation

Explanation/Reference:

QUESTION 9

You need to implement the map of the runners' paths.

How should you build the video viewer? (To answer, select the appropriate options in the answer area.)

Work Area

```
<video width="320" height="240">
<[ ]>
<[ ]>
<[ ]>
<[ ] width="320" height="240">
<[ ] name="movie" value="map.swf" />
<[ ] src="map.swf" />
</[ ]>
</video>
```

Hot Area:

Work Area

```
<video width="320" height="240">
```

```
  < >
```

```
    source src="map.mp4" type="video/mp4"  
    source src="map.ogv" type="video/ogg"  
    source src="map.webm" type="video/webm"
```

```
  < >
```

```
    source src="map.mp4" type="video/mp4"  
    source src="map.ogv" type="video/ogg"  
    source src="map.webm" type="video/webm"
```

```
  < >
```

```
    source src="map.mp4" type="video/mp4"  
    source src="map.ogv" type="video/ogg"  
    source src="map.webm" type="video/webm"
```

```
  < > width="320" height="240">
```

```
    embed  
    object  
    video  
    canvas
```

```
    < > name="movie" value="map.swf" />
```

```
      object  
      param  
      option  
      embed
```

```
    < > src="map.swf" />
```

```
      video  
      param  
      embed  
      source
```

```
  </ >
```

```
    embed  
    object  
    video  
    canvas
```

```
</video>
```

Correct Answer:

Work Area

```
<video width="320" height="240">
```

```
  <source src="map.mp4" type="video/mp4">
  <source src="map.ogv" type="video/ogg">
  <source src="map.webm" type="video/webm">
```

```
  <source src="map.mp4" type="video/mp4">
  <source src="map.ogv" type="video/ogg">
  <source src="map.webm" type="video/webm">
```

```
  <source src="map.mp4" type="video/mp4">
  <source src="map.ogv" type="video/ogg">
  <source src="map.webm" type="video/webm">
```

```
    <video width="320" height="240">
```

```
      embed
      object
      video
      canvas
```

```
        <object name="movie" value="map.swf" />
```

```
          object
          param
          option
          embed
```

```
            <param src="map.swf" />
```

```
              video
              param
              embed
              source
```

```
            </object>
```

```
</video>
```

Section: [none]

Explanation

Explanation/Reference:

Explanation:

Work Area

```
<video width="320" height="240">
```

< >

```
source src="map.mp4" type="video/mp4"  
source src="map.ogv" type="video/ogg"  
source src="map.webm" type="video/webm"
```

< >

```
source src="map.mp4" type="video/mp4"  
source src="map.ogv" type="video/ogg"  
source src="map.webm" type="video/webm"
```

< >

```
source src="map.mp4" type="video/mp4"
source src="map.ogg" type="video/ogg"
source src="map.webm" type="video/webm"
```

```
<img alt="A small image placeholder." width="320" height="240">
```

embed
object
video
canvas

```
<input type="text" name="movie" value="map.swf" />
```

object
param
option
embed

```
<input type="image" src="map.swf" />
```

video
param
embed
source

</>

embed
object
video
canvas

</video>

QUESTION 10

You need to ensure that only valid parameters are passed to the EditLog action.

How should you build the route? (To answer, select the appropriate options in the answer area.)

Work Area

```
routes.MapRoute(  
    name: "EditLog",  
    controller = "RunLog",  
);
```

Hot Area:

Work Area

```
routes.MapRoute(  
    name: "EditLog", .
```

```
        id = @"\d+"  
        url: "RunLog/EditLog/{id}",  
        action = "EditLog",  
        defaults: new  
        constraints: new
```

```
        id = @"\d+"  
        url: "RunLog/EditLog/{id}",  
        action = "EditLog",  
        defaults: new  
        constraints: new
```

```
{
```

```
    controller = "RunLog",
```

```
        id = @"\d+"  
        url: "RunLog/EditLog/{id}",  
        action = "EditLog",  
        defaults: new  
        constraints: new
```

```
},
```

```
        id = @"\d+"  
        url: "RunLog/EditLog/{id}",  
        action = "EditLog",  
        defaults: new  
        constraints: new
```

```
{
```

```
        id = @"\d+"  
        url: "RunLog/EditLog/{id}",  
        action = "EditLog",  
        defaults: new  
        constraints: new
```

```
}
```

```
);
```

Correct Answer:

Work Area

```
routes.MapRoute(  
    name: "EditLog", .
```

```
        id = @"\d+"  
        url: "RunLog/EditLog/{id}",  
        action = "EditLog",  
        defaults: new  
        constraints: new
```

```
        id = @"\d+"  
        url: "RunLog/EditLog/{id}",  
        action = "EditLog",  
        defaults: new  
        constraints: new
```

```
{
```

```
    controller = "RunLog",
```

```
        id = @"\d+"  
        url: "RunLog/EditLog/{id}",  
        action = "EditLog",  
        defaults: new  
        constraints: new
```

```
},
```

```
        id = @"\d+"  
        url: "RunLog/EditLog/{id}",  
        action = "EditLog",  
        defaults: new  
        constraints: new
```

```
{
```

```
        id = @"\d+"  
        url: "RunLog/EditLog/{id}",  
        action = "EditLog",  
        defaults: new  
        constraints: new
```

```
}
```

```
);
```

Section: [none]

Explanation

Explanation/Reference:

Explanation:

```
Work Area
routes.MapRoute(
    name: "EditLog",
    id = @"\d+"
    url: "RunLog/EditLog/{id}",
    action = "EditLog",
    defaults: new
    constraints: new
)
{
    controller = "RunLog",
    id = @"\d+"
    url: "RunLog/EditLog/{id}",
    action = "EditLog",
    defaults: new
    constraints: new
},
{
    id = @"\d+"
    url: "RunLog/EditLog/{id}",
    action = "EditLog",
    defaults: new
    constraints: new
}
);
}
```

QUESTION 11

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.)

Select and Place:

"RunnerLog.Providers.RunLogRoleProvider"
"System.Web.Providers.RunLogRoleProvider"
"System.Web.Providers.DefaultRoleProvider"
defaultProvider="DefaultProvider"
defaultProvider="RLRoleProvider"

```
<roleManager enabled="true">  
  <providers>  
    <add name="RLRoleProvider" type="RunnerLog.  
      Application="RunnerLog"  
    </providers>  
  </roleManager>
```

Correct Answer:

"System.Web.Providers.RunLogRoleProvider"
"System.Web.Providers.DefaultRoleProvider"
defaultProvider="DefaultProvider"

```
<roleManager defaultProvider="R  
  enabled="true">  
  <providers>  
    <add name="RLRoleProvider" type="RunnerLog.  
      Application="RunnerLog"  
    </providers>  
  </roleManager>
```

Section: [none]

Explanation

Explanation/Reference:

QUESTION 12

You need to ensure that only valid parameters are passed to the EditLog action.

How should you build the route? (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.)

Select and Place:

id = @"\d+"

url: "RunLog/EditLog/{id}",

action = "EditLog",

defaults: new

constraints: new

routes.MapRoute(

name: "EditLog",

{

controller = "RunLog",

},

{

}

);

Correct Answer:

```
routes.MapRoute(  
    name: "EditLog",  
    url: "RunLog/EditLog/{id}",  
    defaults: new  
    {  
        controller = "RunLog",  
        action = "EditLog",  
    },  
    constraints: new  
    {  
        id = @"\d+"  
    }  
);
```

Section: [none]

Explanation

Explanation/Reference:

Testlet 1

Web Application

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

MvcApplication / Global.asax

```
public class MvcApplication : HttpApplication
{
    public static string DefaultProduct { get; set; }

    public static void RegisterRoutes(RouteCollection routes)
    {
        routes.IgnoreRoute("{resource}.axd/{*pathInfo}");

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

ProductController.cs

```
public class ProductController : Controller
{
    [HttpGet]
    public Product GetDealPrice(int productId)
    {
        ...
    }

    public ActionResult Show(string productName)
    {
        var price = DataLoader.GetProductPrice(productName);
        return View(new { productName, price });
    }
}
```

DataLoader.cs

```
public class DataLoader
{
    public static string GetProductPrice(string productName)
    {
        var currencySymbol = CultureInfo.CurrentCulture.NumberFormat.CurrencySymbol;
        var product = InternalLoad().FirstOrDefault(x => x.Name == productName);
        return currencySymbol + product.Price;
    }

    private static IEnumerable<Product> InternalLoad()
    {
        ...
    }
}
```

Customer.cs

Customer.cs

```
public class Customer
{
    const string EmailRegex = @"(^|([A-Za-z0-9_\.-])*@[A-Za-z0-9-]*\.[A-Z0-9-\.]+)$";
    const string EmailErrorMessage = "Please enter a valid email address";

    public string Email { get; set; }
    public string Name { get; set; }
}
```

Product.cs

```
public class Product
{
    public string ProductId { get; set; }
    public string Name { get; set; }
    public decimal Price { get; set; }
}
```

ImageConverter.cs

```
public class ImageConverter : MvcHandler
{
    private void WriteImage(HttpContext response, string format)
    {
        ...
    }
}
```

web.config

```
<?xml version="1.0" encoding="utf-8"?>
```

web.config

```
<?xml version="1.0" encoding="utf-8"?>
<configuration>
    <appSettings>
        <add key="PreserveLoginUrl" value="true" />
        <add key="ClientValidationEnabled" value="true" />
        <add key="UnobtrusiveJavaScriptEnabled" value="true" />
    </appSettings>
    <system.web>
        <compilation debug="true" targetFramework="4.5" />
        <httpRuntime targetFramework="4.5"
encoderType="System.Web.Security.AntiXss.AntiXssEncoder,
System.Web, Version=4.0.0.0, Culture=neutral, PublicKeyToken=b03f5f7f11
        <machineKey compatibilityMode="Framework45" />
        <sessionState mode="..." customProvider="DefaultSessionProvider">
            <providers>
                <add name="DefaultSessionProvider"
type="System.Web.Providers.DefaultSessionStateProvider,
System.Web.Providers, Version=1.0.0.0, Culture=neutral, PublicKeyToken=
" connectionName="DefaultConnection" applicationName="/" />
            </providers>
        </sessionState>
    </system.web>
    <system.webServer>
        <validation validateIntegratedModeConfiguration="false" />
        <modules runAllManagedModulesForAllRequests="true" />
    </system.webServer>
</configuration>
```

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.)

- A.

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

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

```
<%: Html.Raw(m => m.Email) %>
```
- D.

