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Class: BSIT-M2 (2020-2024)

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Submitted to: Professor Jameel

Subject: Android Development

Semester Project

Topic: Personal Finance Tracking

# Personal Finance Tracking App Documentation

## Overview

The Personal Finance Tracking app is designed to help users track their personal finances by recording transactions, managing budgets, and generating reports. It provides a user-friendly interface to enter and manage financial data effectively.

## Features

The Personal Finance Tracking app offers the following features:

1. Transaction Entry: Allows users to add new financial transactions with details such as date, category, amount, and notes.
2. Transaction List: Displays a list of all recorded transactions, including date, category, and amount. Users can view, edit, or delete transactions from the list.
3. Budget Management: Enables users to set budgets for different categories and track their expenses against the budgeted amounts.
4. Reports: Generates graphical reports to visualize financial data. Reports include total expenses, average expenses per category, maximum expense, and minimum expense.

## Technologies Used

The Personal Finance Tracking app is built using the following technologies and frameworks:

* **Android Development**: The app is developed using the Android platform, utilizing the Java programming language for the backend logic and XML for designing the user interface.
* **Android Studio**: Android Studio is the integrated development environment (IDE) used for building and testing the app. It provides a range of tools and resources to streamline the Android app development process.
* **SQLite Database**: The app utilizes the SQLite database system to store and manage transaction and budget data. SQLite is a lightweight and efficient database engine widely used in Android app development.
* **Material Design**: The user interface of the app follows the Material Design guidelines provided by Google. Material Design provides a visually appealing and intuitive design language for creating consistent and engaging user experiences.
* **MPAndroidChart Library**: The app integrates the MPAndroidChart library to generate graphical reports. MPAndroidChart is a powerful charting library that allows for the creation of various chart types, including pie charts, bar charts, and line charts.
* **Android Support Libraries**: The app utilizes various Android Support Libraries to enhance compatibility across different Android versions and provide additional functionality.
* **XML**: XML (eXtensible Markup Language) is used for designing the layout of the app's user interface. XML provides a structured way to define the visual elements and their properties.
* **Java Collections Framework**: The Java Collections Framework is utilized for handling data structures such as lists and maps in the app. It provides convenient classes and interfaces to manage and manipulate collections of objects.

## Usage

Upon launching the app, you will be presented with the main screen that provides access to different features:

* Add Transaction: Tap on the "Add Transaction" button to enter a new financial transaction. Fill in the required details such as date, category, amount, and notes.
* View Transactions: Tap on the "View Transactions" button to see a list of all recorded transactions. From the list, you can view, edit, or delete transactions as needed.
* Manage Budget: Tap on the "Manage Budget" button to set budgets for different expense categories. You can specify the budgeted amount for each category and track your expenses against these budgets.
* View Reports: Tap on the "View Reports" button to generate graphical reports based on your financial data. Reports provide insights into total expenses, average expenses per category, maximum expense, and minimum expense.

## Conclusion

The Personal Finance Tracking app provides a convenient way to manage your personal finances, track expenses, and stay within your budget. With its user-friendly interface and insightful reports, you can make informed financial decisions and achieve your financial goals effectively.

