

MONEY MATTERS: A PERSONAL FINANCE MANAGEMENT APP

Project presented by

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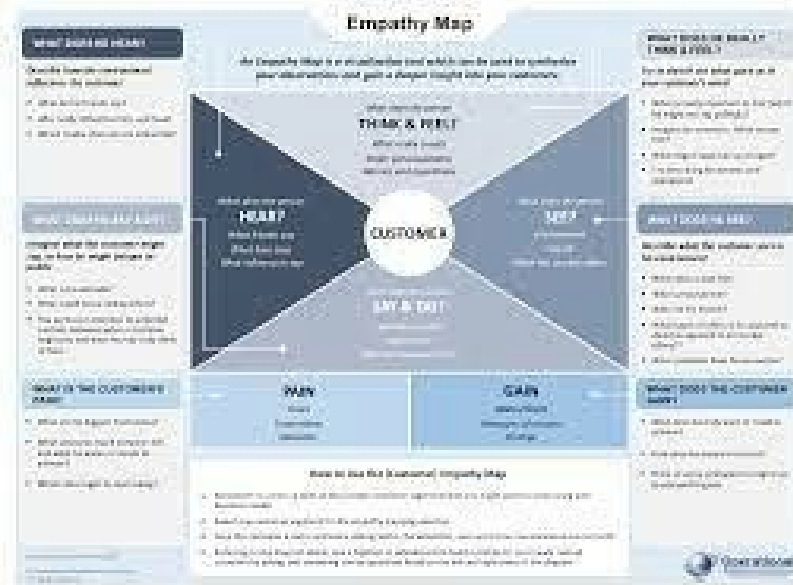
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1. INTRODUCTION:

- 1.1. Overview:
 - One of the most valuable life skills is learning how to manage money, but it is important to start at the beginning. Why we use money in the first place and how to get the best value with our money should be explained. We should also explore our relationship with money.
 - Taking the time to understand the influence that money has in our lives can help to contribute to a healthy relationship with money. Students will learn through lessons and activities how money works and how they can make the most of it, thus ensuring they have better control of their money in the long run.
-
- 1.2. Purpose:
 - The Money Matters module shows students how to manage their money by preparing a personal spending plan and identifying ways to decrease spending and increase income.
- 2. PROBLEM DEFINITION & DESIGN THINKING
- 2.1. Empathy map:
 -



2.2 Brainstorming map:



4. ADVANTAGES AND DISADVANTAGE:

Advantages:

- Money gives you freedom. When you have enough money, you can live where you want, take care of your needs, and indulge in your hobbies. ...
- Money gives you the power to pursue your dreams. ...
- Money gives you security.

Disadvantages:

- No interest charges. There are no additional charges when you pay with cash. ...
- Makes it easier to follow a budget. Cash can help you to stick to a budget. ...
- Cons:
- Less Secure. Cash is less secure than a credit card. ...
- Less Convenient. ...
- Your cash savings may not cover certain expenses. ...

5. APPLICATION:

Money Matters Money Advice Centre has secured funding from The British Gas Energy Trust, to allow us to provide a vital service to vulnerable and struggling clients who reside in Glasgow and South Lanarkshire. This "More Electricity & Gas Assistance" (MEGA) fund is to be used for the provision of those in priority need or who have been affected by the cost-of-living crisis.

MEGA Fund - More Electricity & Gas Assistance fund is available to customers with prepayment meters. Our Emergency Utility Credit Vouchers (maximum of 3 vouchers allowed per individual or couple/family) for all fuel company customers with pre-payment meters (each voucher value will be a maximum of £49..

Applicants' personal data will not be used for any marketing purposes. We undertake to preserve the confidentiality of all information you provide to the Money Matters Money Advice Centre.

6. CONCLUSION:

Personal financial management is done by every individual on some level. The key is to strike the right balance between income, expenses, savings, and investments. This balance will ensure that the personal financial planning and management of the individual are optimum.

7. FUTURE SCOPE:

The field of finance has a huge scope in future. As finance is an integral part of our economy, Financial Managers will always be in high demand. If you want to build a career in finance, the most popular sectors include corporate finance and public

banking, credit and financial planning, and asset management.