```
<%: Html.TextBoxFor(m => m.Email) %>
```

- A. Option A
- B. Option B
- C. Option C
- D. Option D

Correct Answer: AD

Section: [none]

Explanation

Explanation/Reference:

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.)

- A. Mark the Product class with the DataContract attribute.
- B. Mark the public members of the Product class with the DataContractFormat attribute.
- C. Mark the Product class with the CollectionDataContract attribute.
- D. Mark the public members of the Product class with the DataMember attribute.

Correct Answer: AD

Section: [none]

Explanation

Explanation/Reference:

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 3

You need to implement the requirements for handling IIS errors.

What should you do?

- C A. Update the **customErrors** attribute in the web.config file as follows:

```
<customErrors mode="On" defaultRedirect="CustomErrorView">  
    <error statusCode="404" redirect="Error/Error404"/>  
</customErrors>
```

- C B. Update the **customErrors** attribute in the app.config file as follows:

```
<customErrors mode="Off" defaultRedirect="CustomErrorView">  
    <error statusCode="404" redirect="Error/Error404"/>  
</customErrors>
```

- C C. Update the **customErrors** attribute in the app.config file as follows:

```
<customErrors mode="On" defaultRedirect="CustomErrorView">  
    <error statusCode="401" redirect="Error/Error401"/>  
</customErrors>
```

- C D. Update the **customErrors** attribute in the web.config file as follows:

```
<customErrors mode="On" defaultRedirect="CustomErrorView">  
    <error statusCode="403" redirect="Error/Error403"/>  
</customErrors>
```

- A. Option A
- B. Option B
- C. Option C
- D. Option D

Correct Answer: A

Section: [none]

Explanation

Explanation/Reference:

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?

- A.

```
protected override void OnException(ExceptionContext filterContext)
{
    Utility.WriteLine(filterContext.Exception);

    if (filterContext.HttpContext.IsCustomErrorEnabled)
    {
        filterContext.ExceptionHandled = true;
        this.View("Error").ExecuteResult(this.ControllerContext);
    }
}
```
- B.

```
protected override void OnException(ExceptionContext filterContext)
{
    Utility.WriteLine(filterContext.Exception);

    if (System.Diagnostics.Debugger.IsAttached)
    {
        filterContext.ExceptionHandled = true;
        this.View("Error").ExecuteResult(this.ControllerContext);
    }
}
```
- C.

```
protected override void OnException(ExceptionContext filterContext)
{
    if (!System.Diagnostics.Debugger.IsLogging())
    {
        Utility.WriteLine(filterContext.Exception);
        filterContext.ExceptionHandled = true;
        this.View("Error").ExecuteResult(this.ControllerContext);
    }
}
```
- D.

```
protected override void OnException(ExceptionContext filterContext)
{
    Utility.WriteLine(filterContext.Exception);

    if (filterContext.HttpContext.IsDebuggingEnabled)
    {
        filterContext.ExceptionHandled = true;
        this.View("Error").ExecuteResult(this.ControllerContext);
    }
}
```

- A. Option A
- B. Option B
- C. Option C
- D. Option D

Correct Answer: A

Section: [none]

Explanation

Explanation/Reference:

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?

- A.

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

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

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

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

A. Option A

B. Option B

C. Option C

D. Option D

Correct Answer: A

Section: [none]

Explanation

Explanation/Reference:

QUESTION 6

You need to modify the application to meet the productId requirement.
What should you do?

- A. Modify the RegisterGlobalFilters method of the Global.asax.es file as follows.
`Contract.Assume<ArgumentException>(productId != 0);`

- B. Modify the GetDealPrice method of ProductController as follows.
Contract.Requires<ArgumentException>(productId > 0);
- C. Modify the RegisterGlobalFilters method of the Global.asax.es file as follows.
Contract.Requires<ArgumentException>(productId > 0);
- D. Modify the GetDealPrice method of ProductController as follows.
Contract.Assume<ArgumentException>(productId > 0);

Correct Answer: B

Section: [none]

Explanation

Explanation/Reference:

The Contract.Requires(Of TException) method specifies a precondition contract for the enclosing method or property, and throws an exception if the condition for the contract fails.

Syntax:

```
'Declaration
Public Shared Sub Requires(Of TException As Exception) ( _
    condition As Boolean _
)
```

Type Parameters

TException

The exception to throw if the condition is false.

Parameters

condition

Type: System.Boolean

The conditional expression to test.

Reference: Contract.Requires(Of TException) Method (Boolean)

QUESTION 7

You need to implement the business requirements for managing customer data.

What should you do? (Each correct answer presents part of the solution. Choose all that apply.)

- A. Add a class named Customer-Controller to the Controllers folder. Then add a method named Edit to the class.
- B. Create a new controller named Administration in the Controllers folder. Add an action named EditCustomer to the controller.
- C. Add a folder named Customer to the Views folder. Then create a view inside this folder named Edit.aspx.
- D. Create a new folder named EditCustomer to the Views folder. In the new folder, create a new file named Administration.aspx.

Correct Answer: AC

Section: [none]

Explanation

Explanation/Reference:

QUESTION 8

When users attempt to retrieve a product from the product page, a run-time exception occurs if the product does not exist.

You need to route the exception to the CustomException.aspx page.

Which method should you add to MvcApplication?

C A. public static void RegisterGlobalFilters(GlobalFilterCollection filters)
{
 filters.Add(new HandleErrorAttribute
 {
 ExceptionType = typeof(IndexOutOfRangeException),
 View = "CustomException",
 });
}

C B. public static void RegisterGlobalFilters(GlobalFilterCollection filters)
{
 filters.Add(new HandleErrorAttribute
 {
 ExceptionType = typeof(NullReferenceException),
 View = "CustomException",
 });
}

C C. public static void RegisterGlobalFilters(GlobalFilterCollection filters)
{
 filters.Add(new HandleErrorAttribute
 {
 ExceptionType = typeof(IndexOutOfRangeException),
 Handler = "CustomException",
 });
}

C D. public static void RegisterGlobalFilters(GlobalFilterCollection filters)
{
 filters.Add(new HandleErrorAttribute
 {
 ExceptionType = typeof(NullReferenceException),
 Handler = "CustomException",
 });
}

- A. Option A
- B. Option B
- C. Option C
- D. Option D

Correct Answer: B

Section: [none]

Explanation

Explanation/Reference:

QUESTION 9

You updated the web.config file with the HTTP run-time value required to display an alternative version of the site.

You need to ensure that the correct page displays to the users.

Which code segment should you use to update the controller?

- A. If (Request.IsTabletDevice)
- B. If (Request.Browser.IsBrowser("Mobile"))
- C. If (Request.UserAgent["Tablet"])
- D. If (Request.Browser.IsMobileDevice)

Correct Answer: D

Section: [none]

Explanation

Explanation/Reference:

QUESTION 10

You need to implement client-side animations according to the business requirements.

Which line of code should you use? (Each correct answer presents a complete solution. Choose all that apply.)

- A. \$("body h1:nth-child(1)").fadeIn(1000);
- B. \$("body h1:nth-child(1)").fadeOut(1000);
- C. \$("body h2:nth-child(1)").animate({ opacity: 0 });
- D. \$("body h1:nth-child(1)").animate({ opacity: 1 });

Correct Answer: BC

Section: [none]

Explanation

Explanation/Reference:

QUESTION 11

You need to implement client-side animations according to the business requirements.

Which line of code should you use? (Each correct answer presents a complete solution. Choose all that apply.)

- A. \$("h1: first").animate ({ opacity: 0 });
- B. \$("h1:first").fadeIn(1000);
- C. \$("h1:first").animate({ opacity: 1 });
- D. \$("h1:first").fadeOut(1000);

Correct Answer: AD

Section: [none]

Explanation

Explanation/Reference:

QUESTION 12

You need to configure session storage in the web.config file to meet the technical requirements for scalability.

Which SessionState mode should you use? (Each correct answer presents a complete solution. Choose all that apply.)

- A. StateServer
- B. InProc
- C. AutoDetect
- D. SqlServer

Correct Answer: AD

Section: [none]

Explanation

Explanation/Reference:

QUESTION 13

You need to update the routes to ensure that a product is always displayed on the product page.

Which code segment should you use?

- A.

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

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

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

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

- A. Option A
- B. Option B
- C. Option C
- D. Option D

Correct Answer: B

Section: [none]

Explanation

Explanation/Reference:

QUESTION 14

The GetDealPrice method must be called by using Ajax.

You need to get the price of a product by using the GetDealPrice method of the ProductController.

Which code segment should you use? (Each correct answer presents a complete solution. Choose all that apply.)

- A.

```
$ajax({  
    type: "POST",  
    dataType: "json",  
    contentType: "application/json",  
    url: "Product/GetDealPrice",  
    data: "{'productId': '" + productId + "'}",  
    success: function (data) {  
        $(".price").html(data.d);  
    }  
});
```
- B.

```
$load({  
    dataType: "json",  
    contentType: "application/json",  
    url: "Product/GetDealPrice/" + productId,  
    success: function (data) {  
        $(".price").html(data.d);  
    }  
});
```
- C.

