Money Matters: A Personal Finance Management App

Abstract:

Money Matters is a comprehensive personal finance management application that enables users to track their income, expenses, and savings. The app provides a user-friendly interface where individuals can link their bank accounts, credit cards, and other financial accounts to get a holistic view of their financial status.

Key feature of Money matters include:

- Budgeting Tools: Allows users to set budgets for different categories and track their progress.
- Savings Goals: Helps users set and achieve savings goals by visualizing their progress.

Introduction:

In today's fast-paced world, managing personal finances can be a daunting task. With numerous transactions, bills, and financial goals to keep track of, it's easy to feel overwhelmed. Money Matters is a personal finance management app designed to simplify this process and help users gain control over their financial lives.

Money Matters offers a comprehensive suite of tools that allow users to monitor their income, expenses, and savings in one place. By linking various financial accounts, users can get a complete picture of their financial status. The app's intuitive interface and powerful features make it easy to track spending, set budgets, and achieve savings goals.

Project Description:

Money Matters is a personal finance management application designed to help users take control of their financial lives. The app provides a comprehensive platform for tracking income, expenses, and savings, enabling users to make informed financial decisions and achieve their financial goals.

Objectives:

- To provide users with a clear and detailed view of their financial status.
- To simplify the process of tracking expenses and managing budgets.
- To assist users in setting and achieving savings goals.
- To offer insights and reports that help users understand their spending habits and financial health.
- To provide timely alerts and reminders for bill payments and budget limits.

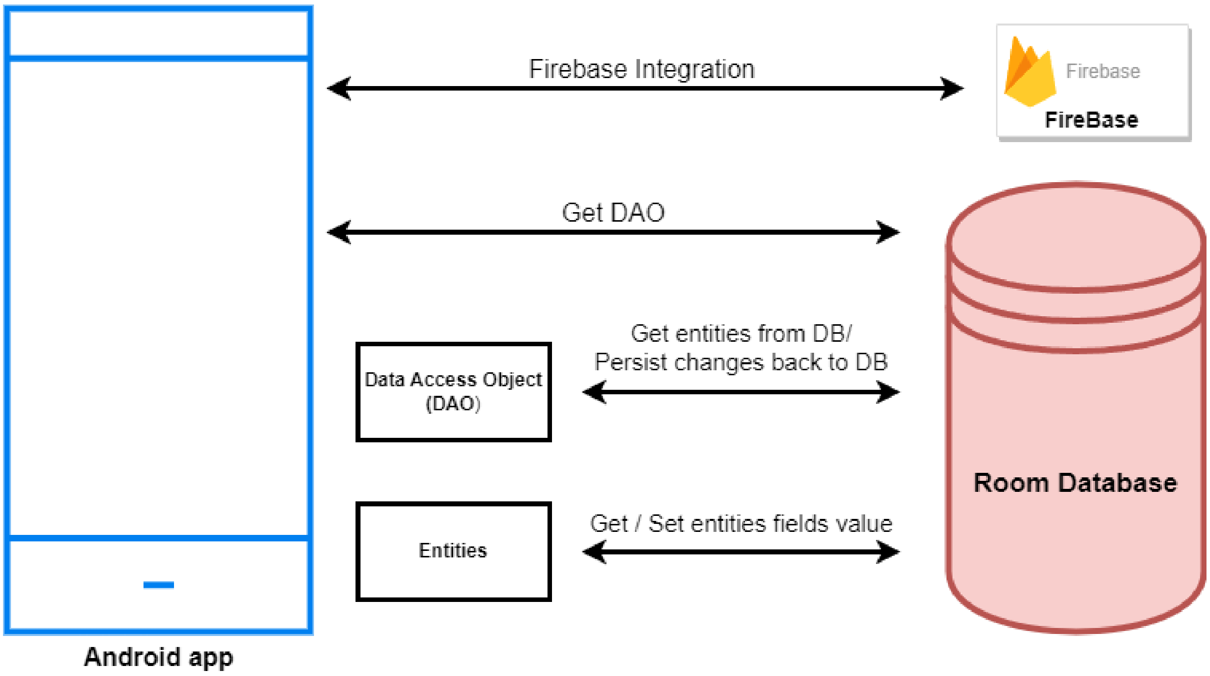
System Requirements:

- **Operating System:** Android-7 or later
- **Ram:**1Gb (Minimum)
- **Rom:**20Mb (Minimum)
- Internet connection

Tools Used:

- Android Studio
- Firebase
- Kotlin

Architecture:



Tasks:

1. .Required initial steps
2. Creating a new project
3. Integrating Firebase and Authentication
4. .Creating UI files
5. Running the application.

