

Web Application Development in .NET

Project -02: Point of Sale (POS)

Modules: Every Feature on Setup and Operation Module should have (Create, Update, Delete, View and Search Operation)

1. Setup Module
 - a. Item Category
 - b. Item
 - c. Expense Category
 - d. Expense Item
 - e. Employee
 - f. Organization
 - g. Outlet
 - h. Party
2. Operation Module
 - a. Purchase
 - b. Sales
 - c. Expense
3. Report Module
 - a. Purchase
 - b. Sales
 - c. Stock
 - d. Expense
 - e. Income

Description:

❖ Item Category Setup:

In this Page, user can setup an Item Category for setup Item. First time, when the page is load, by default “**Root Category**” will be selected, and **Parent Category Dropdown** will be hidden, and **Code** will Load **Automatically**, like as (XXX), user provide Category Information and can be change the code, but ensure that, code must be **Unique**, user provide one or more image, and instant preview after select any image in the bellow section.

If user want to create This Category as a **Child Category**, Then user will select the **Child Category** Radio button, after click the button, **Parent Category Dropdown** will be display, and all setup category will be load in to the dropdown, and user must be select any Parent category as a parent of this Category.

After successfully submission, Saved category will load under the setup page (see the MOQ).

(User can Edit, Delete from here)**

Note: Name and Code is must be unique & required, if it is a child category, then parent also required.

Item Category Setup

☐ Root Category ☐ Child Category

*Parent Category ▾ * it

Name *

Code --- *

Description

Image Name/Path

Category List

SL	Category	Name	Code	Desc	Image	Action
						<input type="button" value="Edit"/> <input type="button" value="Delete"/>

Fig: Category Setup

❖ Item Setup

In this page, user can setup an Item, for that when user select any category from the **category dropdown**, code will automatic load based on category **Code, { (XXX) From category, (XXXXXX) }****
And other thing same as category.

Note: Name and Code must be unique & required based on Category, (FUR-000001, COM-000001)**

Item Setup

Category Code

Name Desc

Cost Price

Sale Price Image Path/name Open

SL	Category	Name	Code	Desc	Cost Price	Sale Price	Image	Action
1								<input type="checkbox"/> <input type="checkbox"/>

❖ Expense Category

In this page user can setup a Category for Setup category Item, This setup page's requirement same as Category Setup page. Please follow the category setup requirements.

Expense Category Setup

☐ Root Category ☐ Child Category

* Parent category

Name Code (3 digit)

Description

SL	Category	Name	Code	Description	Action
1					✓ X

❖ Expense Item Setup

In this page, user can setup an Expense Item, requirement same as **Category Item Setup**.

The Expense Item Setup form includes fields for Category (dropdown), Name, Code (split into two parts), and Description. It has Save and Cancel buttons. Below the form is a table with columns: SL, Category, Name, Code, Desc, and Action.

SL	Category	Name	Code	Desc	Action

❖ Organization Setup

In this page, user can setup an **Organization**.

Note: Name, code and contact No is required & unique.

The Organization Setup form includes fields for Name (*), Code (* (Auto)), Contact No, Logo/Image (with a preview box), and Address (*). It has Save and Cancel buttons. Below the form is a table with columns: SL, Name, Code, Contact, Address, Image, and Action.

SL	Name	Code	Contact	Address	Image	Action

❖ Outlet/ Branch Setup

In this page, user can setup an **Outlet**.

Please be noted: Here **Name** field is missing. So **Name** field will add bellow the **Organization**.

Note: Organization, Name, Code, Contact No, Address are required. Name, Code, and Contact No Unique based on Organization.

Branch / Outlet Setup

Organization *

Code *(Auto)

Contact No

Address *

SL	Organization	Code	Contact	Address	Action
1	Rango	000-00	0181111	Dhaka	<input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>

❖ Party Setup:

In this page, user can setup a **Party**, there also have two **checkbox of Party Type**, which means any **party** can be a **Customer** also a **Supplier**.