8. APPENDIX:

Budgeting, investing, saving and even spending are all a part of money management. So how do you build money confidence and reduce anxiety about your financial goals? Finding ways to better manage your money—and your mindset

9. SOURCE CODE:

```
<?xml version="1.0" encoding="utf-8"?>
<manifest xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:tools="http://schemas.android.com/tools">

    <application
        android:allowBackup="true"
        android:dataExtractionRules="@xml/data_extraction_rules"
        android:fullBackupContent="@xml/backup_rules"
        android:icon="@mipmap/ic_launcher"
        android:label="@string/app_name"
        android:supportRtl="true"
        android:theme="@style/Theme.ExpensesTracker"
        tools:targetApi="31">
        <activity
            android:name=".RegisterActivity"
            android:exported="false"
            android:label="@string/title_activity_register"
            android:theme="@style/Theme.ExpensesTracker" />
        <activity
            android:name=".MainActivity"
            android:exported="false"
            android:label="MainActivity"
            android:theme="@style/Theme.ExpensesTracker" />
        <activity
            android:name=".ViewRecordsActivity"
            android:exported="false"
            android:label="@string/title_activity_view_records"
            android:theme="@style/Theme.ExpensesTracker" />
        <activity
            android:name=".SetLimitActivity"
            android:exported="false"
            android:label="@string/title_activity_set_limit"
            android:theme="@style/Theme.ExpensesTracker" />
        <activity
            android:name=".AddExpensesActivity"
            android:exported="false"
            android:label="@string/title_activity_add_expenses"
            android:theme="@style/Theme.ExpensesTracker" />
    </application>
</manifest>
```

```

        android:name=".LoginActivity"
        android:exported="true"
        android:label="@string/app_name"
        android:theme="@style/Theme.ExpensesTracker">
        <intent-filter>
            <action android:name="android.intent.action.MAIN" />

            <category android:name="android.intent.category.LAUNCHER"

        />
        </intent-filter>
    </activity>
</application>

</manifest>

```

Color.kt

```
package com.example.expensetracker.ui.theme
```

```
import androidx.compose.ui.graphics.Color
```

```
val Purple200 = Color(0xFFBB86FC)
```

```
val Purple500 = Color(0xFF6200EE)
```

```
val Purple700 = Color(0xFF3700B3)
```

```
val Teal200 = Color(0xFF03DAC5)
```

Shape.kt

```
package com.example.expensetracker.ui.theme
```

```
import androidx.compose.foundation.shape.RoundedCornerShape
```

```
import androidx.compose.material.Shapes
```

```
import androidx.compose.ui.unit.dp
```

```

val Shapes = Shapes(
    small = RoundedCornerShape(4.dp),
    medium = RoundedCornerShape(4.dp),
    large = RoundedCornerShape(0.dp)
)

```

)

Theme.kt

```
package com.example.expensetracker.ui.theme
```

```
import androidx.compose.foundation.isSystemInDarkTheme
```

```
import androidx.compose.material.MaterialTheme
```

```
import androidx.compose.material.darkColors
```

```
import androidx.compose.material.lightColors
```

```
import androidx.compose.runtime.Composable
```

```
private val DarkColorPalette = darkColors(
```

```
    primary = Purple200,
```

```
    primaryVariant = Purple700,
```

```
    secondary = Teal200
```

```
)
```

```
private val LightColorPalette = lightColors(
```

```
    primary = Purple500,
```

```
    primaryVariant = Purple700,
```

```
    secondary = Teal200
```

```
/* Other default colors to override
```

```
background = Color.White,
```

```
surface = Color.White,
```

```
onPrimary = Color.White,
```

```
onSecondary = Color.Black,
```

```
onBackground = Color.Black,
```

```
onSurface = Color.Black,
```

```

        */
    )

@Composable
fun ExpensesTrackerTheme(
    darkTheme : Boolean = isSystemInDarkTheme(),
    content : @Composable () -> Unit
) {
    val colors = if (darkTheme) {
        DarkColorPalette
    } else {
        LightColorPalette
    }

    MaterialTheme(
        colors = colors,
        typography = Typography,
        shapes = Shapes,
        content = content
    )
}

```

Type.kt

```

package com.example.expensetracker.ui.theme

import androidx.compose.material.Typography
import androidx.compose.ui.text.TextStyle
import androidx.compose.ui.text.font.FontFamily

```



```

import androidx.compose.ui.text.font.FontWeight
import androidx.compose.ui.unit.sp

// Set of Material typography styles to start with
val Typography = Typography(
    body1 = TextStyle(
        fontFamily = FontFamily.Default,
        fontWeight = FontWeight.Normal,
        fontSize = 16.sp
    )
    /* Other default text styles to override
    button = TextStyle(
        fontFamily = FontFamily.Default,
        fontWeight = FontWeight.W500,
        fontSize = 14.sp
    ),
    caption = TextStyle(
        fontFamily = FontFamily.Default,
        fontWeight = FontWeight.Normal,
        fontSize = 12.sp
    )
    */
)

