

Milestone #1 – Part B

Due Monday June 12th, 2017 – at 23:00

Late policy: 10%/day, maximum 2 days

Demo in class is a must at a time announced by the teacher.

Overview

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You will work alone and start building a web application for a fictitious bicycle manufacturer. The objective is to create an E-Commerce web application similar to <http://www.battdepot.com/> For this Milestone, you will begin create a MasterPage, two ASPX webforms: **products.aspx** and **gear.aspx**.

Database

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We will be using the AdventureWorksLT.mdf SQL Server 2015 database provided on Léa. The AdventureWorks LT database supports standard online transaction processing scenarios for a fictitious bicycle manufacturer.

Take the time to analyze the **Product table** and the **ufnGetAllCategories function** and the data they return.

Products.aspx

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The products page contains a GridView dynamically linked to the Products table using a SQLDataSource data source control. The GridView filters the data from the Products table using a Request.QueryString: *categoryID*. Example: <http://localhost:52103/products.aspx?categoryid=6> Shows the category 6 which is Road bikes. The GridView has paging and sorting enabled. The ListPrice column is formatted as currency. The Color, Size and Weight columns have N/A for their NullDisplayText BoundField property. This is the SQL:

```
SELECT ProductID, Name, ProductNumber, Color, ListPrice, Size, Weight
FROM SalesLT.Product
WHERE (ProductCategoryID = @param)
```



Amazing Online Bike Company

Home : Bikes : Road

- Home
- [-] Bikes
 - Road
 - Mountain
 - Touring
- [-] Gear
 - Components
 - Accessories
 - Clothing

ProductID	Name	ProductNumber	Color	ListPrice	Size	Weight
749	Road-150 Red, 62	BK-R93R-62	Red	\$3,578.27	62	6803.85
750	Road-150 Red, 44	BK-R93R-44	Red	\$3,578.27	44	6245.93
751	Road-150 Red, 48	BK-R93R-48	Red	\$3,578.27	48	6409.23
752	Road-150 Red, 52	BK-R93R-52	Red	\$3,578.27	52	6540.77
753	Road-150 Red, 56	BK-R93R-56	Red	\$3,578.27	56	6658.70
754	Road-450 Red, 58	BK-R68R-58	Red	\$1,457.99	58	8069.37
755	Road-450 Red, 60	BK-R68R-60	Red	\$1,457.99	60	8119.26
756	Road-450 Red, 44	BK-R68R-44	Red	\$1,457.99	44	7606.70
757	Road-450 Red, 48	BK-R68R-48	Red	\$1,457.99	48	7770.00
758	Road-450 Red, 52	BK-R68R-52	Red	\$1,457.99	52	7901.54
1 2 3 4 5						

Gear.aspx

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The gear page contains a ListView dynamically linked to the **ufnGetAllCategories** function using a SQLDataSource data source control. The ListView filters the data from the function table using a Request.QueryString: *category*.

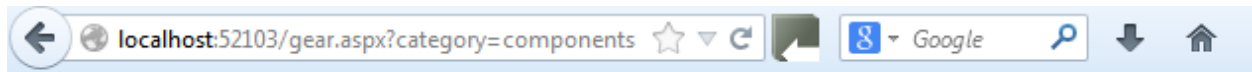
Example: <http://localhost:52103/gear.aspx?category=components>

This link shows the gear category "components". The default Listview is modified in the `<AlternatingItemTemplate>` and the `<ItemTemplate>`. The default data is being replaced by a dynamic HyperLink control. The HyperLink dynamically created the links to call `products.aspx?categoryID=X` where X is the dynamically retrieved `ProductCategoryID`. (See further under). There are 3 types of gear categories: components, accessories and clothing.

```
SELECT ProductCategoryName, ProductCategoryID
FROM   dbo.ufnGetAllCategories()
WHERE  (ParentProductCategoryName = @cat)
```

Dynamic hyperlinks:

```
<asp:HyperLink ID="HyperLink1" runat="server"
Text="<%# Eval("ProductCategoryName") %>"
NavigateUrl="<%#
String.Concat("~/products.aspx?categoryID=", Eval("ProductCategoryID")) %>">
</asp:HyperLink>
```



Amazing Online Bike Company

Home

Bikes

Road

Mountain

Touring

Gear

Components

Accessories

Clothing

Home : Gear : Components

Handlebars	Bottom Brackets	Brakes
Chains	Cranksets	Derailleurs
Forks	Headsets	Mountain Frames
Pedals	Road Frames	Saddles
Touring Frames	Wheels	

Navigation controls

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SiteMapPath & TreeView navigation server controls must be present on the master page. The navigation menu data will be fetched from Web.sitemap. A sample Web.sitemap is provided on Léa. Do not show the Home Starting Node. Set `ShowStartingNode="False"` in `<asp:SiteMapDataSource ID="SiteMapDataSource1" runat="server" ShowStartingNode="False" />`
The bikes navigation calls directly product page with the appropriate categoryID:

<i>Bikes types</i>	<i>categoryID</i>
Mountain	5
Road	6
Touring	7

ASP.NET Components

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- Web forms (ContentPage) associated to a MasterPage
- Navigation server controls: TreeView/Sitemaps
- Data source controls: GridView/ListView with SqlDataSource and custom SQL
- Parameter passing with QueryString.
- Databound
- Dynamic hyperlinks.

Requirements

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Your application must meet the following requirements:

1. It must be implemented in ASP.NET using web forms with C# code behind.
2. A total of 5 ASPX pages need to be created:
 - The Home button links to ~/Default.aspx which should give a welcome message to the user.
 - The Bikes button links to ~/Bikes/Default.aspx which gives a short description of the 3 types of bikes sold and how they differ.
 - The Gear button links to ~/Gear/Default.aspx which gives a short description of the 3 types of gear sold and what the consumer can expect.
 - Road, Mountain and Touring links to ~/products.aspx?categoryID=X where X is the specific category retrieved from the Web.Sitemap file
 - Components, accessories and clothing links to ~/gear.aspx?category=X where X is the specific gear types retrieved from the Web.Sitemap file.
3. All pages should use your Master page.
4. Design is left to you: You can include a logo for your company and realistic text description in all pages.

Deliverables

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- Find a teammate to test your application before submitting and before demoing to the teacher. Include the name of the tester as comments in your main() program header.
- Demo in class when the teacher requests it.

- **Compress the Milestone project folder and submit on Lea. If the zipped file is bigger than 25MB then: use 7zip compression level Ultra and split to volumes of 25 MB each. It will create 2 or more 7zip files. Upload one by one on Lea (limit per file is 25 MB). You are to keep your entire project (along with your .mdf database file) in one folder. Compress this entire folder into a ZIP file (retain the tree structure please!) and submit this on LEA**