```
$ajax({  
    type: "GET",  
    dataType: "json",  
    contentType: "application/json",  
    url: "Product/GetDealPrice/" + productId,  
    success: function (data) {  
        $(".price").html(data.d);  
    }  
});
```
- D.

```
$getJSON("Product/GetDealPrice/" + productId  
    function (data) {  
        $(".price").html(data.d);  
    }  
);
```

- A. Option A
- B. Option B
- C. Option C
- D. Option D

Correct Answer: CD
Section: [none]

Explanation

Explanation/Reference:

QUESTION 15

You need to implement the mobile device support requirements.

How should you build the ProcessRequest method? (To answer, select the appropriate options in the answer area.)

Work Area

```
protected override void ProcessRequest(HttpContext httpContext)
{
    var response = httpContext.Response;
    var mobileFormat = [REDACTED];
    var normalFormat = [REDACTED];
    if (httpContext. [REDACTED] .ContentType == [REDACTED])
    {
        if (httpContext. [REDACTED] . [REDACTED])
        {
            WriteImage(response, mobileFormat);
        }
        else
        {
            WriteImage(response, normalFormat);
        }
    }
    else
    {
        base.ProcessRequest(httpContext);
    }
}
```

Hot Area:

Work Area

```
protected override void ProcessRequest(HttpContext httpContext)
{
```

```
    var response = httpContext.Response;
```

```
    var mobileFormat = ;
```

- "image/png"
- "image/gif"
- "image/jpeg"
- "image/bmp"

```
    var normalFormat = ;
```

- "image/png"
- "image/gif"
- "image/jpeg"
- "image/bmp"

```
    if (httpContext..ContentType == 
```

- Response
- Request
- Application
- Handler

- "image/png"
- "image/gif"
- "image/jpeg"
- "image/bmp"

```
{
```

```
    if (httpContext..
```

- Response
- Request
- Application
- Handler

- Browser.IsMobileDevice
- Browser.IsBrowser("MobileDevice")
- Mobile == "android|ip(hone|od)"
- Mobile == "+mobile|tablet"

```
{
```

```
    WriteImage(response, mobileFormat);
```

```
}
```

```
else
```

```
{
```

```
    WriteImage(response, normalFormat);
```

```
}
```

```
}
```

```
else
```

```
{
```

```
    base.ProcessRequest(httpContext);
```

```
}
```

```
}
```

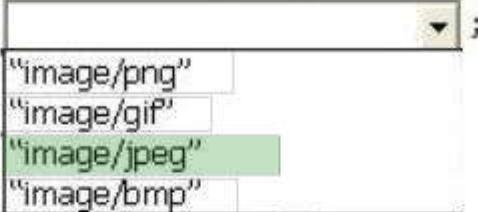
Correct Answer:

Work Area

```
protected override void ProcessRequest(HttpContext httpContext)
{
```

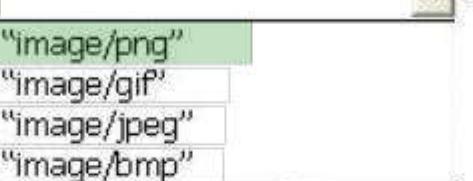
```
    var response = httpContext.Response;
```

```
    var mobileFormat = "image/png";
```



```
"image/gif"  
"image/jpeg"  
"image/bmp"
```

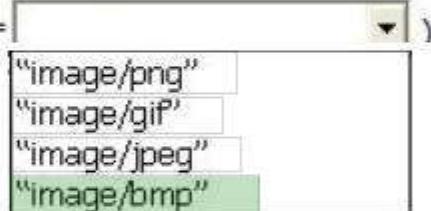
```
    var normalFormat = "image/png";
```



```
"image/jpeg"  
"image/bmp"
```

```
    if (httpContext.Response.ContentType == "image/png")
```

```
        Response  
        Request  
        Application  
        Handler
```

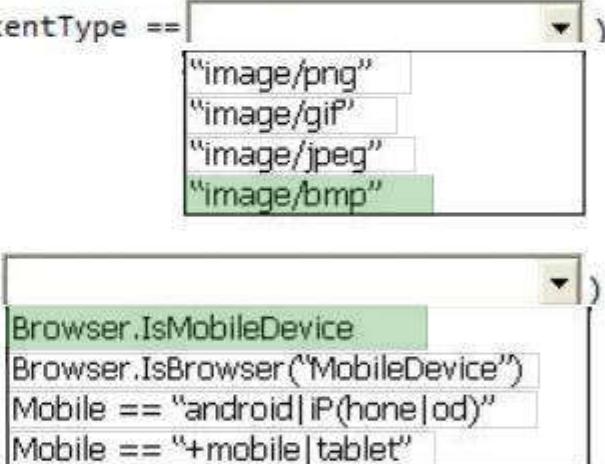


```
"image/png"  
"image/gif"  
"image/jpeg"  
"image/bmp"
```

```
{
```

```
    if (httpContext.
```

```
        Response  
        Request  
        Application  
        Handler
```



```
Browser.IsMobileDevice  
Browser.IsBrowser("MobileDevice")  
Mobile == "android|ip(hone|od)"  
Mobile == "+mobile|tablet"
```

```
{
```

```
    WriteImage(response, mobileFormat);
```

```
}
```

```
else
```

```
{
```

```
    WriteImage(response, normalFormat);
```

```
}
```

```
}
```

```
else
```

```
{
```

```
    base.ProcessRequest(httpContext);
```

```
}
```

```
}
```

Section: [none]

Explanation

Explanation/Reference:

Explanation:

Work Area

```
protected override void ProcessRequest(HttpContext httpContext)
{
    var response = httpContext.Response;
    var mobileFormat = "image/png";
    var normalFormat = "image/png";

    if (httpContext.Response.ContentType == "image/png")
    {
        if (httpContext.Request.Browser.IsMobileDevice ||
            httpContext.Request.Browser.IsBrowser("MobileDevice") ||
            httpContext.Request.Mobile == "android|IP(hone|od)" ||
            httpContext.Request.Mobile == "+mobile|tablet")
        {
            WriteImage(response, mobileFormat);
        }
        else
        {
            WriteImage(response, normalFormat);
        }
    }
    else
    {
        base.ProcessRequest(httpContext);
    }
}
```

Testlet 1

Video Transcoding Service

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

```
public class TranscodeWorkerRole : RoleEntryPoint
{
    public override void Run()
    {
        while (true)
        {
            var nextWorkItem = GetWorkItem();
            TranscodeService.Start(new [] { nextWorkItem } );
        }
    }

    private string GetWorkItem()
    {
        ...
    }
}
```

ThumbnailGenerator.cs

```
public class ThumbnailGenerator : IHttpHandler
{
    public bool IsReusable
    {
        get { return true; }
    }

    public void ProcessRequest(HttpContext context)
    {
        var videoId = context.Request.QueryString["videoId"];
        var startBytes = File.ReadAllBytes(videoId);
        var bytes = BuildThumbnail(videoId);
        StreamResults(context, bytes);
    }

    private Task<byte[]> BuildThumbnail(string videoId)
    {
        return new Task<byte[]>(() => File.ReadAllBytes(videoId));
    }

    private void StreamResults(HttpContext context, byte[] content)
    {
    }
}
```

VideoController.cs

```
[Authorize]
public class VideoController : Controller
{
    public FileResult DownloadVideo(string videoId)
    {
        var stream = GetVideoStream(videoId);
        return File(stream, "video/mpeg");
    }

    [HttpPost]
    public ActionResult UploadVideo(string videoId)
    {
        return View();
    }

    [HttpDelete]
    public ActionResult DeleteVideo(string videoId)
    {
        return View();
    }

    public ActionResult VideoMetadata(string videoId)
    {
        var metadata = HttpRuntime.Cache[videoId];
        if (metadata == null)
        {
            metadata = LoadMetadata(videoId);
            HttpRuntime.Cache[videoId] = metadata;
        }
        return View(metadata);
    }

    public ActionResult ListVideos()
    {
        return View();
    }
}
```

DeleteHandler.cs

```
public class DeleteHandler : DelegatingHandler
{
    protected override Task<HttpResponseMessage> SendAsync
    (HttpRequestMessage request,
    CancellationToken cancellationToken)
    {
        ...
    }
}
```

VideoAdminAttributes.cs

```
public class VideoAdminAttribute : Attribute
{
    private IEnumerable<string> Admins()
    {
        ...
    }
}
```

AdminVerifierFactory.cs

```
public class AdminVerifierFactory : DefaultControllerFactory
{
    public override IController CreateController(RequestContext requestContext, string controllerName)
    {
        return base.CreateController(requestContext, controllerName);
    }
}
```

QUESTION 1

You need to ensure that developers can connect to a Windows Azure role by using RDP.

What should you do?

- A. Export a certificate without a private key. Upload the .cer file to the Management Certificates section on the Azure Management Portal.
- B. Export a certificate with a private key. Upload the .pfx file to the Management Certificates section on the Azure Management Portal.
- C. 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.

- D. 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.

Correct Answer: D

Section: [none]

Explanation

Explanation/Reference:

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?

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

A. Option A

B. Option B

- C. Option C
- D. Option D
- E. Option E

Correct Answer: E

Section: [none]

Explanation

Explanation/Reference:

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?

C A. varcontroller = base.CreateController(requestContext, controllerName);
varattributes = controller.GetType().Attributes.ToString();
if(!attributes.Contains("VideoAdminAttribute"))
 thrownewException("Not an Administrator");
returncontroller;

C B. if(requestContext.HttpContext.Items["Administrator"] == null)
 thrownewException("Not an Administrator");
returnbase.CreateController(requestContext, controllerName) asCont

C C. varcontroller = base.CreateController(requestContext, controllerName);
varhasFilter = controller.GetType().CustomAttributes.Any
(x => x.AttributeType.Name == "VideoAdminAttribute");
if(hasFilter == null)
 thrownewException("Not an Administrator");
returncontroller;

C D. if(requestContext.RouteData.Values["Administrator"] == null)
 thrownewException("Not an Administrator");
returnbase.CreateController(requestContext, controllerName) asCont

- A. Option A
- B. Option B
- C. Option C
- D. Option D

Correct Answer: C

Section: [none]

Explanation

Explanation/Reference:

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.)

A. 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.

B. Create an HttpHandler to check for a valid HTTP header value in the ProcessRequest method.

- A.

