Online Shopping Store Application

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# Introduction

## Objective

Online Shopping Store permits a customer to submit online orders for items and services from a store thar serves both walk-in customers and online customers.It is a great way to compare what you are looking for what you want you can compare price,quantity, product view. It help customers purchase them online without having to visit the shop physically.The online shopping system will use the internet as the sole method for selling goods to its consumers.

## Purpose of the Application

The software project is a ASP.NET MVCWebForms based Online Shopping that stores a large amount of Products,Userinformation,Orderdetailsand Errordetailstheir corresponding related information in an Sql database for instant search and retrieval. Application enables vendors to set up online shops, customers to browse through the shops, and a system administrator to approve and reject requests for new shops and maintain lists of shop categories. Also the developer is designing an online shopping site to manage the items in the shop and also help customers purchase them

online without having to visit the shop physically.When ordering goods, many shopping systems provide a virtual shopping cart for holding items selected for purchase. Successive items selected for purchase are placed into the virtual shopping cart until a customer completes their shopping trip. Virtual shopping carts may be examined at any time, and their contents can be edited or deleted at the option of the customer. Once the customer decides to submit a purchase order, the customer may print the contents of the virtual shopping basket in order to obtain a hard copy record of the transaction. This ASP.NET MVC WebForms application allows fast and efficient retrieval of data to an large number of users.

## Scope

1. Secure registration and Management facilities for customers
2. Adequate searching mechanisms for easy and quick access to particular products
3. Creating a shopping cart, so that customer can shop 'n' no items and checkout finally with the entire shopping cart
4. Once the customer decides to submit a purchase order, Customer can check the order status.

# Functionality

## Application Functionality:

This application provides Customer to buy a product based on Categories.Guest can view only the products,but he can't buy the product.In order to buy the products he has to registerd and login into the application.Creating a shopping cart, so that customer can shop 'n' no items and checkout finally with the entire shopping cart.Based on the Billing address products will deliverd to the customer.Once the customer decides to submit a purchase order, Customer can check the order status.

# Modules Description

## Login:

Admin or user can access the application by Logging in by providing User Name and Password. If you are a new user, you can register to check functionality and use it.At the time of Login the time,date and IPAddress will be inserted in userLogin History

## OnlineShoppingStore Page:

This module has the User Layout page and includes a Menu control with the following parent items:

1. Home
2. About
3. Contact Us
4. Login

This parent form visible only toUser but not to Admin.Admin has another Layout.This Layout includes a Menu control with the following parent items

1. UserProfile
2. Category
3. SubCategory
4. Product
5. Order
6. Error History
7. Login

## UserProfile:

This module has User details like UserName, FirstName, LastName, EmailId, Phone No, Address etc. Admin can manage user and a new user can register himself/herself.

## Category:

This module has category Name and specifies the type of the Products.Admin can manage crud operations

## SubCategory:

This module has subcategory names and subCategory images.Admin can manage crud operations

## Product:

This module has product names and product images.Admin can add images to the Product

## Order:

This module has order details of user.Admin can only update them.when user purchased product the Order details will inserted into Order history

## Error History

This module has Error messages of controller and action name. Where ever the Error arises ,Filters will catches it and sends error to Database

# Software Requirements

* Visual Studio 2012 or above.
* Sql Server Management Studio 2008 or above.

# Hardware Requirements

* 250GB Hard disk Space
* 1 GHz Processor
* Minimum 2GB Ram

**6Structure and other specifications**

a. Directory structure:

1. ContactsManagerInMVCLinqEF: It is a parent folder in which the project can be wrapped.
2. App\_Start:- This folder contains various configurations files like BundleConfig.cs,FilterConfig.cs,RouteConfig.cs,WebApiConfig.cs.
3. Areas:- This folder seperates the logic of admin and user.
4. BO:- This folder contains all business objects logic files and Linq Queries.
5. Content:- This folder containsstatic files like css files, images and icons files.
6. Controllers:- This folder contains the control flow logic and action methods.
7. CustomFilters:- This folder contains Exception handling of Controller,View,Model.
8. Data:- This folder contains all tables as classes and their column names as properties
9. Documentation:- This folder contains information about project development and installation of database
10. Images:- This folder contains .jpg,.jpeg,png,gif files.
11. Models:- This folder contains all validation logic.
12. Scripts:- This folder contains all ".js" files.
13. Views:- This folder contains logic for rendering respresentation/Html output and Layouts(UI).
14. Edmx:-EDMXis Visual Studio's "container" for all things about your Entity Data Model. It contains all the information that is in the CSDL, SSDL, MSL, plus information about the visual layout of the tables in your Visual Studio designer surface.
15. Helper.cs:-It contains logic for storing user data when logged in.
16. Web.config:- This is an XML file with many predefined configuration sections available and support for custom configuration sections. A "configuration section" is a snippet of XML with a schema meant to store some type of information.

