

# Assignment Report

EasyCart: (C# application)



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## Problem Statement

- The views on the website should consist of a login screen and a product details page. The user flows are defined as follows: The user will log in via the login page. After logging in successfully, a page containing a search bar should appear.
- The search bar will allow the user to search for products in the Product table. The user can either enter a product name or a product category name to search for products. For example, assume there is a category of products called "Baby food". Under "Baby food", there are products such as "Cerelac", "Lactogen", "Canned mashed apples" etc.
- The user can either just type "baby food" or "baby" and based on the product matches found against this entry, show the user a drop-down list of "Cerelac", "Lactogen", "Canned mashed apples". The problem becomes trivial if a user simply enters the product name directly. Show the successful product matches along with the product details in a neat table below the search box. This table will be shown when the user selects a product from the search match drop-down.
- Provide a clear button to clear the table from the webpage. On the right-hand side, show a panel containing a list of all the unique categories. Clicking on a category should display the entire table of products under the selected product category.

## Solution

To complete this assessment, I have used the following tool and language:

- Visual Studio 2019 (Community Edition)
- MySql Workbench for Database
- Language: C#
- .Net Framework 4.7
- Bootstrap 4

## Project setup

To set up the MySql database connection, connection string should be set up according to the local machine in **Web.config** file

```
<connectionStrings>  
  <add name="BTSDB"  
    connectionString="Database=productdata;Server=localhost;UID=root;PWD=root"  
    providerName=" MySql.Data.MySqlClient" />  
</connectionStrings>
```

## Design and Code

I have created the following pages:

1. **Login.aspx:** This is the login screen which takes username and Password as input and allows user to get in if the user is authentic.
  - ✓ Username: [pushkardeshmane@gmail.com](mailto:pushkardeshmane@gmail.com)
  - ✓ Password: pushkar
2. **Default.aspx:** This is the home screen, It consists of the solution of the assignment.
  - It consists of a search bar where user can enter either a Product Category name or the Product name
  - As soon as the user enters the first letter an autocomplete list shows all the categories and products which consists of similar letters in it.
  - User can select from the autocomplete and by clicking on search button user will get the result
  - If the user has entered the product category all the products from that category loads into a dropdownlist, If the user has entered the product name user will see the details of that products in grid view below.
  - In case the user selects the product category, Dropdown gets filled with all the products from that category and the user can select to get the product details.
  - To the right side of the screen panel named **Quick Search** lists all the product categories in ascending order, on clicking the category user can see all the products of that category
3. **AddProduct.aspx:** This page allows the user to enter the products to the database

4. **AddCategory.aspx:** From this page user can add new product categories.

