

## 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 contains two hand-drawn wireframes. The left wireframe is titled 'Category' and features a header with navigation icons (back, forward, close, home) and a search bar. Below the header are input fields for 'Code' and 'Name', followed by a 'Save' button. At the bottom is a table with columns 'Sl', 'Code', 'Name', and 'Action'. The right wireframe is titled 'Product' and has a similar header. It includes input fields for 'Code', 'Name', 'Category' (a dropdown menu), 'Reorder Level', and 'Description'. To the right of these fields is a placeholder for a product image, represented by a box with an 'X' and the word 'Product'. There are plus signs next to the 'Category' and image placeholders, indicating a relationship or selection process. A 'Save' button is located below the 'Description' field. At the bottom of the 'Product' wireframe is a table with columns 'Sl', 'Code', 'Name', 'Category', 'Reorder Level', 'Image', 'Description', and 'Action'.

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

| 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

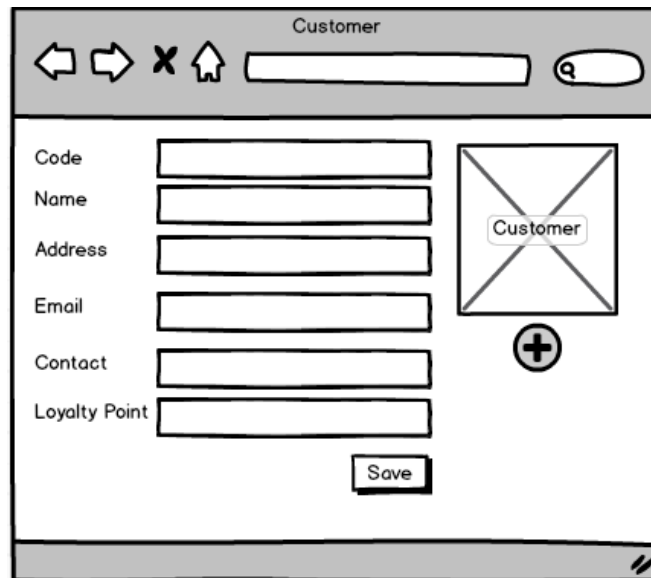
- Product Category Setup
- Product Setup with Category

## 2. Party Module

As a Admin

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

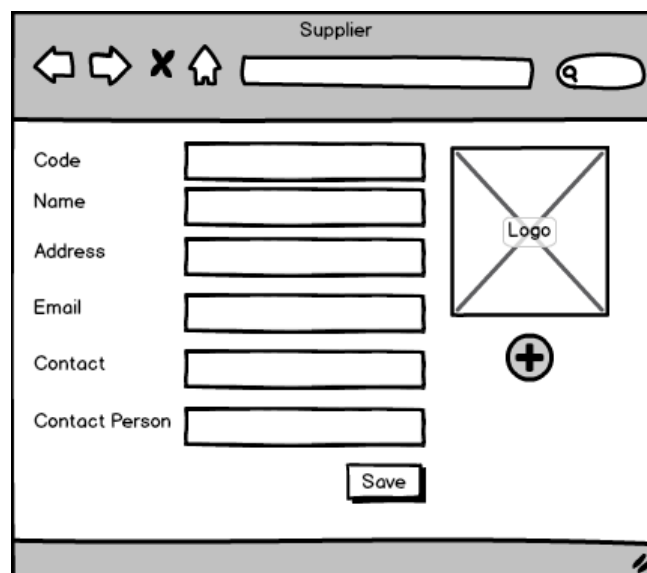
So that I can save Customers



A hand-drawn wireframe of a 'Customer' entry form. The title bar at the top is labeled 'Customer' and contains navigation icons (back, forward, close, home) and a search bar with a magnifying glass icon. The form body has a list of labels on the left: 'Code', 'Name', 'Address', 'Email', 'Contact', and 'Loyalty Point', each followed by a text input field. To the right of these fields is a square placeholder for a logo, labeled 'Customer' with a large 'X' over it, and a circular button with a plus sign below it. At the bottom right is a 'Save' button. The bottom of the window has a grey bar with a double-slash icon.

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

So that I can save Supplier



A hand-drawn wireframe of a 'Supplier' entry form. The title bar at the top is labeled 'Supplier' and contains navigation icons (back, forward, close, home) and a search bar with a magnifying glass icon. The form body has a list of labels on the left: 'Code', 'Name', 'Address', 'Email', 'Contact', and 'Contact Person', each followed by a text input field. To the right of these fields is a square placeholder for a logo, labeled 'Logo' with a large 'X' over it, and a circular button with a plus sign below it. At the bottom right is a 'Save' button. The bottom of the window has a grey bar with a double-slash icon.

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

### 3. Purchase Module

**Supplier**

Date

Bill/Invoice No.

Supplier

**Products**

Products

Code

Manufactured Date

Expire Date

Quantity

Unit Price (Tk)

Total Price (Tk)

Previous Cost Price (Tk)

Previous MRP (Tk)

New MRP (Tk)

Remarks

**Add**

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

**Submit**

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 is a navigation bar with a title 'Sales' and a search bar. Below the navigation bar, the interface is divided into two main sections: 'Customer' and 'Product Details'.

**Customer Section:**

- Customer: A dropdown menu with '-Select-' and a '+' icon.
- Date: A text input field.
- Loyalty Point: A text input field with '<View>'.

**Product Section:**

- Product: A dropdown menu with '-Select-'.
- Available Quantity: A text input field with '<View>'.
- Quantity: A text input field.
- Unit Price (Tk): A text input field.
- An 'Add' button is located at the bottom right of this section.

**Product Details Table:**

| Sl | Product | Quantity | Unit Price (Tk) | Total Price (Tk) | Action |
|----|---------|----------|-----------------|------------------|--------|
|    |         |          |                 |                  | Delete |
|    |         |          |                 |                  | Delete |
|    |         |          |                 |                  | Delete |

**Summary Section:**

- Grand Total (Tk): A text input field with '<View>'.
- Discount (%): A text input field.
- Discount Amount (Tk): A text input field.
- Payable Amount (Tk): A text input field.
- A 'Save' button is located at the bottom right of this section.

- 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

←
→
✕
↑

Q

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

Name

Category

Reorder Level

Available Quantity

Order

Supplier

Last CP (Tk)

Order Date:

Quantity

Delivery Date:

Total Price (Tk)

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

---

**Product**  
 Code: 
 Name:   
 Category: 
 Available Quant:   
 Expired Date:  
 Expired Quantity:

---

**Expired**  
 Supplier:  
 Last CP (Tk):   
 Stock Out Quantity:   
 Stock Out Date:  
 Total Price (Tk):   
 Remarks:

- 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

← → ✕ 🏠  🔍

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 Sales

← → ✕ 🏠  🔍

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        |
|    |      |            |          |         |           |             |

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