Program:

Items.kt

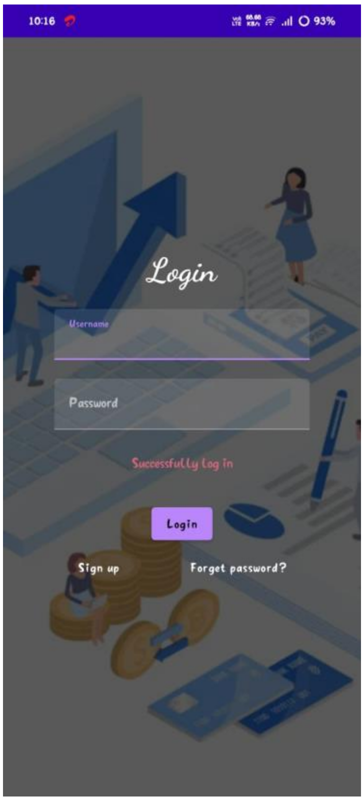
```
package com.example.expensestracker


import androidx.room.ColumnInfo

import androidx.room.Entity

import androidx.room.PrimaryKey


@Entity(tableName = "items_table")

data class Items(

   @PrimaryKey(autoGenerate = true) val id: Int?,

   @ColumnInfo(name = "item_name")  val itemName: String?,

   @ColumnInfo(name = "quantity") val quantity: String?,

   @ColumnInfo(name = "cost") val cost: String?,

)
```

ExpenseDatabase.kt

```
package com.example.expensestracker


import android.content.Context

import androidx.room.Database

import androidx.room.Room

import androidx.room.RoomDatabase


@Database(entities = [Items::class], version = 1)
```

```
abstract class ExpenseDatabase : RoomDatabase() {

    abstract fun ExpenseDao(): ItemsDao

    companion object {

        @Volatile
        private var instance: ExpenseDatabase? = null

        fun getDatabase(context: Context): ExpenseDatabase {
            return instance ?: synchronized(this) {
                val newInstance = Room.databaseBuilder(
                    context.applicationContext,
                    ExpenseDatabase::class.java,
                    "expense_database"
                ).build()
                instance = newInstance
                newInstance
            }
        }
    }
```

Output:



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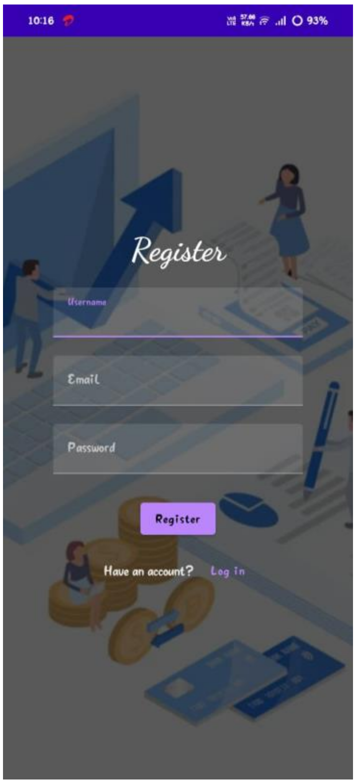
Login

Username

Password

Successfully Log in



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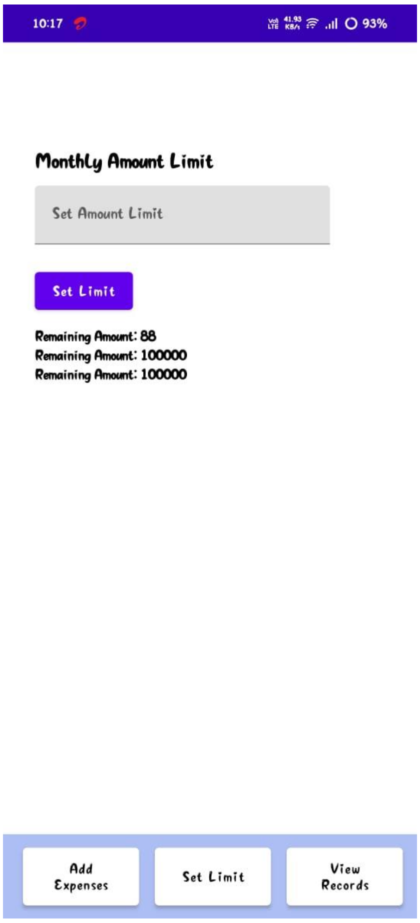
Register

