Upskill Campus Internship

Title: Upskill Campus Internship Projects
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Domain: Core Java
Internship Duration: 23 September 2025 – 21 October 2025
College Name: MallaReddy College of Engineering for Women

Acknowledgment

The experience has helped me enhance my programming skills and practical knowledge in software development.

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Project Summaries

1. Banking Information System

Objective:
To manage customer bank accounts efficiently, allowing deposit, withdrawal, and balance tracking.

Problem Statement:
Manual tracking of bank accounts is time-consuming and prone to errors. This system automates account management for better efficiency and accuracy.

Tools/Technologies Used:
Java (Core Java), File Handling

Implementation Details:

- Console-based Java application
- Users can create accounts, deposit/withdraw money, and check balances
- Data is stored in files for persistence

Final Output (Described):
The application successfully manages accounts and performs all banking operations as intended.

Conclusion:
The project demonstrates the automation of basic banking processes.

Final Reflection / Learning Outcome:
I improved my skills in Java programming, file handling, and modular project design.

GitHub Link:
https://github.com/nilu1342/Banking-System

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2. Music Player Application

I. Overview

The primary focus was on developing the foundation of the Music Player application in Java. The work included implementing core playback functionalities, exploring JavaFX libraries, and ensuring audio compatibility with multiple file formats (MP3, WAV, FLAC).

II. Achievements

1. Core Music Player Development
   o Implemented playback controls: Play, Pause, Resume, Stop, Next, and Previous.
   o Enabled support for multiple file formats (MP3, WAV, FLAC etc).

2. Playlist Management
   o Developed functionality to create, manage, and delete playlists.
   o Added shuffle and repeat modes for a flexible listening experience.

3. Advanced Features
   o Integrated crossfade effect for smooth song transitions.
   o Implemented metadata display (Title, Artist, Album, Duration).

4. User Interface
   o Designed an intuitive JavaFX interface with album art, song info, and easy navigation.

   GitHub link:
   https://github.com/nilu1342/MusicPlayerApp

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3. Human Resource Management System

I. Overview:
The main focus was on developing a console-based Human Resource Management System (HRMS) using Java. The goal was to implement essential HR functionalities such as employee management, attendance tracking, leave management, and secure user authentication. Efforts were also made to ensure data persistence using Java serialization.

II. Achievements

1. HRMS Project Development:
   - Designed and implemented a Java-based HRMS with modules for employee, attendance, and leave management.
   - Added CRUD (Create, Read, Update, Delete) operations for employee records.
   - Implemented secure admin login using hashed passwords for authentication.

2. Attendance Tracking:
   - Added functionality to mark attendance (Present, Absent, On Leave) for specific dates.
   - Developed features to view attendance by employee or by date.

3. Leave Management:
   - Created features to add, approve, or reject leave requests.
   - Implemented leave status updates and automatic persistence of leave data.

4. Report Generation and Search:
   - Generated summary reports for employees, attendance, and leave records.
   - Added search functionality to find employees by name, ID, or department.

   GitHub link:
   https://github.com/nilu1342/Human-Resource-Management-System

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4. Expense Tracker Application

I. Overview

The focus was on developing a **console-based Expense Tracker Application** in Java. The project allows users to record, organize, and analyze their personal expenses efficiently through a user-friendly text interface.

The key functionalities include expense recording, category management, filtering, modification, report generation, and persistent data storage using simple CSV files. The system helps users track their daily spending habits and gain insights into their financial patterns.

II. Achievements

Core Expense Management

- Implemented functionality to **add, edit, and delete expenses** with details such as date, amount, category, and description.
- Added input **validation and error handling** to ensure proper data entry.

Category Management

- Enabled users to **create, rename, and delete expense categories** (e.g., Food, Transport, Shopping, etc.).
- Linked each expense to a category for better organization.

Expense Tracking & Filtering

- Implemented **filter options** to view expenses by **date range, category, or amount**.
- Added the ability to list all expenses with clear formatting for better readability.

Report Generation

- Developed **total expense and category-wise reports** within a selected time period.
- Displayed spending summaries in the console for quick financial review.

Data Persistence

- Ensured all expenses and categories are **saved in CSV files** (`expenses.csv`, `categories.csv`) and reloaded automatically each time the program runs.

User-Friendly Interface

- Designed a clear and interactive **menu-driven console interface** with easy navigation and understandable prompts.

GitHub Link:

https://github.com/nilu1342/Expense-Tracker
