

Case Study:

Developing a Web-Based E-Commerce Application Using ASP.NET MVC

Begin Date : 16:00 PM Friday, November 27

Due Date : 16:00 PM Tuesday, December 1

1. (Designing **Layout Page**)

Please create a layout page which includes common user interface elements using the CSS, JS, HTML and images files which are provided into "Assets" folder to design your e-commerce web application. You will see three different pages such as "index.html", "details.html", and "contact.html" in the "Assets" folder. These pages are the sample ones to utilize for you.

2. (Creating Models and **View Models**)

View Model mi?
ViewModel mi?

Please create three different models such as "**Products**", "**Categories**", and "**Suppliers**" using Entity Framework **Code-First** workflow. Figure 1 demonstrates the model diagram. In addition, please create the account models for building authentication and authorization mechanism of the application. (Notice that you are supposed to use **membership provider**.)

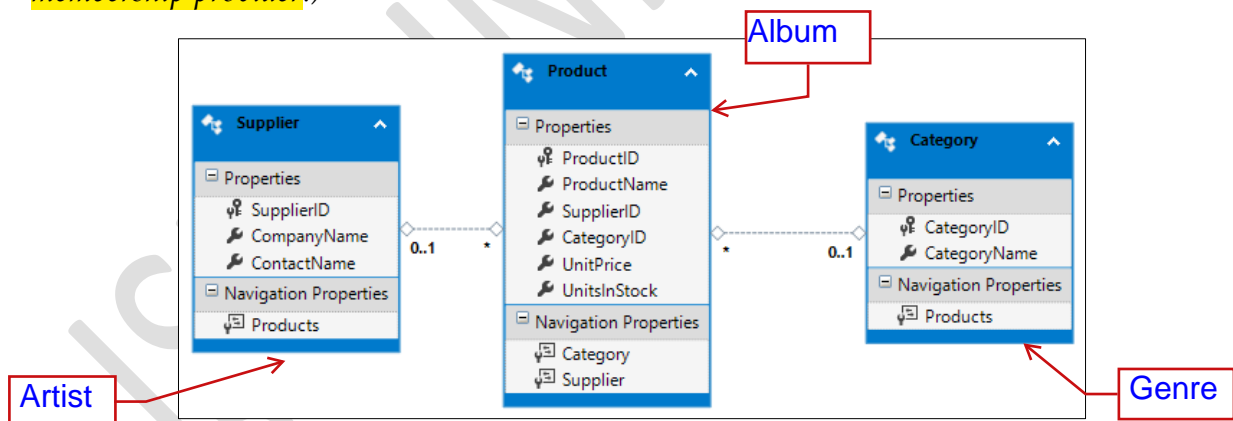


Figure 1. Model Diagram

Please design and create the needed **view models** for the project.

- Midterm Project -

HTML Template
Multiple (!) Tables
Code First
Membership Provider
M+V+C

- Midterm Project -

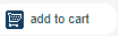
Multiple (!) Tables
Code First

MusicStore = WebStore (Midterm)
Category = Genre
Supplier = Artist
Product = Album

3. (Creating Controllers and Actions)

Please create six different controllers named “Home”, “Product”, “Category”, “Supplier”, “Account” and “ShoppingCartController” respectively. Table 1 shows that which controller includes which actions.

Table 1. Controllers and Actions

Controller	Action	Definition
Home	Index	<ul style="list-style-type: none"> Shows last six products in the “Latest Products” section of the page. (Examine “index.html” page.) Shows three random products in the “Recommended Products” section of the page.
Product (Use MVC Scaffolding) (Unauthorized users cannot access these views.) (Only users whose role is “ Administrator ” can access these views.)	Index	<ul style="list-style-type: none"> Lists all products
	Create	<ul style="list-style-type: none"> Allows users to add new product
	Delete	<ul style="list-style-type: none"> Allows users to remove a product from database
	Details	<ul style="list-style-type: none"> Allows users to show details of an existing product
	Edit	<ul style="list-style-type: none"> Allows users to update an existing product
	ProductDetails	<ul style="list-style-type: none"> Allows users to show details of an existing product when they click the “details” hyperlink. In addition, when a product is displayed, users can add this product to their carts using  button. (The user should be redirected to the product details page. Notice that the view should be the same with “details.html”. You don't need to display any product in the “Similar products” section of the details page.)
Category	CategoryMenu	<ul style="list-style-type: none"> A partial view to display all categories within the category menu for “Layout” page.
	ProductsByCategory	<ul style="list-style-type: none"> Lists all products by its category when users selected anyone of the categories in the menu
Supplier	SupplierMenu	<ul style="list-style-type: none"> A partial view to display all suppliers within the supplier menu for “Layout” page.
	ProductsBySupplier	<ul style="list-style-type: none"> Lists all products by its supplier when users selected anyone of the suppliers in the menu
Account	LogOn	<ul style="list-style-type: none"> Allows users to login the system
	LogOff	<ul style="list-style-type: none"> Allows users to logout the system
	Register	<ul style="list-style-type: none"> Allows users to create new account in the system
	ChangePassword	<ul style="list-style-type: none"> Allows users to change their passwords
	ChangePasswordSuccess	<ul style="list-style-type: none"> Displays a success message when a user changed his/her password successfully
ShoppingCartController	Index	<ul style="list-style-type: none"> Please use the sample in MVC Music Store Application which has been implemented in the course
	AddToCart	
	RemoveFromCart	
	CartSummary (The total number of added products and the total price should be displayed in the “ Shopping cart ” section of the “ Layout ” page.)	
CheckoutController	AddressAndPayment	<ul style="list-style-type: none"> Please use the sample in MVC Music Store Application which has been implemented in the course
	Complete	