Note: Name, Code and Contact No are required & Unique.

The sketch shows a 'Party Setup' form with the following fields: Name, Contact, Logo/Image (with an upload icon and a file selection box), Code (with a mask '---- --' and 'YYYY MM'), Email, and Address. Below these fields are two checkboxes for 'Party Type': 'Customers' and 'Suppliers'. Below the form is a 'Party List' table with the following columns: SL, Name, Code, Contact, Email, Image, Address, and Action.

❖ Employee Setup

In this page, use can setup an Employee, for that, when load the page, user can see the **Official** Tab, and **official Form** also loaded in the bellow and **Personal form** will hide, but when user change the tab to **Personal** tab, then **Personal information form** will show the bellow, and obviously **Official form** will hide.

Note: Name, Code*, Outlet, Contact No* and NID are required.

The sketch shows an 'Employee Setup' form with two tabs: 'Official' and 'Personal'. The 'Official' tab is selected and contains the following fields: Name, Code, Outlet (with a dropdown arrow), Joining Date (with a calendar icon), Image (with an upload icon and an 'Open' button), Contact No, Email, and Reference (with a dropdown arrow). The 'Personal' tab is hidden and contains the following fields: Emergency Contact No, NID, Reference (with a dropdown arrow), Father's Name, Mother's Name, Present Address, and Permanent Address. At the bottom right of the form are 'Save' and 'Cancel' buttons.

❖ Operation Module:

In this page, user can purchase one or more Item at a time. Page layout Divided by Two sections, 1- Purchase Header, 2- Purchase Details

- 1- Purchase Header, user select an Item from Item dropdown list, Cost Price will be suggested as given in item setup. Cost Price can be changed further, by default quantity will be 1, after clicking the add button, item will be added with quantity and Cost Price in the Purchase Details Section as u can see the bellow image. There should have Edit & Delete Button in Every details Row, thus user can edit or delete the item before submit.
- 2- In Employee Section: Select the Outlet/ Branch, Employee will be loaded, because we setup Employee Based on Outlet.
- 3- Purchase Date should be by Default Today's date, and must be provide a date picker, thus user can select any date from calendar.
- 4- In Purchase summary section: Total Amount and Total amount Due will show, (by default Total due = total amount), Total Due can be changed by user but cannot be greater than Total Amount.

After completed user Click the save and purchase will be saved with relevant information, and after successfully Submission, redirect to Details (View) Page. User can download Purchase information in pdf format from view page.

After Successful purchase operation the items will be stored in stock thus in further stock report item will be shown.

Note: Dropdown load with Item Name and Barcode, and user can search from dropdown. All validation will check. Without any Details, user can't create any purchase. Purchase Date, Supplier, Outlet, Employee all are required.

Purchase Receiving

Item Name/Bar code Qty Cost/Price

SL	Item	Qty	Price	Line total	Action
1	001	2	500	1000	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/>

Outlet/Branch

Employee

Purchase Date

Supplier

Remarks

Purchase Summary

Total	Amount Due
1000	1000

Optional: From here generate bar code which will consist item code as bar code, item name and sales price as per item quantity .

Purchase Result

Purchase No

00011111

Outlet/Branch

< >

Purchase Date

< >

Purchase By

< >

Supplier

< >

Remarks

Item Details

Sl	Item	Qty	Price	Line total
1

Print

→ Pdf

❖ Sales Operation

Sale operation similar to as Purchase, you can create both UI as any one layout system

While item is selected the sales price of item should be loaded as price which can not be changed by user i.e. its read only field.

Sub Total = total item qty * unit price.

VAT Amount = (Sub Total – Discount Amount)*VAT %

Total Amount = SubTotal – Discount Amount(if any) + VAT Amount.

Note: Outlet, employee, sale date all are required. If user provide VAT or Discount, it will apply when click the save button. You can see the Sales Result/ Details/ View the image, it will show after successfully sales creation. And all are same as purchase.

