



PF SEMESTER

PRESENTATION

PRESENTATION BY

Syed Abdul Muiz

Daniyal Ali

Ayesha Zafar

PROJECT NAME

EXPENSE TRACKER

PROJECT OBJECTIVES

- Objective 1 Create a Simple Expense Tracking System to help users manage their daily expenses.
- Objective 2: Allow users to Register, Login, Add, View, Delete and Track their Total Expenses.
- Objective 3: Develop a Secure and User-friendly interface for managing financial data.

SYSTEM OVERVIEW

1. Description: The System is a Console Base Application for Tracking Expenses.

2. Main Features:

User Registration and Login.

Adding, Viewing and Deleting Expenses.

Calculating the Total Expenses for a user.

KEY FEATURES AND OUTCOMES

- **Feature 1: User Registration**
 - Allow users to Register with a unique Name and Password.
 - Save the Users Information in a Text File.
- **Feature 2: Login System**
 - Users can login using their credentials (name + password).

KEY FEATURES AND OUTCOMES

- **Feature 3: Expense Management**
 - Users can add, view and delete their expenses (With descriptions and Amount).
- **Feature 4: Expense Calculation**
 - Calculate and displays the total amount spend by the user.
- **Outcomes:** A Fully Functional Secure System for Managing Personal Finance.

IMPLEMENTATION DETAILS

- **Technology:** Written in C++, using file handling for data storage.
- **User Interaction:** Console base Input and Output.
- **File Structure:**
 - Each User has a .txt file for their personal data (name, password).
 - Expenses are saved in separate files (username_expenses.txt).

IMPLEMENTATION DETAILS

- **Core Functions:**
 - StartingMenu() for navigating options.
 - RegisterUser() for user Registration.
 - LoginMenu() for User Authentication.
- **Functions to Manage Expenses:**
 - Add, View, Delete and Total Expenses.

CHALLENGES FACED AND SOLUTIONS

- **Challenge 1:** Ensuring security of user credentials (password management).
- **Solution:** Basic Text-Based password storage, but with a option to later enhance security (e.g. , using hashing.
- **Challenge 2:** Handling user input errors (Invalid choices, in correct formats).
- **Solution:** Input Validation is performed using cin checks an error handling (HandlingInvalidInput() function).

CHALLENGES FACED AND SOLUTIONS

- **Challenge 3:** Managing File Handling and Ensuring that data is read and written correctly.
- **Solution:** The Program checks if file exists before registration and handles file operations carefully to avoid data loss.

SUMMARY

THE EXPENSE TRACKING SYSTEM
PROVIDES A SIMPLE YET EFFECTIVE WAY
TO MANAGE PERSONAL FINANCES.

WITH USER REGISTRATION, LOGIN AND
EXPENSE MANAGEMENT, IT OFFERS A
FOUNDATION FOR MORE ADVANCED
FINANCIAL TOOLS.

THANK YOU

Syed Abdul Muiz

Daniyal Ali

Ayesha Zafar