```

AddExpensesActivity.kt

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

```

import android.annotation.SuppressLint
import android.content.Context

```

```

import android.content.Intent
import android.os.Bundle
import android.widget.Toast
import androidx.activity.ComponentActivity
import androidx.activity.compose.setContent
import androidx.compose.foundation.layout.*
import androidx.compose.material.*
import androidx.compose.runtime.*
import androidx.compose.ui.Alignment
import androidx.compose.ui.Modifier
import androidx.compose.ui.graphics.Color
import androidx.compose.ui.platform.LocalContext
import androidx.compose.ui.text.font.FontWeight
import androidx.compose.ui.text.style.TextAlign
import androidx.compose.ui.unit.dp
import androidx.compose.ui.unit.sp

class AddExpensesActivity : ComponentActivity() {
    private lateinit var itemsDatabaseHelper: ItemsDatabaseHelper
    private lateinit var expenseDatabaseHelper: ExpenseDatabaseHelper
    @SuppressWarnings("UnusedMaterialScaffoldPaddingParameter")
    override fun onCreate(savedInstanceState: Bundle?) {
        super.onCreate(savedInstanceState)
        itemsDatabaseHelper = ItemsDatabaseHelper(this)
        expenseDatabaseHelper = ExpenseDatabaseHelper(this)
        setContent {
            Scaffold(
                // in scaffold we are specifying top bar.

```

```

bottomBar = {
    // inside top bar we are specifying
    // background color.
    BottomAppBar(backgroundColor = Color(0xFFadbef4),
        modifier = Modifier.height(80.dp),
        // along with that we are specifying
        // title for our top bar.
        content = {

            Spacer(modifier = Modifier.width(15.dp))

            Button(
                onClick = {startActivity(Intent(
                    applicationContext,AddExpensesActivity::class.java))},
                colors = ButtonDefaults.buttonColors(
                    backgroundColor = Color.White),
                modifier = Modifier.size(height = 55.dp,
                    width = 110.dp)
            )
            {
                Text(
                    text = "Add Expenses", color = Color.
                        Black, fontSize = 14.sp,
                    textAlign = TextAlign.Center
                )
            }

            Spacer(modifier = Modifier.width(15.dp))

            Button(

```

```

onClick = {
    startActivity(
        Intent(
            applicationContext,
            SetLimitActivity::class.java
        )
    )
},

background-color = Color.White),

width = 110.dp)

)
{
    Text(
        text = "Set Limit", color = Color.Black,

        text-align = TextAlign.Center
    )
}

Spacer(modifier = Modifier.width(15.dp))

Button(
    onClick = {
        startActivity(
            Intent(
                applicationContext,
                ViewRecordsActivity::class.java
            )
        )
    }
)

```

```

        )
    )
},
backgroundColor = Color.White),
width = 110.dp)

)
{
    Text(
        text = "View Records", color = Color.
        Black, fontSize = 14.sp,
        textAlign = TextAlign.Center
    )
}

}

)

}

) {
    AddExpenses(this, itemsDatabaseHelper, expenseDatabaseHelper)
}

}

}
}

```

```
@SuppressLint("Range")
```

```
@Composable
```

```
fun AddExpenses(context: Context, itemsDatabaseHelper: ItemsDatabaseHelper,
```

```

expenseDatabaseHelper: ExpenseDatabaseHelper) {
    Column(
        modifier = Modifier
            .padding(top = 100.dp, start = 30.dp)
            .fillMaxHeight()
            .fillMaxWidth(),
        horizontalAlignment = Alignment.Start
    ) {

        val mContext = LocalContext.current
        var items by remember { mutableStateOf("") }
        var quantity by remember { mutableStateOf("") }
        var cost by remember { mutableStateOf("") }
        var error by remember { mutableStateOf("") }

        Text(text = "Item Name", fontWeight = FontWeight.Bold, fontSize = 20.sp)

        Spacer(modifier = Modifier.height(10.dp))

        TextField(value = items, onValueChange = { items = it },
            label = { Text(text = "Item Name") })

        Spacer(modifier = Modifier.height(20.dp))

        Text(text = "Quantity of item", fontWeight = FontWeight.Bold,
            fontSize = 20.sp)

        Spacer(modifier = Modifier.height(10.dp))

        TextField(value = quantity, onValueChange = { quantity = it },
            label = { Text(text = "Quantity") })
    }
}

