

## Web Application Development using ASP.Net MVC

### Project 2: Small Business Management System

**Name of Project:** Small Business Management System

**Type of application:** Web Application

**Technology Stack:** C#, MVC, MS SQL Server

Team will be scored using following scoring benchmark.

SL#	Story Name	Score
1	Product Catalog Module	4
2	Party Module (Customer)	3
3	Party Module (Supplier)	3
4	Purchase Module	4
5	Sales Module	4
6	Stock Module	4
7	Reporting Module (Periodic Income Expense Report on Sales)	4
8	Reporting Module (Periodic Income Expense Report on Purchase)	4
	<b>Total</b>	<b>30</b>

Each member score (50) = Team Score (30) + Individual Score (20)

Individual score will be counted as your contribution.

Every team member must contribute equally. During project presentation, everyone will be asked about his/her contribution and score accordingly. During presentation, you will run your application and will show what you have completed so far. We will ask you about the source code and code quality, database design and data quality, member's contribution (github & trello). Your git repository, trello and release phases are the verification of your work. Note that before final presentation every one must complete all release phases (contains marks) works. Please note that if any members don't write any code or fails to complete release phases will get score zero.

**Description of Project:**

ABC Company is a small retail company, they purchase their products and sale the products with a profit margin. Currently they are managing their business manually, for that reason ABC Company is suffering to manage their stocks and sale management information, also the purchase informations on their products as they needed more time to summarize the result.

So, ABC wants an automation system which will manage their small business, and they will be able to manage their products, purchases, stocks and sales, with which they could have right data on time and with less effort.

**What ABC Company Needs?**

1. To Manage their Purchases.
2. To Manage their Stock
3. To Manage Their Sales.

So we could divide the solution into various Modules

1. Product Catalog Module.
2. Purchase Module
3. Stock Module
4. Sales Module
5. Party Module (Customer/Supplier)
6. Reporting Module

**Module Details:**

1. Product Catalog
  - a. Product Category Setup (Entry, Edit, Search)
  - b. Product Setup with Category (Entry, Edit, Search)
2. Party Module
  - a. Customer Setup (Entry, Edit, Search)
  - b. Supplier Setup (Entry, Edit, Search)
3. Purchase Module
  - a. Purchase Entry
  - b. Purchase Edit
  - c. Purchase Confirm
  - d. Purchase Search
4. Sales Module
  - a. Sales Entry
  - b. Sales Edit
  - c. Sales Confirm

d. Sales Search

5. Stock Module

- a. Periodical Stock Report (From - To, Opening Balance, In, Out, Closing Balance)
- b. Find Low product & Expired product.

6. Reporting Module

- a. Periodic Income Expense Report on Sales
- b. Periodic Income Expense Report on Purchase

## Story

### 1. Product Catalog Setup

As a Admin

I want to save new Categories (Name, Code)

So that I can save Products as per their Category

The image shows two hand-drawn wireframes for a product catalog system. The left wireframe is for the 'Category' management page, and the right is for the 'Product' management page.

**Category Management Wireframe:**

- Header: 'Category' with navigation icons (back, forward, close, home, search) and a search bar.
- Form: Fields for 'Code' and 'Name', followed by a 'Save' button.
- Table:

Sl	Code	Name	Action
1	001	Electronics	Edit Delete
2	002	Mobile	Edit Delete

**Product Management Wireframe:**

- Header: 'Product' with navigation icons and a search bar.
- Form: Fields for 'Code', 'Name', 'Category' (dropdown), 'Reorder Level', and 'Description'. There are '+' buttons next to the 'Category' and 'Description' fields. A 'Save' button is at the bottom.
- Image Placeholder: A box with an 'X' and the word 'Product'.
- Table:

Sl	Code	Name	Category	Reorder Level	Image	Description	Action
1	001	Nokia 3200	Mobile	25	<input type="checkbox"/>	Button Phone	Edit Delete
2	002	Nokia 3200	Mobile	25	<input type="checkbox"/>	Button Phone	Edit Delete

As a Admin

I want to save or modify Products (Name, Code, Image, Reorder Level, Category and Description)

So that Purchase and Sales Team can use the Products

As a Admin

When I Click on (+) Button Category Page will be pop up

So that I can Add new Category

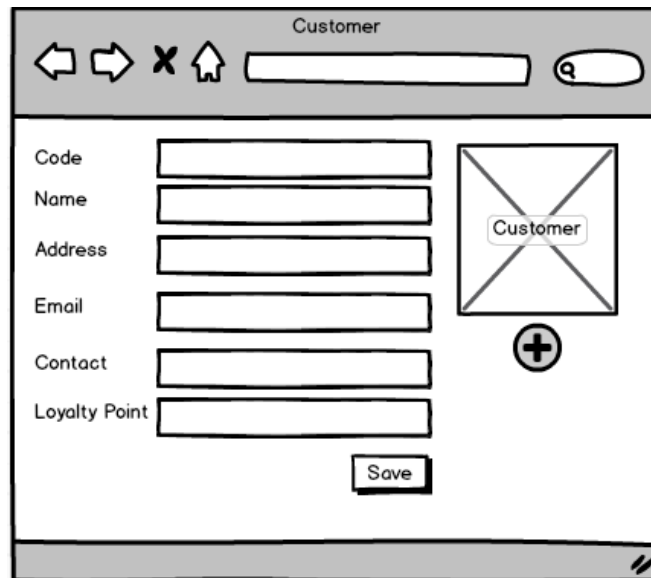
- Product Category Setup
- Product Setup with Category