**6Constraint and relation /Dependancy**

1. Role:- Role Table consists of
   1. PKRoleId: It is a Primary key in Role Table
2. UserProfile:-User Profile Table consists of
   1. PKUserId: it is a primary key in User Profile table
   2. FKRoleId: it is a ForeignKey in User Profile. FKRoleId has a relationship with PKRoleId in Role table
3. Category:- Category table consists of
   1. PKCategoryId: it is a primary key in Category table
   2. FKCreatedByUserId: it is a ForeignKey in Category. FKCreatedByUserId has a relationship with PKUserId in User Profile table
   3. FKUpdatedByUserId: it is a ForeignKey in Category. FKUpdatedByUserId has a relationship with PKUserId in User Profile table
4. SubCategory:- SubCategory table consists of
   1. PKSubCategoryId: it is a primarykey in SubCategory table.
   2. FKCategoryId: it is a ForeignKey in SubCategory. FKCategoryId has a relationship with PKCategoryId in Category table
   3. FKCreatedByUserId:it is a ForeignKey in Category. FKCreatedByUserId has a relationship with PKUserId in User Profile table
   4. FKUpdatedByUserId:it is a ForeignKey in Category. FKUpdatedByUserId has a relationship with PKUserId in User Profile table
5. Product:- Product table consists of
   1. PKProductId: it is a primary key in product table
   2. FKCategoryId: it is a ForeignKey in Product. FKCategoryId has a relationship with PKCategoryId in Category table
   3. FKSubCategoryId: it is a ForeignKey in Product. FKSubCategoryId has a relationship with PKSubCategoryId in SubCategory table
   4. FKCreatedByUserId:it is a ForeignKey in Category. FKCreatedByUserId has a relationship with PKUserId in User Profile table
   5. FKUpdatedByUserId:it is a ForeignKey in Category. FKUpdatedByUserId has a relationship with PKUserId in User Profile table
6. ProductImage:- ProductImage table consists of
   1. PKProductImageId: it is a primary key in ProductImage table.
   2. FKProductId: it is a ForeignKey in ProductImage. FKProductId has a relationship with PKProductId in Product table
7. Order:- Order table consists of
   1. PKOrdeId: it is a primary key in Order table
   2. FKCustomerUserId:it is a ForeignKey in Order. FKCustomerUserId has a relationship with PKUserId in User Profile table
   3. FKBillingAddressId: it is a ForeignKey in Order. FKBillingAddressId has a relationship with PKBillingAddressId in User Profile table
   4. FKProccessByUserId: it is a ForeignKey in Order.FKProccessByUserId has a relationship with PKUserId in User Profile table
8. OrderDetails:- Order Detail table consisting of
   1. PKOrderDetailId: it is a primary key in OrderDetail table .
   2. FKProductId: it is a ForeignKey in OrderDetail.FKProductId has a relationship with PKProductId in Product table
   3. FKOrderId:it is a ForeignKey in OrderDetail table.FKOrderId has a relationship with PKOrderId in Order table
9. OrderHistory:- Order History table consists of
   1. PKOrderHistoryId: it is a primary key in OrderHistory table.
   2. FKOrderId: it is a ForeignKey in OrderDetail table.FKOrderId has a relationship with PKOrderId in Order table
10. UserLoginHistory:- User Login History table consists of
    1. PKUserLoginHistoryId: it is a primary key in UserLoginHistory table
    2. FKUserId: it is a ForeignKey in UserLoginHistory table.FKUserId has a relationship with PKUserId in UserProfile table
11. BillingAddress:- Billing Address table consists of
    1. PKBillingAddressId: it is a primary key in BillingAddress table
    2. FKUserId: it is a ForeignKey in UserLoginHistory table.FKUserId has a relationship with PKUserId in UserProfile table
12. ErrorHistory:-Error History table consists of
    1. PKErrorHistoryId: it is a primary key in Error History table.
    2. FKUserId: it is a ForeignKey in ErrorHistory table.FKUserId has a realtionship with PKUserId in UserProfile.

**6Role of each filter on the form**

1. UserProfile Form:- The search filter in userProfile form searches the users based on user CreatedDate,EmailId,PhoneNo.
2. SubCategory Form:- The search filter in subCategory form searches the SubCategories based on categories
3. Product:- The search filter in product form searches the products based on Categories & SubCategories.
4. Order:-The search filter in order form searches the orders based on OrderDate,UserName,Status,where Status has Processing,Delivered,Cancelled.