```

```

        Spacer(modifier = Modifier.height(20.dp))

        Text(text = "Cost of the item", fontWeight = FontWeight.Bold,
fontSize = 20.sp)

        Spacer(modifier = Modifier.height(10.dp))

        TextField(value = cost, onValueChange = { cost = it },
            label = { Text(text = "Cost") })

        Spacer(modifier = Modifier.height(20.dp))

        if (error.isNotEmpty()) {
            Text(
                text = error,
                color = MaterialTheme.colors.error,
                modifier = Modifier.padding(vertical = 16.dp)
            )
        }

        Button(onClick = {
            if (items.isNotEmpty() && quantity.isNotEmpty() && cost.
isNotEmpty()) {
                val items = Items(
                    id = null,
                    itemName = items,
                    quantity = quantity,
                    cost = cost
                )
            }
        })

```

```

        val limit= expenseDatabaseHelper .getExpenseAmount(1)

        val actualvalue = limit?.minus(cost.toInt())

        // Toast.makeText(mContext, actualvalue.toString(),
        Toast.LENGTH_SHORT).show()

        val expense = Expense(

            id = 1,

            amount = actualvalue.toString()

        )

        if (actualvalue != null) {
            if (actualvalue < 1) {
                Toast.makeText(mContext, "Limit Over", Toast .
LENGTH_SHORT).show()
            } else {
                expenseDatabaseHelper .updateExpense(expense)
                itemsDatabaseHelper .insertItems(items)
            }
        }

    }) {
        Text(text = "Submit")
    }

}

```



```
}
```

Expenses.kt

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

```
import androidx.room.ColumnInfo
```

```
import androidx.room.Entity
```

```
import androidx.room.PrimaryKey
```

```
@Entity(tableName = "expense_table")
```

```
data class Expense(
```

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

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

```
)
```

ExpenseDao.kt

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

```
import androidx.room.*
```

```
@Dao
```

```
interface ExpenseDao {
```

```
    @Query("SELECT * FROM expense_table WHERE amount= :amount")
```

```
    suspend fun getExpenseByAmount(amount: String): Expense?
```

```
    @Insert(onConflict = OnConflictStrategy.REPLACE)
```

```
    suspend fun insertExpense(items: Expense)
```

```

    @Update
    suspend fun updateExpense(items : Expense)

    @Delete
    suspend fun deleteExpense(items : Expense)
}

```

ExpensesDao.kt

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

```
import androidx.room.*
```

```
@Dao
```

```
interface ExpenseDao {
```

```
    @Query("SELECT * FROM expense_table WHERE amount= :amount")
```

```
    suspend fun getExpenseByAmount(amount : String): Expense?
```

```
    @Insert(onConflict = OnConflictStrategy.REPLACE)
```

```
    suspend fun insertExpense(items : Expense)
```

```
    @Update
```

```
    suspend fun updateExpense(items : Expense)
```

```
    @Delete
```

```
    suspend fun deleteExpense(items : Expense)
```

```
}
```

ExpenseDatabase.kt

```

package com.example.expensetracker

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
            }
        }
    }
}