## 2. Party Module

As a Admin

I want to save, modify and search Customers (Name, Code, Address, Contact, Email, and Loyalty Point)

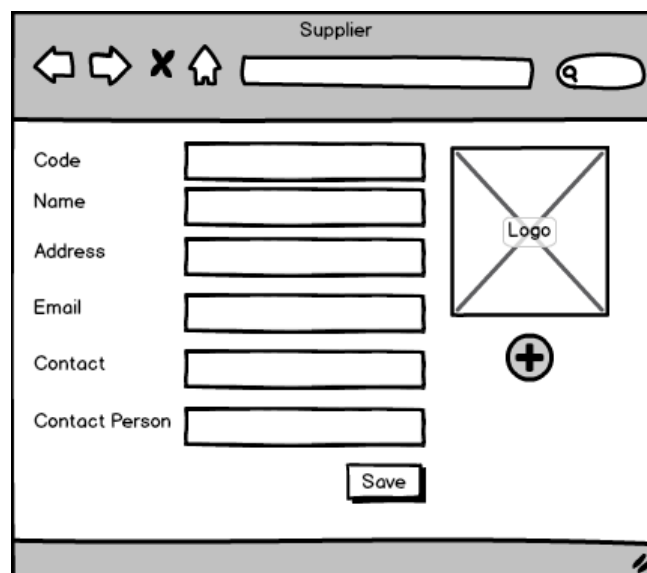
So that I can save Customers



The Customer Entry Form is a web interface for managing customer records. It features a header bar with the title "Customer" and navigation icons (back, forward, delete, and home). Below the header is a search bar with a magnifying glass icon. The main form area contains six input fields for "Code", "Name", "Address", "Email", "Contact", and "Loyalty Point". To the right of these fields is a placeholder for a customer profile picture, labeled "Customer" with a large "X" and a plus sign below it. A "Save" button is located at the bottom right of the form.

I want to save, modify and search Supplier (Name, Code, Address, Contact and Email)

So that I can save Supplier



The Supplier Entry Form is a web interface for managing supplier records. It features a header bar with the title "Supplier" and navigation icons (back, forward, delete, and home). Below the header is a search bar with a magnifying glass icon. The main form area contains six input fields for "Code", "Name", "Address", "Email", "Contact", and "Contact Person". To the right of these fields is a placeholder for a supplier logo, labeled "Logo" with a large "X" and a plus sign below it. A "Save" button is located at the bottom right of the form.

- a. Customer Entry, Edit, Search
- b. Supplier Entry, Edit, Search

### 3. Purchase Module

Purchase

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**Supplier**  
 Date   
 Bill/Invoice No:   
 Supplier

**Products**  

Products	<input type="text" value="-Select-"/>	Quantity	<input type="text"/>
		Unit Price (Tk)	<input type="text"/>
Code	<input type="text" value("&lt;view&gt;")"=""/>	Total Price (Tk)	<input type="text" value("&lt;view&gt;")"=""/>
Manufactured Date	<input type="text"/>	Previous Cost Price (Tk)	<input type="text" value("&lt;view&gt;")"=""/>
Expire Date	<input type="text"/>	Previous MRP (Tk)	<input type="text" value("&lt;view&gt;")"=""/>
		New MRP (Tk)	<input type="text"/>
Remarks			

Sl	Products(Code)	Manufactured Date	Expire Date	Quantity	Unit Price (Tk)	Total Price (Tk)	New MRP (Tk)	Remarks	Action
									Edit Delete

### As an Admin / Purchase Manager

I want to save and modify purchase information (Date, Bill/Invoice number, Supplier, Products, Code, Manufactured Date, Expire Date, Purchased Quantity, Unit price, Remarks)

So that Business Owner, Purchase team can have up-to-date purchase information  
[Unit Costing Calculation Formula: New MRP = 25% of Unit Cost]

### As a Admin / Purchase Manager

When Confirm purchase Products will be available for Sales (i.e. Stock quantity will be increased)

So that Business Owner, Purchase team can have up-to-date purchase information

As a Admin /Purchase Manager/ Owner

I want to Search purchase products

So that we can see the up-to-date purchase information and make our purchase dissection.

As a Admin / Owner  
I want to calculate product sales price  
So that, I gain profits on sales.

