PF SEMESTER

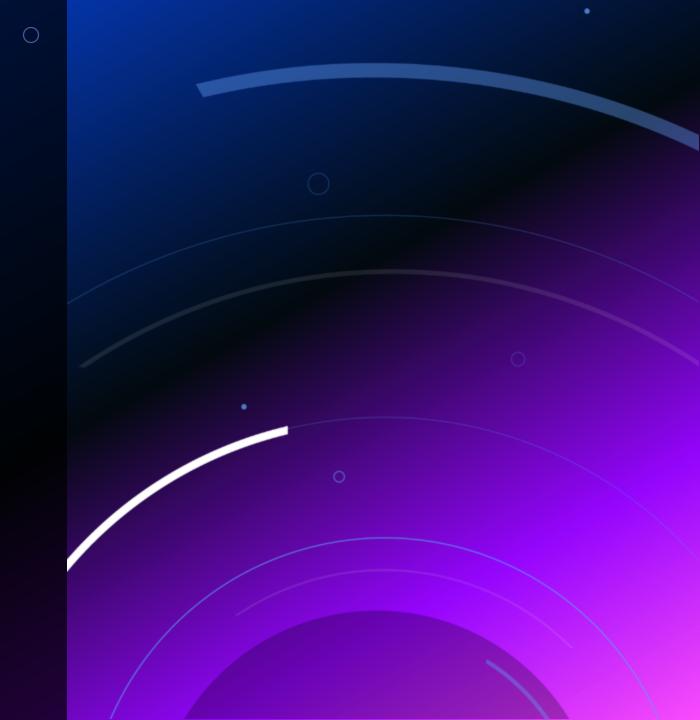
PRESENTATION

PRESENTATION BY

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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 exits 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

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