```
var controller = base.CreateController(requestContext, controllerName);

var attributes = controller.GetType().Attributes.ToString();

if(!attributes.Contains("VideoAdminAttribute"))

    thrownewException("Not an Administrator");

return controller;
```
- B.

```
if(requestContext.HttpContext.Items["Administrator"] == null)

    thrownewException("Not an Administrator");

returnbase.CreateController(requestContext, controllerName) asController;
```
- C.

```
var controller = base.CreateController(requestContext, controllerName);

var hasFilter = controller.GetType().CustomAttributes.Any

(x => x.AttributeType.Name == "VideoAdminAttribute");

if(hasFilter == null)

    thrownewException("Not an Administrator");

return controller;
```
- D.

```
if(requestContext.RouteData.Values["Administrator"] == null)

    thrownewException("Not an Administrator");

returnbase.CreateController(requestContext, controllerName) asController;
```

- A. Option A
- B. Option B

- C. Option C
- D. Option D

Correct Answer: C

Section: [none]

Explanation

Explanation/Reference:

QUESTION 5

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.)

- A. 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.
- B. Create an HttpHandler to check for a valid HTTP header value in the ProcessRequest method.
- C. Create an HttpModule and check for a valid HTTP header value in the AuthenticateRequest event.
- D. 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.

Correct Answer: CD

Section: [none]

Explanation

Explanation/Reference:

QUESTION 6

You need to maximize performance of video delivery.

Which code segment should you use as the body of the GetVideoStream function in the Video-Controller class?

C A. `MemoryStream stream = new MemoryStream();`
`new GZipStream(System.IO.File.OpenRead(videoId), CompressionMode.Compress, stream);`
`return stream;`

C B. `if (Request.ContentEncoding.BodyName == "application/x-gzip")`
`{`
 `return new GZipStream(System.IO.File.OpenRead(videoId), CompressionMode.Compress, stream);`
`}`
`return System.IO.File.OpenRead(videoId);`

C C. `return new GZipStream(System.IO.File.OpenRead(videoId), CompressionMode.Compress, stream);`

C D. `if (Request.Headers["Accept-Encoding"].Contains("gzip"))`
`{`
 `return new GZipStream(System.IO.File.OpenRead(videoId), CompressionMode.Compress, stream);`
`}`
`return System.IO.File.OpenRead(videoId);`

- A. Option A
- B. Option B
- C. Option C
- D. Option D

Correct Answer: D

Section: [none]

Explanation

Explanation/Reference:

QUESTION 7

The transcode.exe utility activates its license online when it is installed.

You need to ensure that the registration of the transcode utility is handled as specified in its license. Which method should you add to the TranscodeWorkerRole class?

- A.

```
public override void OnStop()
{
    RoleEnvironmentStopping += (sender, args) =>
    {
        var task = Process.Start("transcode.exe", "unregister");
        if (task.HasExited)
            base.OnStop();
    };
}
```
- B.

```
public override void OnStop()
{
    RoleEnvironmentStopping += (sender, args) =>
    {
        Process.Start("transcode.exe", "unregister").WaitForExit();
        base.OnStop();
    };
}
```
- C.

```
public override void OnStop()
{
    Process.Start("transcode.exe", "unregister");
    base.OnStop();
}
```
- D.

```
public override void OnStop()
{
    Process.Start("transcode.exe", "unregister").WaitForExit();
    base.OnStop();
}
```

- A. Option A
- B. Option B
- C. Option C
- D. Option D

Correct Answer: D

Section: [none]

Explanation

Explanation/Reference:

QUESTION 8

You need to ensure that all customers can delete videos regardless of their browser capability.

Which code segment should you use as the body of the SendAsync method in the DeleteHandler class?

C A. var response = base.SendAsync(request, cancellationToken);
if(request.Headers.Contains("X-Delete"))
{
 response.Result.StatusCode = HttpStatusCode.NotImplemented;
}
return response;

C B. if(request.Headers.Contains("X-Delete"))
{
 request.Method = new HttpMethod("DELETE");
}
return base.SendAsync(request, cancellationToken);

C C. var response = base.SendAsync(request, cancellationToken);
if(response.Result.Headers.Contains("X-Delete"))
{
 request.Method = new HttpMethod("DELETE");
}
return response;

C D. if(request.Method == HttpMethod.Delete)
{
 request.Headers.Add("X-Delete", "true");
}
return base.SendAsync(request, cancellationToken);

- A. Option A
- B. Option B
- C. Option C

D. Option D

Correct Answer: B

Section: [none]

Explanation

Explanation/Reference:

QUESTION 9

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.)

Work Area

```
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;  
}
```

Hot Area:

Work Area

```
ul#nav {  
    font-size: 1.3em;  
    font-weight: 600;  
}  
  
ul#nav li {  
    float: left;  
    background-color: #ffd800;  
    background-color: #2da4c2;  
    text-decoration: none;  
}  
  
ul#nav li a {  
    text-decoration: none;  
    list-style: none;  
    border-radius: 15px;  
    word-wrap: break-word;  
    text-align: center;  
}  
  
ul#nav li a {  
    background-clip: border-box;  
    background-color: #2da4c2;  
    border-radius: 15px;  
    word-wrap: break-word;  
    color: #FFF;  
}  
  
ul#nav li a {  
    background-clip: padding-box;  
    text-decoration: none;  
    background-color: #ffd800;  
    float: left;  
    border-radius: 12px 12px 0 0;  
    padding: 0 12px 0 12px;  
    margin: 0 4px 0 4px;  
}  
  
ul#nav li a:hover {  
    color: #333;  
}  
  
ul#nav li a {  
    float: left;  
    background-color: #ffd800;  
    background-color: #2da4c2;  
    list-style: none;  
}  
  
ul#nav li a {  
    cursor: pointer;  
    background-clip: border-box;  
    text-decoration: none;  
    background-origin: border-box;
```

Correct Answer:

Work Area

```
ul#nav {  
    font-size: 1.3em;  
    font-weight: 600;  
}  
  
ul#nav li {  
    float: left;  
    background-color: #ffd800;  
    background-color: #2da4c2;  
    text-decoration: none;  
}  
  
ul#nav li a {  
    text-decoration: none;  
    list-style: none;  
    border-radius: 15px;  
    word-wrap: break-word;  
    text-align: center;  
}  
  
ul#nav li a {  
    background-clip: border-box;  
    background-color: #2da4c2;  
    border-radius: 15px;  
    word-wrap: break-word;  
    color: #FFF;  
}  
  
ul#nav li a {  
    background-clip: padding-box;  
    text-decoration: none;  
    background-color: #ffd800;  
    float: left;  
    border-radius: 12px 12px 0 0;  
    padding: 0 12px 0 12px;  
    margin: 0 4px 0 4px;  
}  
  
ul#nav li a:hover {  
    color: #333;  
}  
  
ul#nav li a {  
    float: left;  
    background-color: #ffd800;  
    background-color: #2da4c2;  
    list-style: none;  
}  
  
ul#nav li a {  
    cursor: pointer;  
    background-clip: border-box;  
    text-decoration: none;  
    background-origin: border-box;
```

Section: [none]

Explanation

Explanation/Reference:

Explanation:

Work Area

```
ul#nav {  
    font-size: 1.3em;  
    font-weight: 600;  
}  
  
ul#nav li {  
    float: left;  
    background-color: #ffd800;  
    background-color: #2da4c2  
    text-decoration: none;  
}  
  
ul#nav li {  
    text-decoration: none;  
    list-style: none;  
    border-radius: 15px;  
    word-wrap: break-word;  
    text-align: center;  
}  
  
ul#nav li a {  
    background-clip: border-box;  
    background-color: #2da4c2  
    border-radius: 15px;  
    word-wrap: break-word;  
  
    color: #FFF;  
}  
  
ul#nav li a {  
    background-clip: padding-box;  
    text-decoration: none;  
    background-color: #ffd800;  
    float: left;  
  
    border-radius: 12px 12px 0 0;  
    padding: 0 12px 0 12px;  
    margin: 0 4px 0 4px;  
}  
  
ul#nav li a:hover {  
    color: #333;  
}  
  
ul#nav li a {  
    float: left;  
    background-color: #ffd800;  
    background-color: #2da4c2  
    list-style: none;  
}  
  
ul#nav li a {  
    cursor: pointer;  
    background-clip: border-box;  
    text-decoration: none;  
    background-origin: border-box;  
}  
}
```

QUESTION 10

You need to ensure that the transcode.exe utility is installed before the worker role starts. How should you

implement the startup task? (To answer, drag the appropriate values to the correct element or attribute. Each value 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.)

Select and Place:

Variable

Environment

foreground

background

simple

```
<Startup>
  <Task commandLine="msiexec transcode.msi" taskType=">
    < />
    < /> name="license" value="825534">/
  </ />

</Task>
</Startup>
```

Correct Answer:

Variable

Environment

foreground

background

simple

```
<Startup>
  <Task commandLine="msiexec transcode.msi" taskType=" simpl
    < Environment >
      < Variable > name="license" value="825534">/
    </ Environment >