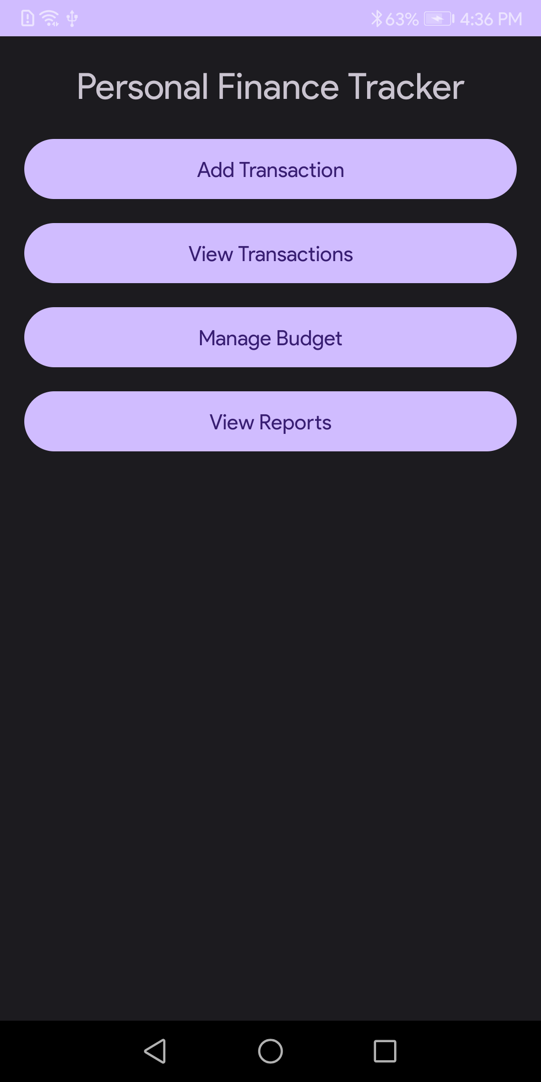
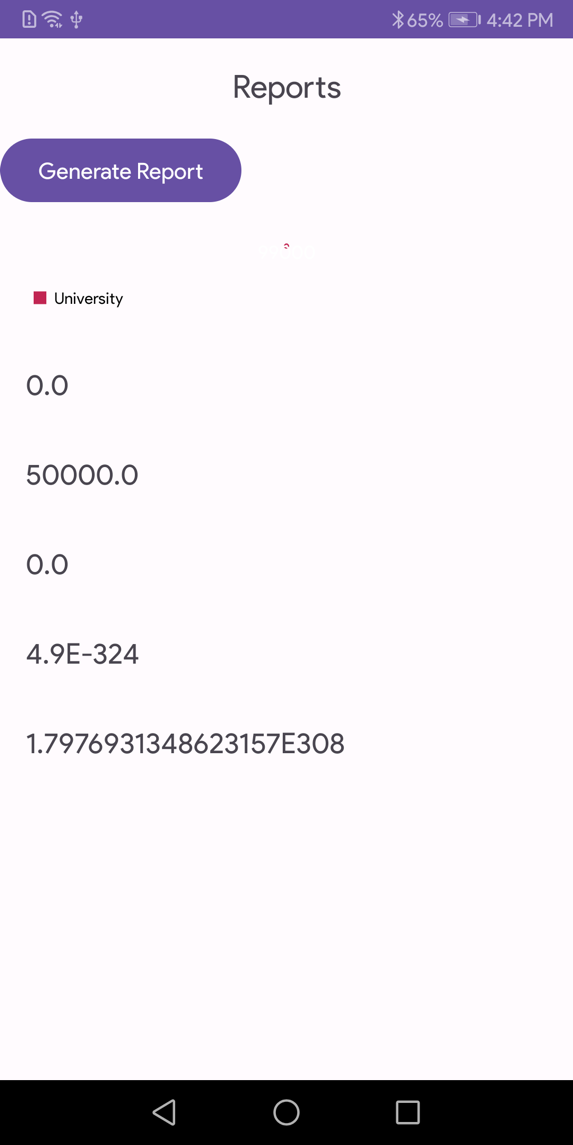
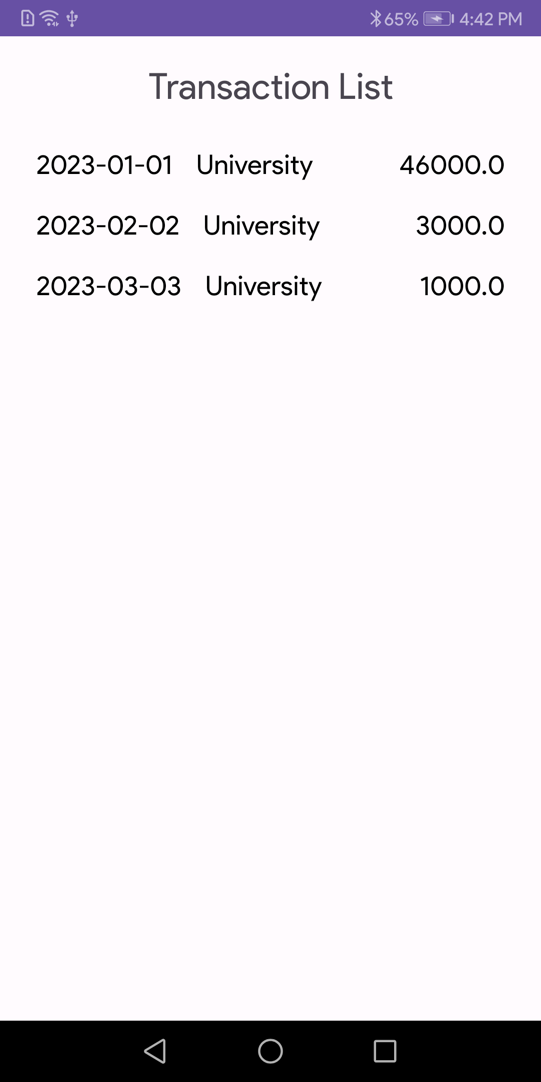
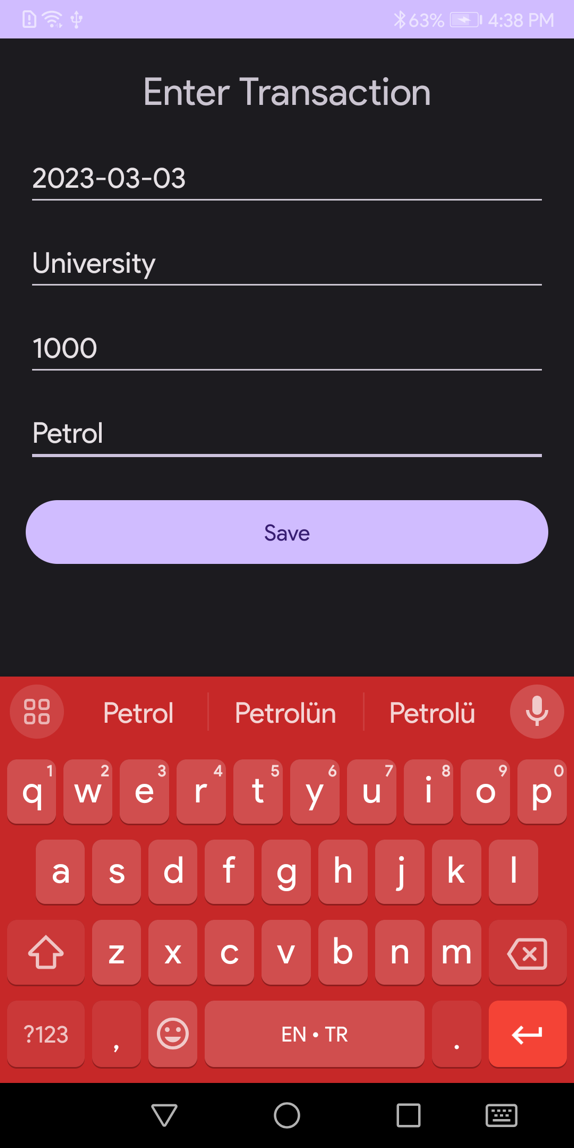
**Code**

Complete code can be found on my [GitHub](https://github.com/MatrixUsman/BSITM2/tree/main/Semester%206/Android%20Devlopment/Semester%20Project/PersonalfinancetrackingSQLite/PersonalfinancetrackingSQLite).

Link to [APK](https://github.com/MatrixUsman/BSITM2/blob/main/Semester%206/Android%20Devlopment/Semester%20Project/PersonalfinancetrackingSQLite/PersonalfinancetrackingSQLite.apkapp-debug.apk)

[Compressed Code zip](https://github.com/MatrixUsman/BSITM2/blob/main/Semester%206/Android%20Devlopment/Semester%20Project/PersonalfinancetrackingSQLite/PersonalfinancetrackingSQLite.zip)

[Media](https://github.com/MatrixUsman/BSITM2/tree/main/Semester%206/Android%20Devlopment/Semester%20Project/PersonalfinancetrackingSQLite/Media)

**Screenshots  
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