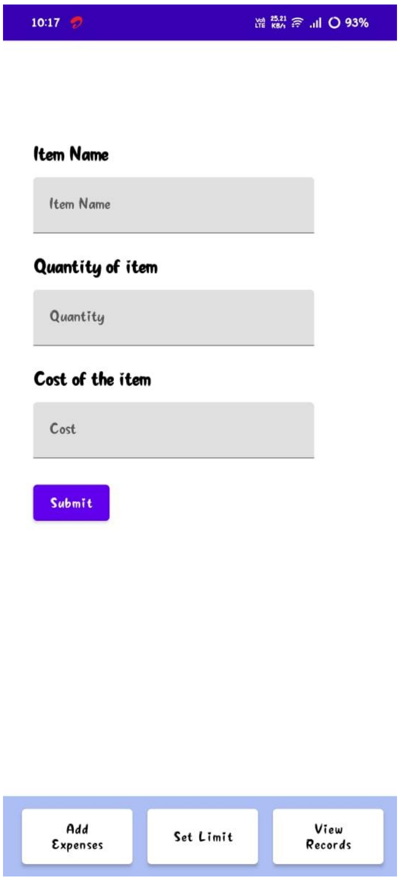
Username

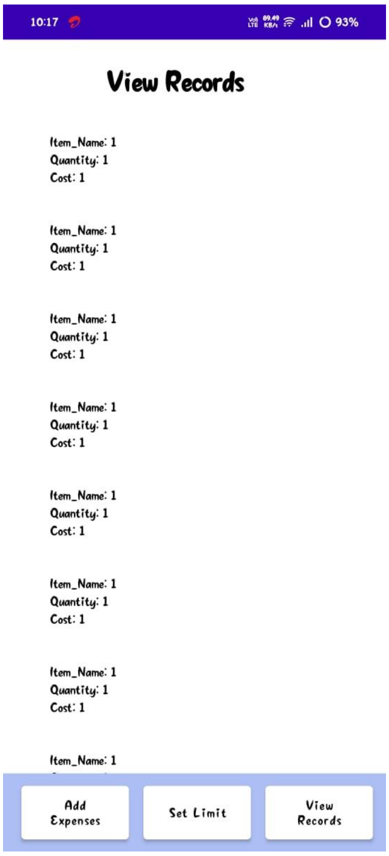
Email

Password



Remaining Amount: 88
Remaining Amount: 100000
Remaining Amount: 100000





View Records

Item_Name: 1
Quantity: 1
Cost: 1

Item_Name: 1
Quantity: 1
Cost: 1

Item_Name: 1
Quantity: 1
Cost: 1

Item_Name: 1
Quantity: 1
Cost: 1

Item_Name: 1
Quantity: 1
Cost: 1

Item_Name: 1
Quantity: 1
Cost: 1

Item_Name: 1
Quantity: 1
Cost: 1

Item_Name: 1

Conclusion:

- **Purpose:** The app helps users track their expenses and accounts, providing an overview of their financial status. Users can set budgets for various expenses and monitor their progress.
- **Learning Outcomes:** By completing this project, you'll learn to work with Android Studio, build an app, and integrate a database.
- **Project Workflow:** Users register and log in to the app, then access the main page to manage their finances.

Future Scope:

1. AI and Machine Learning Integration:

- Implement AI-driven financial advice and personalized recommendations based on user spending patterns and financial goals.

- Use machine learning algorithms to predict future expenses and income trends.

2. Investment Tracking:

- Add features to track investments in stocks, mutual funds, and other assets
.
- Provide insights and analytics on investment performance.

3. **Multi-Currency Support:**

- Enable users to manage finances in multiple currencies, useful for international users or those with foreign investments.

- Include real-time currency conversion rates.

4. **Advanced Security Features:**

- Implement biometric authentication (fingerprint, facial recognition) for enhanced security.

- Introduce two-factor authentication (2FA) for an additional layer of protection.

5. **Integration with Financial Advisors:**

- Allow users to connect with certified financial advisors for personalized advice.

- Provide a platform for virtual consultations and financial planning sessions.

6. **Bill Payment and Management:**

- Integrate bill payment services to allow users to pay bills directly through the app.

- Provide reminders and automatic payment options for recurring bills.

7. **Community and Social Features:**

- Create a community platform where users can share tips, advice, and experiences.

- Introduce social features like goal-sharing and group savings challenges.

8. **Enhanced Reporting and Analytics:**

- Develop more sophisticated financial reports and analytics tools.

- Offer customizable dashboards for users to view their financial data in various formats.

9. **Educational Resources:**

- Provide educational content on personal finance, budgeting, and investing.

- Include tutorials, articles, and videos to help users improve their financial literacy.

10. **Integration with Other Financial Services:**

- Partner with banks, credit card companies, and other financial institutions for seamless integration.

- Offer additional services like loans, insurance, and credit score monitoring.