  </Task>
</Startup>
```

Section: [none]

Explanation

Explanation/Reference:

Question Set 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.)

A.

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

B.

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

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

- C. [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 = Request.Url.ToString() });
 }
 else
 {
 ...
 return View();
 }
 }
}
- D. [Authorize]
public class LibraryController : Controller
{
 [Authorize(Roles="Anonymous")]
 public ActionResult GetBook()
 {
 ...
 return View();
 }

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

A. Option A

- B. Option B
- C. Option C
- D. Option D

Correct Answer: AC

Section: [none]

Explanation

Explanation/Reference:

QUESTION 2

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.)

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

Correct Answer: AD

Section: [none]

Explanation

Explanation/Reference:

QUESTION 3

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?

- A. Implement HTTP caching in the ASP.NET MVC controllers.
- B. Combine the content files by using ASP.NET MVC bundling.
- C. Install a second IIS instance.
- D. Move the content to a Windows Azure CDN.

Correct Answer: B

Section: [none]

Explanation

Explanation/Reference:

QUESTION 4

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:

- My Dictionary.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.GetProd
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?

- A. ViewBag.Title = HttpContext.GetGlobalResourceObject("MyDictionary", "Title");
- B. ViewBag.Title = HttpContext.GetGlobalResourceObject("MyDictionary", "Title", new System.Globalization.CultureInfo("en"));
- C. ViewBag.Title = Resources.MyDictionary.Title;
- D. ViewBag.Title = HttpContext.GetLocalResourceObject("MyDictionary", "Title");

Correct Answer: C

Section: [none]

Explanation

Explanation/Reference:

QUESTION 5

You are testing an ASP.NET application.

The test plan requires that tests run against the application's business layer.

You need to use the test project template that meets this requirement.

Which template should you use?

- A. Web Test Project
- B. Load Test Project
- C. Unit Test Project
- D. Coded Test Project

Correct Answer: C

Section: [none]

Explanation

Explanation/Reference:

QUESTION 6

You are authoring unit tests.

The unit tests must test code that consumes sealed classes.

You need to create, maintain, and inject dependencies in the unit tests.

Which isolation method should you use?

- A. T4 text templates and code generation
- B. Stub types
- C. Shim types
- D. Hard-coded implementation

Correct Answer: C

Section: [none]

Explanation

Explanation/Reference:

<http://msdn.microsoft.com/en-us/library/hh549176.aspx>

Shim types are one of two technologies that the Microsoft Fakes Framework uses to let you easily isolate components under test from the environment. Shims divert calls to specific methods to code that you write as part of your test. Many methods return different results dependent on external conditions, but a shim is under the control of your test and can return consistent results at every call. This makes your tests much easier to write.

QUESTION 7

You are developing an ASP.NET MVC web application that includes the following method.

```
public double AccountBalance(double currentBalance, double transactionAmount)
{
    double finalBalance = 0.00;
    finalBalance = currentBalance + transactionAmount;
    return finalBalance;
}
```

You need to test the AccountBalance method.

Which unit test should you use?

- C A.

```
[TestMethod()]
private void AccountBalanceTest()
{
    double currentBalance = 175.05;
    double transactionAmount = 76.03;
    double finalBalance = 251.08;
    double result = 0.00;

    result = AccountBalance(currentBalance, transactionAmount);
    Assert.AreEqual(finalBalance, result);
}
```
- C B.

```
[TestMethod()]
public void AccountBalanceTest()
{
    double currentBalance = 175.05;
    double transactionAmount = 76.03;
    double finalBalance = 251.08;
    double result = 0.00;

    result = AccountBalance(currentBalance, transactionAmount);
    Assert.IsTrue(finalBalance, result);
}
```
- C C.

```
[TestMethod()]
public void AccountBalanceTest()
{
    double currentBalance = 175.05;
    double transactionAmount = 76.03;
    double finalBalance = 251.08;
    double result = 0.00;

    result = AccountBalance(currentBalance, transactionAmount);
    Assert.AreEqual(finalBalance, result);
}
```
- C D.

```
[UnitTest()]
public void AccountBalanceTest()
{
    double currentBalance = 175.05;
    double transactionAmount = 76.03;
    double finalBalance = 251.08;
    double result = 0.00;

    result = AccountBalance(currentBalance, transactionAmount);
    Assert.AreEqual(finalBalance, result);
}
```

- A. Option A
- B. Option B
- C. Option C
- D. Option D

Correct Answer: C

Section: [none]

Explanation

Explanation/Reference:

<http://msdn.microsoft.com/en-us/magazine/cc163665.aspx>

[http://msdn.microsoft.com/en-us/library/microsoft.visualstudio.testtools.unittesting.assert.areequal\(v=vs.110\).aspx](http://msdn.microsoft.com/en-us/library/microsoft.visualstudio.testtools.unittesting.assert.areequal(v=vs.110).aspx)

QUESTION 8

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?

- A. From the DEBUG menu in Visual Studio 2012, select Exceptions. Enable the Thrown check box for Common Language Runtime Exceptions.
- B. From the DEBUG menu in Visual Studio 2012, select Exceptions. Disable the User-unhandled check box for Common Language Runtime Exceptions.
- C. Add the following code to the Web.config file of the application.

```
<customErrors mode="On">
<error statusCode="500" redirect="CustomErrors.html" />
</customErrors>
```
- D. Add the following code to the Web.config file of the application.

```
<customErrors mode="On" >
<error statusCode="404" redirect="CustomErrors.html"/>
</customErrors>
```

Correct Answer: A

Section: [none]

Explanation

Explanation/Reference:

QUESTION 9

You are developing an ASP.NET MVC news aggregation application that will be deployed to servers on multiple networks.

The application must be compatible with multiple browsers. A user can search the website for news articles. You must track the page number that the user is viewing in search results.

You need to program the location for storing state information about the user's search. What should you do?

- A. Store search results and page index in Session.
- B. Use Application state to store search terms and page index.
- C. Use QueryString to store search terms and page index.

- D. Store search results and page index in TempData

Correct Answer: C

Section: [none]

Explanation

Explanation/Reference:

QUESTION 10

You are developing an ASP.NET MVC application. The application is deployed in a web farm and is accessed by many users.

The application must handle web server failures gracefully. The servers in the farm must share the state information.

You need to persist the application state during the session.

What should you implement?

- A. A state server
- B. Cookieless sessions
- C. A web garden on the web servers
- D. An InProc session

Correct Answer: A

Section: [none]

Explanation

Explanation/Reference:

QUESTION 11

You are developing an ASP.NET MVC application that displays stock market information.

The stock market information updates frequently and must be displayed in real-time.

You need to eliminate unnecessary header data, minimize latency, and transmit data over a full-duplex connection.

What should you do?

- A. Implement long-running HTTP requests.
- B. Instantiate a MessageChannel object on the client.
- C. Implement WebSockets protocol on the client and the server.
- D. Configure polling from the browser.

Correct Answer: C

Section: [none]

Explanation

Explanation/Reference:

QUESTION 12

You are designing a distributed application that runs on the Windows Azure platform.

The application must store a small amount of insecure global information that does not change frequently. You need to configure the application to meet the requirements.

Which server-side state management option should you use? (Each correct answer presents a complete solution. Choose all that apply.)

- A. Windows Azure application state
- B. Sql Azure
- C. Profile properties of the Windows Azure application
- D. Windows Azure session state

Correct Answer: BD

Section: [none]

Explanation

Explanation/Reference:

SQL Database provides a relational database management system for Windows Azure and is based on SQL Server technology. With a SQL Database instance, you can easily provision and deploy relational database solutions to the cloud, and take advantage of a distributed data center that provides enterprise-class availability, scalability, and security with the benefits of built-in data protection and self-healing.

Session States in Windows Azure.

If you are a Web developer, you are probably very familiar with managing user state - that is you are familiar with tracking user activity and actions across several request-response exchanges that occur in Web applications. Since HTTP is a stateless protocol, developers over the years have developed all sorts of means to manage state. You'll even find an MSDN page providing alternatives and recommendations for state management here. Cookies, hidden fields, and query strings are some client-side options to tracking user state. When it comes to managing that state on the server-side, most Web developers rely on session objects.

QUESTION 13

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?

- A. @media screen and (width >= 500px) {
...
}
- B. @media screen and (min-width: 500px) {
...
}
- C. @media screen (min-width: 500px, max-width: 1000px) {
...
}
- D. @media resolution (min-width: 500px) {
...
}

Correct Answer: B

Section: [none]

Explanation

Explanation/Reference:

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

QUESTION 14

You are developing an ASP.NET MVC application.

You need to authenticate clients by using NT LAN Manager (NTLM).

Which authentication method should you implement?

- A. Basic
- B. Windows
- C. Forms
- D. Kerberos

Correct Answer: B

Section: [none]

Explanation

Explanation/Reference:

[http://msdn.microsoft.com/en-us/library/aa292114\(v=vs.71\).aspx](http://msdn.microsoft.com/en-us/library/aa292114(v=vs.71).aspx)

QUESTION 15

You are developing an ASP.NET MVC application.

The application must allow users to enter JavaScript in a feedback text box only.

You need to disable request validation.

What should you do?

- A. Apply and set the CausesClientSideValidation attribute on the text box to FALSE.
- B. Apply and set the ValidateInput attribute on the text box to FALSE.

- C. Use the `HttpRequest.Unvalidated` property to read the unvalidated form value.
- D. Use the `HttpRequest.Form` property to read the unvalidated form value.

Correct Answer: C

Section: [none]

Explanation

Explanation/Reference:

Provides access to HTTP request values without triggering request validation.

<http://msdn.microsoft.com/en-us/library/system.web.httprequest.unvalidated.aspx>

QUESTION 16

You are developing an ASP.NET MVC application that will be deployed on a web farm. Passwords must be stored in the `web.config` file and must not be readable or in a format that is easily decodable.

You need to encrypt the passwords that are stored in the `web.config` file.

Which command-line tool should you use?

- A. `Aspnet_regiis.exe`
- B. `Ngen.exe`
- C. `Aspnet_merge.exe`
- D. `EdmGen.exe`

Correct Answer: A

Section: [none]

Explanation

Explanation/Reference:

[http://msdn.microsoft.com/en-us/library/zhhddkxy\(v=vs.100\).aspx](http://msdn.microsoft.com/en-us/library/zhhddkxy(v=vs.100).aspx)

QUESTION 17

You are designing a distributed application.

The application must store a small amount of insecure global information that does not change frequently. You need to configure the application to meet the requirements.

Which server-side state management option should you use? (Each correct answer presents a complete solution. Choose all that apply.)

- A. Application state
- B. Session state
- C. Database support
- D. Profile properties

Correct Answer: AC

Section: [none]

Explanation

Explanation/Reference:

QUESTION 18

You are developing an ASP.NET MVC application. The application is deployed in a web farm and is accessed by many users.

The application must handle web server failures gracefully. The servers in the farm must share the short-term

state information.

You need to persist the application state during the session.

What should you implement?

- A. ASP.NET session state
- B. A local database
- C. A state server
- D. Profile properties

Correct Answer: C

Section: [none]

Explanation

Explanation/Reference:

QUESTION 19

You are developing an ASP.NET MVC application that will be deployed to servers on multiple networks. The application must be compatible with multiple browsers. You must track the page number that the user is viewing in search results.

You need to program the location for storing state information.

Where should you persist state information?

- A. Session
- B. QueryString
- C. Application
- D. TempData

Correct Answer: B

Section: [none]

Explanation

Explanation/Reference:

QUESTION 20

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?

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

Correct Answer: C

Section: [none]

Explanation

Explanation/Reference:

QUESTION 21

You are designing an HTML5 website.

You need to design the interface such that the content is viewable in all types of browsers, including screen readers,

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

- A. Ensure that content elements have valid and descriptive names.
- B. Use Resource Description Framework (RDF) to describe content elements.
- C. Convert HTML forms to XForms.
- D. Use HTML5 semantic markup elements.
- E. Annotate content elements with Accessible Rich Internet Application (ARIA) attributes.

Correct Answer: DE

Section: [none]

Explanation

Explanation/Reference:

QUESTION 22

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:

- ProductDictionary.resx
- ProductDictionary.es.resx
- ProductDictionary.fr.resx

Each file contains a public resource named Currency with the localized currency symbol. 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.LocalizedCurrency to the localized currency contained in the resource files.

Which code segment should you add to the action at line 03?

- A. ViewBag.LocalizedCurrency = Resources.ProductDictionary.Currency;
- B. VievBag.LocalizedCurrency = HttpContext.GetGlobalResourceObject("ProductDictionary", "Currency", new System.Globalization.CultureInfo(Men));
- C. VievBag.LocalizedCurrency = HttpContext.GetLocalResourceObject("ProductDictionary", "Currency");

D. ViewBag.LocalizedCurrency = HttpContext.GetGlobalResourceObject("ProductDictionary", "Currency");

Correct Answer: A

Section: [none]

Explanation

Explanation/Reference:

QUESTION 23

You are developing an ASP.NET MVC application.

You need to authenticate clients by using an ASP.NET membership database.

Which authentication method should you implement?

- A. Kerberos
- B. Forms
- C. Basic
- D. Windows

Correct Answer: B

Section: [none]

Explanation

Explanation/Reference:

QUESTION 24

You are developing an ASP.NET MVC application that will be deployed on a web farm. Passwords must be stored in the web.config file and must not be readable or in a format that is easily decodable.

You need to encrypt the passwords that are stored in the web.config file.

Which command-line tool should you use?

- A. Aspnet_regiis.exe
- B. Aspnet_regbrowsers.exe
- C. Aspnet_setreg.exe
- D. Aspnet_compiler.exe

Correct Answer: A

Section: [none]

Explanation

Explanation/Reference:

QUESTION 25

You are developing an ASP.NET MVC web application that includes the following method.

