CASE STUDY ON

DAILY PERSONAL EXPENSE MANAGER

Document Revision History

Date	Revision No.	Author	Summary of Changes
20th Mar. 2020	1	Manish Rajhans	Initial Draft

Table of Contents

INTRODUCTION

This document outlines a case study on Module1 (C# Programing). The project is to develop Daily Personal Expense Management System. This document contains the requirements, work flow of the system and gives guidelines on how to build the functionality.

SETUP CHECKLIST

Minimum System Requirements

- Windows 8 or above
- Memory 4 GB
- Internet Explorer 6.0 or higher
- SQL Server 2012 client and access to SQL Server 2012 server
- Visual Studio 2017 or above

INSTRUCTIONS

- The code modules should follow all the coding standards.
- You can refer to your degreed course.
- You may also look up the help provided in the MSDN

PROBLEM STATEMENT

OBJECTIVE

Development of Daily Personal Expense Management System

To manage daily expenses, we usually maintain the data either using pen and paper or we use excel sheets for the same. With the creation of Daily Personal Expense Management System, you should be able plan the budget and record the daily expenses against it. Also this system should tell you the balance amount you can spend against the given category after crosschecking with the budget amount.

ABSTRACT OF THE PROJECT

The proposed Daily Personal Expense Management System should provide below functionalities:

1. Create Budget:
    - The user should be allowed to create budget by providing Expense Head and BudgetedAmount.
    - Expense Heads can be:
        - Grocery
        - Medical
        - Personal
        - Rent
        - EMI
        - Travelling
2. View Budget
    - The user should be allowed to view the created budget.
3. Add Expense
    - The user should be able to add Expense under only specified expense head.
    - The user should be able to add expense only if the budgeted amount is more than the expense amount under the specified expense head, else it should indicate proper error message. For example, If budgeted amount for grocery is Rs 2000 and you are

trying to add 2300, it should give error reporting how much you are overspending.

- The user should provide date while adding expense.

4. View Expenses:
    - The user should be able to view Expense grouped over a chosen expense head
    - The user should be able to view expenses daywise
    - The user should be able to view expenses against budgeted amount under chosen expense head

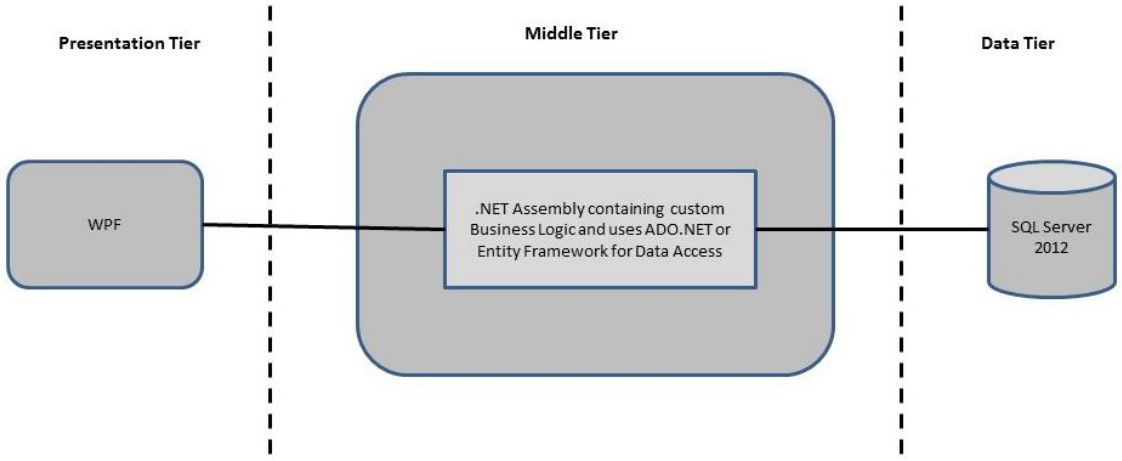
Develop the Application for the above requirement using C#.

FUNCTIONAL COMPONENTS OF THE PROJECT

Application Architecture:
Distributed web applications traditionally to be designed and built across three logical tiers:

- Database Access Layer (DAL)
- Business Logic Layer (BLL)
- Presentation Layer

The DAL refers to the data oprations performed using Serialization. The BLL refers to the component that encapsulates all the business logic of the application. And, the Presentation layer refers to the console application.



- **Design guidelines**
  - Presentation layer is Console Application
  - Data access layer of 3-tier use Serialization with collections

TECHNOLOGY USED:

- *Presentation Layer*
    a. *C# Console Application*

- *Business Layer*
    1. *Business Logic Components and Services :-*
        a. C# 5.0

- *Data Access Layer*
    1. *Serialization:-*
        a. Binary Serialization

