**Capstone Project – Expense Tracker (MVC)**

The Personal Finance Web App helps users track and manage their daily expenses efficiently. It allows users to add new expenses with details such as title, amount, date, and category. Users can view a list of all expenses in a structured table format. It supports editing existing expenses to update any details as needed. Users can delete unwanted or incorrect expense entries.

**Features:**

\*.Add a new expense

\*.View all expenses

\*.Edit an expense

\*.Delete an expense

\*.Filter expenses by category.

**Technologies Used:**

\*.ASP.NET Core

\*.MVC Entity Framework Core

\*.SQL Server Razor Views + Bootstrap

\*.Git for version control

**Setup Steps:**

**Step-1 : Initial Project Setup**

1. Open Visual Studio 2022.
2. Select “Create a New Project”.
3. Choose the Template as “ASP.NET Core Web App (Model-View-Controller)” and Click “Next”.
4. Name the Project as “Expense\_Tracker”

**Step-2 : Model Class**

1. Create an Expense.cs class in the Model Folder.

**Step-3 : Controller and Views**

1. Create an Entity Framework Controller →Pass the ExpensesModel → Add the Context → Select SQL Server → Click “Next”.
2. Right-click on Controllers folder →Add→New Scaffolded Item

* Choose: “**MVC Controller with views, using Entity Framework**” and Name the Controller as “Expenses”
* Model Class: Expense.cs
* Data Context Class: ApplicationDbContext

**Step-4 : Database Migration**

1. Go to Tools → NuGet Packager Manager → Open Package Manager Console → Execute these 2 commands:-

* Add-Migration InitialCreate
* Update-Database

**Step-5 : Verify Database**

1. Open SQL Object Explorer → SQL Server → MS SQL Localdb → Database → ExpenseTracker\_Context → Tables → dbo.Expense → Right click → View Data.

**User Manual:**

1. **Add Expense**

\*.Open the Expense Tracker web application.

\*.Click on the "Add Expense" button on the homepage.

\*. Fill in the expense details like Title, Amount, Category, and Date in the form.

\*.Click the "Add" button to add the expense.

1. **Edit Expense**

**\*.N**avigate to the "List of Expenses" page from the main menu.

\*.Locate the expense you want to modify and click the **"Edit"** button next to it.

\*.The Edit Expense form will appear with the existing details filled in.

\*.Update the desired fields such as Title, Amount, Category, or Date.

\*.Click the **"Save"** button to apply the changes.

1. **Delete Expense**

\*.Open the Expense Tracker application and go to the "List of Expenses" page.

\*.Locate the expense entry you want to delete from the list.

\*.Click the "Delete" button next to that expense.

\*.A confirmation message will appear asking "Are you sure you want to delete this?"

\*.Click "Yes" to confirm, and the selected expense will be permanently deleted.

1. **Filter Expenses**

\*.Go to the Expense List page in the application.

\*.Locate the filter options.

\*.Select the desired category from the dropdown list.

\*.Click the "Filter" button to view the filtered expense results