```
public double GoldMined(double currentGold, double newlyMinedGold)
{
    double totalGold = 0.00;
    totalGold = currentGold + newlyMinedGold;
    return totalGold;
}
```

You need to test the GoldMined method.

Which unit test should you use?

- C A. [TestMethod()]
public void GoldMinedTest()
{
 double currentGold = 175.05;
 double newlyMinedGold = 76.03;
 double totalGold = 251.08;
 double result = 0.00;

 result = GoldMined(currentGold, newlyMinedGold);
 Assert.IsTrue(totalGold, result);
}
- C B. [TestMethod()]
private void GoldMinedTest()
{
 double currentGold = 175.05;
 double newlyMinedGold = 76.03;
 double totalGold = 251.08;
 double result = 0.00;

 result = GoldMined(currentGold, newlyMinedGold);
 Assert.AreEqual(totalGold, result);
}
- C C. [UnitTests()]
public void GoldMinedTest()
{
 double currentGold = 175.05;
 double newlyMinedGold = 76.03;
 double totalGold = 251.08;
 double result = 0.00;

 result = GoldMined(currentGold, newlyMinedGold);
 Assert.AreEqual(totalGold, result);
}
- C D. [TestMethod()]
public void GoldMinedTest()
{
 double totalGold = 175.05;
 double newlyMinedGold = 76.03;
 double totalGold = 251.08;
 double result = 0.00;

 result = GoldMined(currentGold, newlyMinedGold);
 Assert.AreEqual(totalGold, result);
}

- A. Option A
- B. Option B
- C. Option C
- D. Option D

Correct Answer: D

Section: [none]

Explanation

Explanation/Reference:

QUESTION 26

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?

- A. From the Debug menu in Visual Studio 2012, select Exceptions. Enable the Thrown check box for Common Language Runtime Exceptions.
- B. From the DEBUG menu in Visual Studio 2012, select Attach to Process. Select the IIS process.
- C. From the Debug menu in Visual Studio 2012, select Exceptions. Disable the User-unhandled check box for Common Language Runtime Exceptions.
- D. From the TOOLS menu in Visual Studio 2012, click Customize. Click the Commands tab and select Debug.

Correct Answer: A

Section: [none]

Explanation

Explanation/Reference:

QUESTION 27

You are developing an ASP.NET MVC web application for viewing a photo album. The application is designed for devices that support changes in orientation, such as tablets and smartphones. The application displays a grid of photos in portrait mode.

When the orientation changes to landscape, each tile in the grid expands to include a description. The HTML that creates the gallery interface resembles the following markup.

```
<ul class="gallery">
<li>
  
  <div>Description</div>
</li>
</ul>
```

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

```
ul.gallery > li {
  width: 100px;
}

ul.gallery > li > div {
  display: none;
}
```

If this CSS is omitted, the existing CSS displays the tiles in landscape mode.

You need to update the portrait mode CSS to apply only to screens with a width less than 500 pixels.

Which code segment should you use?

- A. @media resolution(max-width: 500px) {
 ...
}
- B. @media screen(min-width: 0px, max-width: 500px) {
 ...
}
- C. @media screen and (width <= 500px) {
 ...
}
- D. @media screen and (max-width: 500px) {
 ...
}

Correct Answer: D

Section: [none]

Explanation

Explanation/Reference:

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

QUESTION 28

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.)

Select and Place:

IHttpHandler

IRouteFactory

IRouteHandler

IHttpConstraint

RequestContext

ServerContext

```
public class USOnlyRouteHandler : IRouteHandler
{
    public IHttpHandler GetHttpHandler(
        RequestContext)
    {
        return new USIPHandler(requestContext);
    }
}
```

Correct Answer:

IRouteFactory

IHttpConstraint

ServerContext

```
public class USOnlyRouteHandler : IRouteHandler
{
    public IHttpHandler GetHttpHandler(
        RequestContext)
    {
        return new USIPHandler(requestContext);
    }
}
```

Section: [none]

Explanation

Explanation/Reference:

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

QUESTION 29

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.)

Select and Place:

```
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],  
        };  
    }  
}
```

Correct Answer:

```
bindingContext.ModelType = typeof  
(ReservationLocation);  
  
dynamic data = bindingContext.ValueProvider.GetValue  
("loc");  
  
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],  
        };  
    }  
}
```

Section: [none]**Explanation****Explanation/Reference:****QUESTION 30**

You are developing an ASP.NET MVC application that has pages for users who browse the site with Windows Phone 7.

The pages for Windows Phone 7 include the following files:

- _Layout.WP7.cshtml
- Index.WP7.cshtml

You need to update the application so that it renders the customized files correctly to Windows Phone 7 users. How should you update the Application_Start method? (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.)

Select and Place:

```
DefaultDisplayMode("WP7")
("Windows Phone OS",
 StringComparison.OrdinalIgnoreCase
DefaultDisplayMode("Mobile")
("Mobile",
 AreaRegistration.RegisterAllDevices();
```

```
protected void Application_Start()
{
    DisplayModeProvider.Instance.Mod
}

{
    ContextCondition = (context
        context.GetOverriddenUse
    );
}

AreaRegistration.RegisterAllAreas();
```

Correct Answer:

```
DefaultDisplayMode("Mobile")
("Mobile",
AreaRegistration.RegisterAllDevices();
```

```
protected void Application_Start()
{
    DisplayModeProvider.Instance.Mod
    DefaultDisplayMode("WP7")

    {
        ContextCondition = (context
            context.GetOverriddenUser
        ("Windows Phone OS",
        StringComparison.Orc
    });