- a. Purchase Entry
- b. Purchase Edit
- c. Purchase Confirm
- d. Purchase Search

#### 4. Sales Module

As a Sales man

When I Confirm Sales (Customer, Date, Product, Quantity and Price) Stock quantity will be decreased, on purchase price customer will get loyalty point, So that Business Owner, Purchase team can have final up-to-date sales information and give discount/offer on loyalty point.

**[Loyalty Point Calculation Formula: Loyalty Point will be increased by [Grand Total/1000] Point(s)]**

**[Discount (%) Calculation Formula: Loyalty Point/10]**

As a Admin/ Inventory Manager

I want to know my reorder level

So that I can order purchase

As a Purchase Manager, Owner

I want to Search Sales products

So that we can see the up-to-date sales information.

The image shows a web application interface for a Sales Module. At the top, there's a navigation bar with icons for back, forward, close, and home, followed by a search bar. The main content area is divided into two columns. The left column contains two sections: 'Customer' and 'Product'. The 'Customer' section has a dropdown for 'Customer' (currently showing '-Select-'), a text input for 'Date', and a text input for 'Loyalty Point' (showing '<View>'). The 'Product' section has a dropdown for 'Product' (showing '-Select-'), a text input for 'Available Quantity' (showing '<View>'), and text inputs for 'Quantity', 'MRP (Tk)', and 'Total MRP (Tk)'. An 'Add' button is at the bottom of the 'Product' section. The right column is titled 'Product Details' and contains a table with columns: 'SI', 'Product', 'Quantity', 'MRP (Tk)', 'Total MRP (Tk)', and 'Action'. The table has three rows, each with a 'Delete' button in the 'Action' column. Below the table, there are four text inputs with labels: 'Grand Total (Tk)', 'Discount (%)', 'Discount Amount (Tk)', and 'Payable Amount (Tk)', each showing '<View>'. A 'Save' button is at the bottom right of the right column.

SI	Product	Quantity	MRP (Tk)	Total MRP (Tk)	Action
					Delete
					Delete
					Delete

- a) Sales Entry
- b) Sales Edit
- c) Sales Confirm
- d) Sales Search



## 5. Stock Module

### As a Inventory Manager

I want to track Available Products/ Re-Order Products/ Expired Products and Stock out Lost or Damaged Products

So that products never runs out and loss can be minimized.

Stock

←
→
✕
↑

Product 
Category

Start Date 
End Date

☐ Re-Order Level
 ☐ Expired
 ☐ Damage
 ☐ Lost

Search

Sl	Code	Name	Category	Reorder Level	Expired Date	Expired Qty	Opening Balance	In	Out	Closing Balance
1	001	<a href="#">Nokia 3200</a>	Mobile	<a href="#">25</a>	1/1/2020	<a href="#">10</a>	100	100	50	150
2	002	<a href="#">Nokia 3200</a>	Mobile	<a href="#">25</a>	1/1/2020	<a href="#">0</a>	500	500	600	400

Order Product

Product

Code

<VIEW>

Name

<VIEW>

Category

<VIEW>

Reorder Level

<VIEW>

Available Quantity

<VIEW>

Order

Supplier

-Select-

Last CP (Tk)

<VIEW>

Order Date:

//

Quantity

Delivery Date:

//

Total Price (Tk)

<VIEW>

Remarks

Save

Stock Out Damage or Lost Product

←
→
✕
🏠

Q

**Product**

**Code** <VIEW>

**Category** <VIEW>

**Name** <VIEW>

**Available Quant** <VIEW>

**Action**

**Supplier** -Select-

☒ Damage    ☐ Lost

**Last CP (Tk)** <VIEW>

**Stock Out Quantity**

**Stock Out Date:** / /

**Total Price (Tk)** <VIEW>

**Remarks**

Save

Stock Out Expired Product

←
→
✕
🏠

Q

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**Product**

Code

Category

Expired Date:

Name

Available Quant

Expired Quantity

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**Expired**

Supplier

Stock Out Date:

Remarks

Last CP (Tk)

Stock Out Quantity

Total Price (Tk)

Save

- Periodical Stock Report (From - To, Opening Balance, In, Out, Closing Balance)
- Find Low quantity Products or Expired products then order them or remove.
- Stock Out Damage or Lost Product

## 6. Reporting Module

Periodic Income Expense Report on Sales

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Start Date  End Date

SI	Code	Name	Catagory	CP (TK)	Sale (TK)	Profit (Tk)
1	001	Nokia 3200	Mobile	1000	1500	500
2	002	Nokia 3100	Mobile	3000	5500	2500

Periodic Income Expense Report on Purchase

← → ✕ 🏠  🔍

Start Date  End Date

SI	Code	Name	Catagory	CP (TK)	MRP (TK)	Profit (Tk)
1	001	Nokia 3200	Mobile	1000	1500	500
2	002	Nokia 3100	Mobile	3000	5500	2500

- a. Periodic Income Expense Report on Sales
- b. Periodic Income Expense Report on Purchase