## Screenshots:

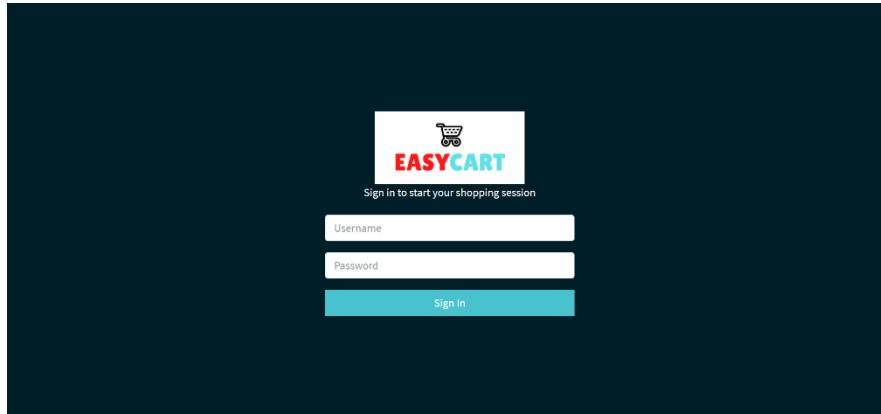


Fig. Login Screen

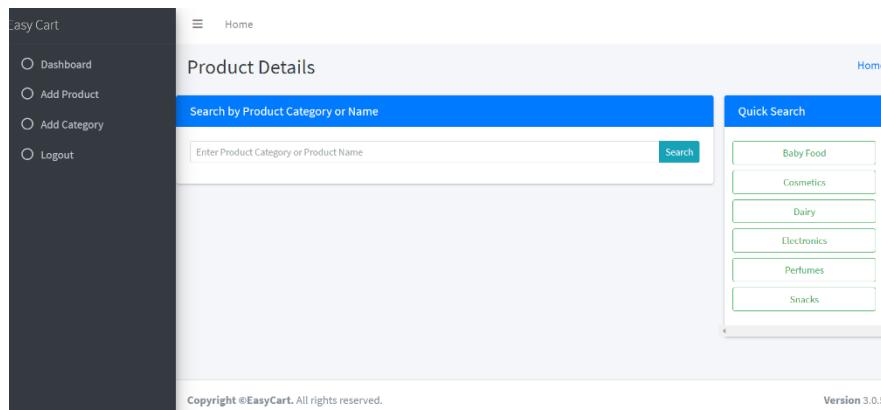


Fig. Dashboard (main solution page)

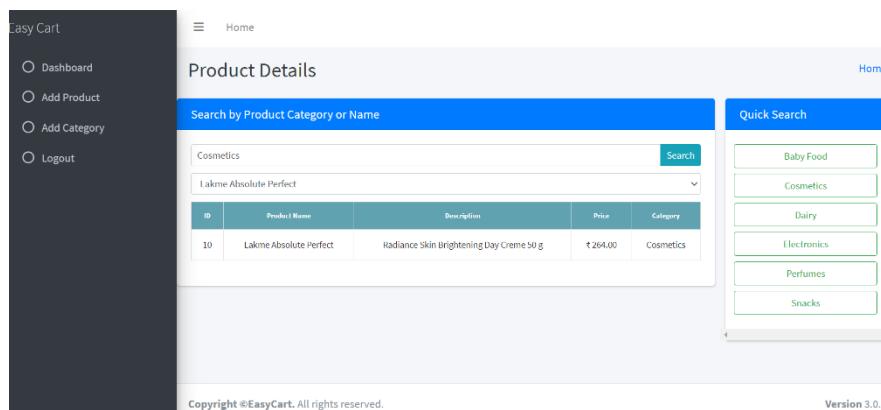
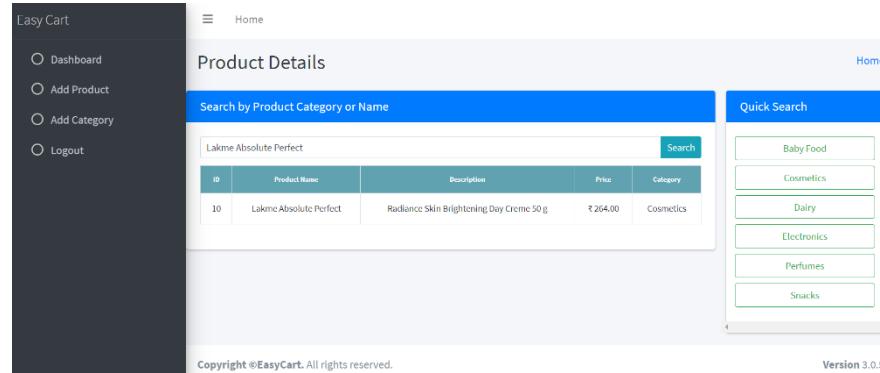


Fig. Search by product category



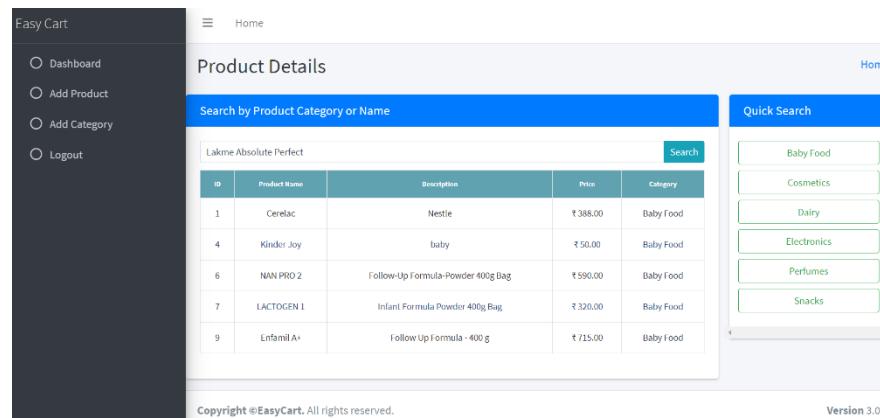
The screenshot shows the 'Product Details' section of the application. A search bar at the top contains the text 'Lakme Absolute Perfect'. Below it is a table with the following data:

ID	Product Name	Description	Price	Category
10	Lakme Absolute Perfect	Radiance Skin Brightening Day Creme 50g	₹264.00	Cosmetics

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Fig. Search by product name



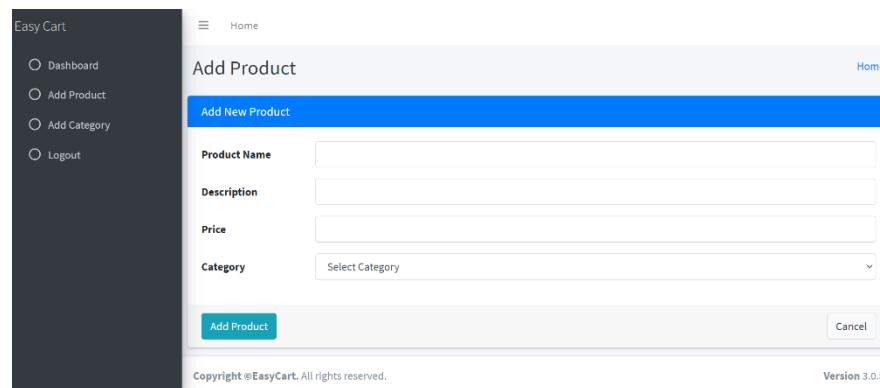
The screenshot shows the 'Product Details' section of the application. A search bar at the top contains the text 'Cerelac'. Below it is a table with the following data:

ID	Product Name	Description	Price	Category
1	Cerelac	Nestle	₹388.00	Baby Food
4	Kinder Joy	Baby	₹50.00	Baby Food
6	NAN PRO 2	Follow-Up Formula-Powder 400g Bag	₹590.00	Baby Food
7	LACTOGEN 1	Infant Formula Powder 400g Bag	₹320.00	Baby Food
9	Enfamil A+	Follow Up Formula - 400 g	₹715.00	Baby Food

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Fig. Quick search

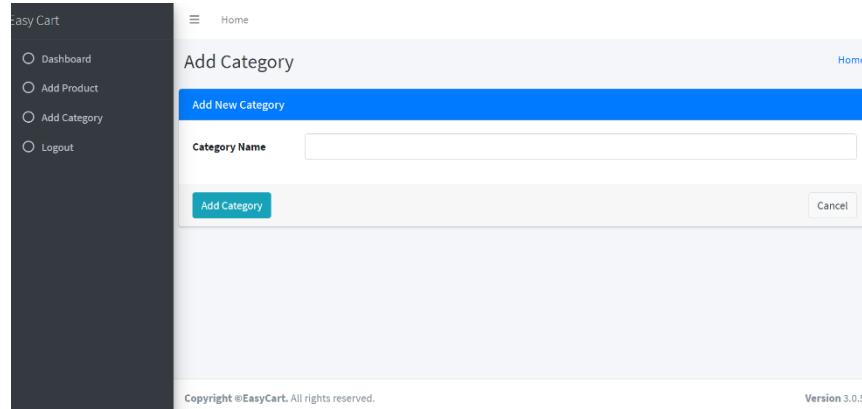


The screenshot shows the 'Add Product' form. It has fields for 'Product Name', 'Description', 'Price', and 'Category'. The 'Category' field has a dropdown menu with the placeholder 'Select Category'. At the bottom are 'Add Product' and 'Cancel' buttons.

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Fig. Add Product Form



The screenshot shows a web application interface for 'Easy Cart'. On the left is a dark sidebar menu with options: Dashboard, Add Product, Add Category, and Logout. The main content area has a header 'Add Category' and a sub-header 'Add New Category'. Below these are two buttons: 'Category Name' (with an input field) and 'Add Category' (in blue). In the top right corner is a 'Home' link. At the bottom of the page, there's a copyright notice 'Copyright ©EasyCart. All rights reserved.' and a 'Version 3.0.5' link.

Fig. Add Category Form

## Highlights:

- All the pages and design is responsive, web page design can be seen on any screen size
- Code for the validation is written, all the required validations are in place
- Code for the category panel is written so that the categories quick search buttons are shown dynamically as a new category is added.
- Code contains try, catch blocks to avoid run time crashing of application