Sales

Item Name/ Bar Code
Qty
Price

Stock Qty
< >

[Add]

Sl	Item	Qty	Price	Line Total
1	0001...	2	500	1000
2	0002...	3	500	1500
Total				2500

Outlet

Employee

Sale Date

Customer Contact

Customer Name

Sales Summary

Sub Total

VAT
 %

Discount
 TK

Total	Amount Due
0.000	0.000

[Save]

Sales Result/ Sales Receipt

Sale No

Sale Date

Customer

① Item Name

②

③

Outlet

Sold By

Contact No

Qty

Price

Total Price

VAT

Discount

Grand Total

(Print)

❖ Expense Operation

For a Sales Center there is various kinds of expenses which recorded for the service center expense. In this page user will enter expense transactions.

Every required fields are same as Purchase.

Note: From Cash amount will show (Sales-(Purchase + Expense) =Cash)**

The image shows two hand-drawn UI screens for an expense management system.

Expense Screen:

- Expense Section:** Contains input fields for "Exp Item/code" (with a dropdown arrow), "Qty", "Reason/Dense", and "Amount". There are also checkboxes for "H" and "X".
- Outlet/Branch Section:** Contains input fields for "Outlet/Branch" (with a dropdown arrow), "Employee" (with a dropdown arrow), and "Date" (with a "Today (*)" button).
- Expense Summary Table:**

Total	Due
2000	* From Cash/ Due
- Action Buttons:** "Save" and "Cancel".
- Table:**

SL	Exp Item	Qty	Amount	Line Total	Dense	Action
						↵ X

Expense Result Screen:

- Expense Section:** Contains input fields for "Outlet/Branch", "Employee", and "Date", each with left and right arrow navigation buttons.
- Expense Details Table:**

St	Item	Qty	Amount	Line total
				Total
- Action Buttons:** "Print" and "Pdf".

❖ Report Module

In this page, user can see the purchase history, for that user can search by Purchase Code or Outlet or From Date or To Date or All. After click the show button, purchase will load and Total Amount will show in the bellow of the table.

Note: View, Edit and Delete Button show in every row, user can edit, delete and view from here, final user can save this result as pdf.

Report

Purchase Report

Purchers Code Outlet/Branch
From Date To Date

Search Result

SL	Date	Description	Outlet	Supplier	Purchase Total	Action
1	20/12/17	Horn Name, Qty, Cost				

Total

❖ Sales Report Also same as Purchase report. This layout must be same as purchase result, sales total should be every row and Grand Total amount will be show in the bellow section.

Sales Report

Outlet From Date
Sales Code To Date

Report

SL	Date	Description	Outlet	Customer	Total

- ❖ Expense Report Also same as Purchase report. This layout must be same as purchase result, sales total should be every row and Grand Total amount will be show in the bellow section.

Expense Report

Outlet

Expense Code

From Date

To Date

Sl	Date	Description	Outlet	Total Expense

❖ Stock Report

In this page, user can see the total stock summary based on Outlet.

Note: Item Name and Code, Category Full Path (Electronics > Samsung > Mobile > Smart Phone > Galaxy), Total Stock Quantity and average price.

Stock Report

Outlet

* Challenging *

Sl	Item Name	Category Full Path	Stock Qty	Avg Price
1	TV (Color)	Electronics > TV > (Color)	20	15,000

❖ Income Report

In this page, user can see the income report based on search criteria. User will select an Outlet *.

From Date* To Date* must provide, and after click the show button, Purchase , Sales and Expense Report will show, and here expense table is missing, so you should add this.

Note: Summary: Total Purchase, Total Sales, Total Expense, and Total Profit

Income Report

Outlet From Date To Date

Purchase Report

Sl	Date	Descrip	Pur Amount

Sales Report

Sl	Date	Descrip	Sales Amount

Summary

Total Purchase	Total Sales	Total Profit
		*