    AreaRegistration.RegisterAllArea
}
```

Section: [none]

Explanation

Explanation/Reference:

<http://techbrij.com/1013/display-mode-mobile-tablet-tv-aspnet-mvc>

QUESTION 31

You are developing an ASP.NET MVC application in Visual Studio 2012. The application contains sensitive bank account data.

The application contains a helper class named SensitiveData.Helpers.CustomEncryptor. The application must not display AccountNumber in clear text in any URL.

You need to build the view for the GetAccounts action.

How should you build the view? (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.)

Select and Place:

custEncrypt

maskedAccountNum

Html

Encrypt(item.AccountNumber)

Encode(item.AccountNumber)

```
@model IEnumerable<SensitiveData.Models.GarageSale>
@(SensitiveData.Helpers.CustomEncryptor custEncrypt = new SensitiveData.Helpers.CustomEncryptor())
<h2>GetAccounts</h2>
<table>
    <tr>
        <th>Account Name</th>
        <th>Balance</th>
    </tr>
    @foreach (var item in Model)
    {
        <tr>
            <td>@Html.DisplayFor(modelItem => item.AccountName)</td>
            <td>@Html.DisplayFor(modelItem => item.Balance)</td>
            <td>
                @Html.ActionLink("Edit", "Edit", new { id = item.Id })
            </td>
        </tr>
    }
</table>
```

Correct Answer:

Html

Encode(item.AccountNumber)

```
@model IEnumerable<SensitiveData.Models.GarageSale>
@(SensitiveData.Helpers.CustomEncryptor customEncryptor = new SensitiveData.Helpers.CustomEncryptor())
<h2>GetAccounts</h2>
<table>
    <thead>
        <tr>
            <th>Account Name</th>
            <th>Balance</th>
        </tr>
    </thead>
    @foreach (var item in Model)
    {
        <tr>
            <td>@Html.DisplayFor(modelItem => item.AccountName)</td>
            <td>@Html.DisplayFor(modelItem => item.Balance)</td>
            <td>
                @Html.ActionLink("Edit", "Edit", new { id = item.Id })
                @Html.ActionLink("Delete", "Delete", new { id = item.Id })
            </td>
        </tr>
    }
</table>
```

Section: [none]
Explanation

Explanation/Reference:

QUESTION 32

You are developing an ASP.NET MVC application that authenticates a user by using claims-based authentication.

The application must:

- Use Windows Identity Foundation 4.5.
- Support the Windows Azure Access Control Service.

You need to implement authentication.

How should you build the class constructor? (To answer, select the appropriate option from the drop-down list in the answer area.)

Work Area

```
using Microsoft.IdentityModel.Claims;

public class IdentityClaim
{
    private string _identityProvider;
    private string _identityValue;
    public const string ACSProviderClaim =
        "http://schemas.microsoft.com/accesscontrolservice/...";

    public IdentityClaim([ ] identity)
    {
        if (identity != null)
        {
            foreach (var claim in identity.Claims)
            {
                if (claim.[ ] == [ ].NameIdentifier)
                {
                    _identityValue = claim.Value;
                }
                if (claim.[ ] == ACSProviderClaim)
                {
                    _identityProvider = claim.Value;
                }
            }
        }
    }
}
```

Hot Area:

Work Area

```
using Microsoft.IdentityModel.Claims;

public class IdentityClaim
{
    private string _identityProvider;
    private string _identityValue;
    public const string ACSProviderClaim =
        "http://schemas.microsoft.com/accesscontrolservice/...";

    public IdentityClaim( identity)
    {
        ClaimNames
        ClaimTypes
        IIdentityClaims
        IClaimsIdentity
        ClaimType
        ClaimName
    }

    if (identity != null)
    {
        foreach (var claim in identity.Claims)
        {
            if (claim. == .NameIdentifier)
            {
                ClaimNames
                ClaimTypes
                IIdentityClaims
                IClaimsIdentity
                ClaimType
                ClaimName
            }

            _identityValue = claim.Value;
        }
        if (claim. == ACSProviderClaim)
        {
            ClaimNames
            ClaimTypes
            IIdentityClaims
            IClaimsIdentity
            ClaimType
            ClaimName
        }

        _identityProvider = claim.Value;
    }
}
```

Correct Answer:

Work Area

```
using Microsoft.IdentityModel.Claims;

public class IdentityClaim
{
    private string _identityProvider;
    private string _identityValue;
    public const string ACSProviderClaim =
        "http://schemas.microsoft.com/accesscontrolservice/...";

    public IdentityClaim( identity)
    {
        ClaimNames
        ClaimTypes
        IIdentityClaims
 IClaimsIdentity
        ClaimType
        ClaimName
    }

    if (identity != null)
    {
        foreach (var claim in identity.Claims)
        {
            if (claim. == .NameIdentifier)
            {
                ClaimNames
                ClaimTypes
                IIdentityClaims
                IClaimsIdentity
 ClaimType
                ClaimName
            }

            _identityValue = claim.Value;
        }
        if (claim. == ACSProviderClaim)
        {
            ClaimNames
            ClaimTypes
            IIdentityClaims
            IClaimsIdentity
 ClaimType
            ClaimName
        }

        _identityProvider = claim.Value;
    }
}
```

Section: [none]

Explanation

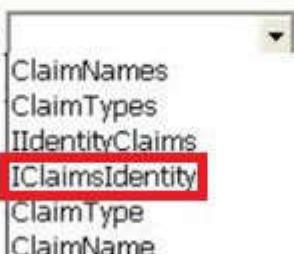
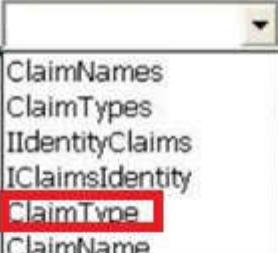
Explanation/Reference:

Explanation:

Work Area

```
using Microsoft.IdentityModel.Claims;

public class IdentityClaim
{
    private string _identityProvider;
    private string _identityValue;
    public const string ACSProviderClaim =
        "http://schemas.microsoft.com/accesscontrolservice/...";

    public IdentityClaim( identity)
    {
        if (identity != null)
        {
            foreach (var claim in identity.Claims)
            {
                if (claim. == .NameIdentifier)
                {
                    _identityValue = claim.Value;
                }
                if (claim. == ACSProviderClaim)
                {
                    _identityProvider = claim.Value;
                }
            }
        }
    }
}
```

<http://garvincasimir.wordpress.com/2012/04/05/tutorial-mvc-application-using-azure-acss-and-formsauthentication-part-1/>

QUESTION 33

You are developing an ASP.NET MVC application.

You need to store membership information in a Microsoft SQL Server database.

How should you configure the membership provider? (To answer, select the appropriate options in the answer area.)

Work Area

```
<configuration>
  <connectionStrings>
    <add name="SqlServices"
      connectionString="Data Source=localhost;
        Integrated Security=SSPI;Initial Catalog=aspnetdb;" />
  </connectionStrings>
  <system.web>
    <authentication mode="Forms" >
      <forms loginUrl="login.aspx"
        name=".ASPFORMSAUTH" />
    </authentication>
    <authorization>
      <deny users="?" />
    </authorization>
    <membership defaultProvider="SqlProvider">
      <providers>
        <add
          name="SqlProvider"
          applicationName="MyApplication" />
      </providers>
    </membership>
  </system.web>
</configuration>
```

Hot Area:

Work Area

```
<configuration>
  <connectionStrings>
    <add name="SqlServices"
      connectionString="Data Source=localhost;
      Integrated Security=SSPI;Initial Catalog=aspnetdb;" />
  </connectionStrings>
  <system.web>
    <authentication mode="Forms" >
      <forms loginUrl="login.aspx"
        name=".ASPXFORMSAUTH" />
    </authentication>
    <authorization>
      <deny users="?" />
    </authorization>
    <membership defaultProvider="SqlProvider">
      <providers>
        <add
          name="SqlProvider"
          type="System.Web.Security.SqlMembershipProvider"
          type="System.Web.Security.SqlProvider"
          namespace="System.Web.Security.SqlMembershipProvider"
          namespace="System.Web.Security.SqlProvider"
          connectionString="SqlServices"
          connectionStringName="SqlServices"
          applicationName="MyApplication" />
      </providers>
    </membership>
  </system.web>
</configuration>
```

Correct Answer:

Work Area

```
<configuration>
  <connectionStrings>
    <add name="SqlServices"
      connectionString="Data Source=localhost;
      Integrated Security=SSPI;Initial Catalog=aspnetdb;" />
  </connectionStrings>
  <system.web>
    <authentication mode="Forms" >
      <forms loginUrl="login.aspx"
        name=".ASPxFORMSAUTH" />
    </authentication>
    <authorization>
      <deny users="?" />
    </authorization>
    <membership defaultProvider="SqlProvider">
      <providers>
        <add
          name="SqlProvider"
          type="System.Web.Security.SqlMembershipProvider"
          type="System.Web.Security.SqlProvider"
          namespace="System.Web.Security.SqlMembershipProvider"
          namespace="System.Web.Security.SqlProvider"
          connectionString="SqlServices"
          connectionStringName="SqlServices"
          applicationName="MyApplication" />
      </providers>
    </membership>
  </system.web>
</configuration>
```

Section: [none]

Explanation

Explanation/Reference:

Explanation:

Work Area

```
<configuration>
  <connectionStrings>
    <add name="SqlServices"
      connectionString="Data Source=localhost;
        Integrated Security=SSPI;Initial Catalog=aspnetdb;" />
  </connectionStrings>
  <system.web>
    <authentication mode="Forms" >
      <forms loginUrl="login.aspx"
        name=".ASPFXFORMSAUTH" />
    </authentication>
    <authorization>
      <deny users="?" />
    </authorization>
    <membership defaultProvider="SqlProvider">
      <providers>
        <add
          name="SqlProvider"
          type="System.Web.Security.SqlMembershipProvider"
          type="System.Web.Security.SqlProvider"
          namespace="System.Web.Security.SqlMembershipProvider"
          namespace="System.Web.Security.SqlProvider"
          connectionString="SqlServices"
          connectionStringName="SqlServices"
          applicationName="MyApplication" />
      </providers>
    </membership>
  </system.web>
</configuration>
```

<http://msdn.microsoft.com/en-us/library/system.web.security.sqlmembershipprovider.aspx>

QUESTION 34

You are developing an ASP.NET MVC web application that enables users to open Microsoft Excel files. The

current implementation of the ExcelResult class is as follows.

```
public class ExcelResult : ActionResult
{
    public string Path { get; set; }

    public override void ExecuteResult(ControllerContext context)
    {
        ...
    }
}
```

You need to enable users to open Excel files.

How should you implement the ExecuteResult method? (To answer, select the appropriate options in the answer area.)

Work Area

```
var response = context.HttpContext.Response;
var request = context.HttpContext.Request;

if (canProcess)
{
    response.Clear();
    response.ContentType = "application/vnd.ms-excel";
    response.AddHeader("Content-Disposition", "attachment; filename=Report.xls");
    response.WriteFile(context.HttpContext.Server.MapPath(Path));
}
```

Hot Area:

Work Area

```
var response = context.HttpContext.Response;
var request = context.HttpContext.Request;

var canProcess = request.AcceptTypes.Contains("application/vnd.ms-excel");
var canProcess = request.ContentType.Contains("application/vnd.ms-excel");

if (canProcess)
{
    response.Clear();

    response.AddHeader("content-disposition", "attachment; filename=dl");
    response.Output.Write("content-disposition", "application/vnd.ms-excel");

    response.ContentType = "application/vnd.ms-excel";
    response.ContentEncoding = new UTF8Encoding();

    response.WriteFile(context.HttpContext.Server.MapPath(Path));
}
```

Correct Answer:

Work Area

```
var response = context.HttpContext.Response;
var request = context.HttpContext.Request;

var canProcess = request.AcceptTypes.Contains("application/vnd.ms-excel");
var canProcess = request.ContentType.Contains("application/vnd.ms-excel");

if (canProcess)
{
    response.Clear();

    response.AddHeader("content-disposition", "attachment; filename=dl");
    response.Output.Write("content-disposition", "application/vnd.ms-excel");

    response.ContentType = "application/vnd.ms-excel";
    response.ContentEncoding = new UTF8Encoding();

    response.WriteFile(context.HttpContext.Server.MapPath(Path));
}
```

Section: [none]

Explanation

Explanation/Reference:

Explanation:

Work Area

```
var response = context.HttpContext.Response;
var request = context.HttpContext.Request;

var canProcess = request.AcceptTypes.Contains("application/vnd.ms-excel");
var canProcess = request.ContentType.Contains("application/vnd.ms-excel");

if (canProcess)
{
    response.Clear();

    response.AddHeader("content-disposition", "attachment; filename=dl");
    response.Output.Write("content-disposition", "application/vnd.ms-excel");

    response.ContentType = "application/vnd.ms-excel";
    response.ContentEncoding = new UTF8Encoding

    response.WriteFile(context.HttpContext.Server.MapPath(Path));
}
```

QUESTION 35

You are developing an ASP.NET MVC application that authenticates a user by using claims-based authentication.

The application must:

- Use Windows Identity Foundation 4.5.
- Support the Windows Azure Access Control Service.

You need to implement authentication.

How should you build the class constructor? (To answer, drag the appropriate code segment to the correct location or locations in the answer area. 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.)

Select and Place:

ClaimNames

ClaimTypes

IIdentityCla

IClaimsIdent

ClaimType

ClaimName

```
using Microsoft.IdentityModel.Claims;

public class IdentityClaim
{
    private string _identityProvider;
    private string _identityValue;
    public const string ACSProviderClaim =
        "http://schemas.microsoft.com/accesscontrolservice/1.0/claims/identity";

    public IdentityClaim([REDACTED] identity)
    {
        if (identity != null)
        {
            foreach (var claim in identity.Claims)
            {
                if (claim.[REDACTED] == [REDACTED])
                {
                    _identityValue = claim.Value;
                }
                if (claim.[REDACTED] == ACSProviderClaim)
                {
                    _identityProvider = claim.Value;
                }
            }
        }
    }
}
```

Correct Answer:

ClaimNames

ClaimTypes

IIdentityCla

IClaimsIdent

ClaimType

ClaimName

```
using Microsoft.IdentityModel.Claims;

public class IdentityClaim
{
    private string _identityProvider;
    private string _identityValue;
    public const string ACSProviderClaim =
        "http://schemas.microsoft.com/accesscontrolservice/1.0/claims/identity";

    public IdentityClaim( IClaimsIdent identity)
    {
        if (identity != null)
        {
            foreach (var claim in identity.Claims)
            {
                if (claim. ClaimType == ClaimTypes
                {
                    _identityValue = claim.Value;
                }
                if (claim. ClaimType == ACSProviderClaim)
                {
                    _identityProvider = claim.Value;
                }
            }
        }
    }
}
```

Section: [none]

Explanation

Explanation/Reference:

Explanation:

Box 1: IClaimsIdent

Box 2: ClaimType

Box 3: ClaimTypes

Box 4: ClaimType

Similar example:

For Box 1, see line 15.

For Box 2, see line 22.

For Box 3, see line 22.

For Box 4, see line 26.

using System;

```
02 using System.Collections.Generic;
03 using System.Linq;
04 using System.Web;
05 using Microsoft.IdentityModel.Claims;
06
07 namespace MVC3MixedAuthenticationSample.Models
08 {
09     public class IdentityClaim
10    {
11        private string _identityProvider;
12        private string _identityValue;
13        public const string ACSProviderClaim
14            ="http://schemas.microsoft.com/accesscontrolservice/2010/07/claims/identityprovider";
15
16        public IdentityClaim(IClaimsIdentity identity)
17        {
18            if (identity != null)
19            {
20                foreach (var claim in identity.Claims)
21                {
22                    if (claim.ClaimType == ClaimTypes.NameIdentifier)
23                    {
24                        _identityValue = claim.Value;
25                    }
26                    if (claim.ClaimType == ACSProviderClaim)
27                    {
28                        _identityProvider = claim.Value;
29                    }
30                }
31            }
32        }
33
34        public string IdentityValue
35        {
36            get { return _identityValue; }
37            set { _identityValue = value; }
38        }
39
40        public string IdentityProvider
41        {
42            get { return _identityProvider; }
43            set { _identityProvider = value; }
44        }
45    }
46}
```

```
31 }  
32 }  
33  
34 }
```

QUESTION 36

You are developing an ASP.NET MVC application that has pages for users who browse the site with Windows Phone 7.

The pages for Windows Phone 7 include the following files:

- _Layout.WP7.cshtml
- Index.WP7.cshtml

You need to update the application so that it renders the customized files correctly to Windows Phone 7 users.

How should you update the Application_Start method? (To answer, select the appropriate option from the drop-down list in the answer area.)

Work Area

```
protected void Application_Start()  
{  
    DisplayModeProvider.Instance.Modes.Insert(0, new  
    {  
        ContextCondition = (context =>  
            context.GetOverriddenUserAgent().IndexOf  
            {  
                context.GetOverriddenUserAgent().IndexOf  
                ( ) >= 0)  
            }));  
  
    AreaRegistration.RegisterAllAreas();
```

Hot Area:

Work Area

```
protected void Application_Start()
{
    DisplayModeProvider.Instance.Modes.Insert(0, new
    {
        DefaultDisplayMode("WP7")
        ("Windows Phone OS",
        StringComparison.OrdinalIgnoreCase
        DefaultDisplayMode("Mobile")
        ("Mobile",
        AreaRegistration.RegisterAllDevices());
    });

    ContextCondition = (context =>
        context.GetOverriddenUserAgent().IndexOf(
        "Windows Phone OS",
        StringComparison.OrdinalIgnoreCase
        DefaultDisplayMode("Mobile")
        ("Mobile",
        AreaRegistration.RegisterAllDevices();

    ) ) >= 0);

    AreaRegistration.RegisterAllAreas();
}
```

Correct Answer:

Work Area

```
protected void Application_Start()
{
    DisplayModeProvider.Instance.Modes.Insert(0, new
    {
        DefaultDisplayMode("WP7")
        ("Windows Phone OS",
        StringComparison.OrdinalIgnoreCase
        DefaultDisplayMode("Mobile")
        ("Mobile",
        AreaRegistration.RegisterAllDevices());
    });

    ContextCondition = (context =>
        context.GetOverriddenUserAgent().IndexOf(
        DefaultDisplayMode("WP7")
        ("Windows Phone OS",
        StringComparison.OrdinalIgnoreCase
        DefaultDisplayMode("Mobile")
        ("Mobile",
        AreaRegistration.RegisterAllDevices();

    ) ) >= 0);

});;

AreaRegistration.RegisterAllAreas();
```

Section: [none]

Explanation

Explanation/Reference:

Explanation:

Work Area

```
protected void Application_Start()
{
    DisplayModeProvider.Instance.Modes.Insert(0, new
    {
        DefaultDisplayMode("WP7")
        ("Windows Phone OS",
        StringComparison.OrdinalIgnoreCase)
        DefaultDisplayMode("Mobile")
        ("Mobile",
        AreaRegistration.RegisterAllDevices());
    });

    ContextCondition = (context =>
        context.GetOverriddenUserAgent().IndexOf(
        "Windows Phone OS",
        StringComparison.OrdinalIgnoreCase) >= 0)

    DefaultDisplayMode("WP7")
    ("Windows Phone OS",
    StringComparison.OrdinalIgnoreCase)
    DefaultDisplayMode("Mobile")
    ("Mobile",
    AreaRegistration.RegisterAllDevices());

});

AreaRegistration.RegisterAllAreas();
```