```

```
    }  
}
```

ExpenseDatabaseHelper.kt

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

```
import android.annotation.SuppressLint
```

```
import android.content.ContentValues
```

```
import android.content.Context
```

```
import android.database.Cursor
```

```
import android.database.sqlite.SQLiteDatabase
```

```
import android.database.sqlite.SQLiteOpenHelper
```

```
class ExpenseDatabaseHelper(context: Context) :
```

```
    SQLiteOpenHelper(context, DATABASE_NAME, null, DATABASE_VERSION){
```

```
    companion object {
```

```
        private const val DATABASE_VERSION = 1
```

```
        private const val DATABASE_NAME = "ExpenseDatabase.db"
```

```
        private const val TABLE_NAME = "expense_table"
```

```
        private const val COLUMN_ID = "id"
```

```
        private const val COLUMN_AMOUNT = "amount"
```

```
    }
```

```
    override fun onCreate(db: SQLiteDatabase?) {
```

```
        val createTable = "CREATE TABLE $TABLE_NAME (" +
```

```
            "${COLUMN_ID} INTEGER PRIMARY KEY AUTOINCREMENT, " +
```

```
        "${COLUMN_AMOUNT} TEXT" +  
        ")"
```

```
        db?.execSQL(createTable)  
    }
```

```
    override fun onUpgrade(db1: SQLiteDatabase?, oldVersion: Int, newVersion:  
Int) {  
        db1?.execSQL("DROP TABLE IF EXISTS $TABLE_NAME")  
        onCreate(db1)  
    }
```

```
    fun insertExpense(expense: Expense) {  
        val db1 = writableDatabase  
        val values = ContentValues()  
        values.put(COLUMN_AMOUNT, expense.amount)  
        db1.insert(TABLE_NAME, null, values)  
        db1.close()  
    }
```

```
    fun updateExpense(expense: Expense) {  
        val db = writableDatabase  
        val values = ContentValues()  
        values.put(COLUMN_AMOUNT, expense.amount)  
        db.update(TABLE_NAME, values, "$COLUMN_ID=?", arrayOf(expense.id.  
toString()))  
        db.close()  
    }
```

```

@SuppressLint("Range")

fun getExpenseByAmount(amount: String): Expense? {

    val db1 = readableDatabase

    val cursor: Cursor = db1.rawQuery("SELECT * FROM ${
ExpenseDatabaseHelper.TABLE_NAME} WHERE ${ExpenseDatabaseHelper.COLUMN_AMOUNT
} = ?", arrayOf(amount))

    var expense: Expense? = null

    if (cursor.moveToFirst()) {

        expense = Expense(

            id = cursor.getInt(cursor.getColumnIndex(COLUMN_ID)),

            amount = cursor.getString(cursor.getColumnIndex(COLUMN_AMOUNT
)),

        )

    }

    cursor.close()

    db1.close()

    return expense

}

@SuppressLint("Range")

fun getExpenseById(id: Int): Expense? {

    val db1 = readableDatabase

    val cursor: Cursor = db1.rawQuery("SELECT * FROM $TABLE_NAME WHERE $
COLUMN_ID = ?", arrayOf(id.toString()))

    var expense: Expense? = null

    if (cursor.moveToFirst()) {

        expense = Expense(

            id = cursor.getInt(cursor.getColumnIndex(COLUMN_ID)),

            amount = cursor.getString(cursor.getColumnIndex(COLUMN_AMOUNT

```

```

)),
        )
    }
    cursor.close()
    db1.close()
    return expense
}

@SuppressLint("Range")
fun getExpenseAmount(id: Int): Int? {
    val db = readableDatabase
    val query = "SELECT $COLUMN_AMOUNT FROM $TABLE_NAME WHERE $COLUMN_ID
=?"
    val cursor = db.rawQuery(query, arrayOf(id.toString()))
    var amount: Int? = null
    if (cursor.moveToFirst()) {
        amount = cursor.getInt(cursor.getColumnIndex(COLUMN_AMOUNT))
    }
    cursor.close()
    db.close()
    return amount
}

@SuppressLint("Range")
fun getAllExpense(): List<Expense> {
    val expenses = mutableListOf<Expense>()
    val db1 = readableDatabase
    val cursor: Cursor = db1.rawQuery("SELECT * FROM $TABLE_NAME", null)
    if (cursor.moveToFirst()) {
        do {
            val expense = Expense(

```

```

        id = cursor.getInt(cursor.getColumnIndex(COLUMN_ID)),
        amount = cursor.getString(cursor.getColumnIndex(
COLUMN_AMOUNT)),
    )
    expenses.add(expense)
} while (cursor.moveToNext())
}
cursor.close()
db1.close()
return expenses
}

```

```

}

```

Items.kt

```

package com.example.expensetracker

```

```

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?,  
    )  
}
```

ItemsDao.kt

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

```
import androidx.room.*
```

```
@Dao
```

```
interface ItemsDao {
```

```
    @Query("SELECT * FROM items_table WHERE cost= :cost")
```

```
    suspend fun getItemsByCost(cost: String): Items?
```

```
    @Insert(onConflict = OnConflictStrategy.REPLACE)
```

```
    suspend fun insertItems(items: Items)
```

```
    @Update
```

```
    suspend fun updateItems(items: Items)
```

```
    @Delete
```

```
    suspend fun deleteItems(items: Items)
```

```
}
```

ItemsDatabase.kt

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

```
import android.content.Context
```

```
import androidx.room.Database
```

```

import androidx.room.Room

import androidx.room.RoomDatabase

@Database(entities = [Items::class], version = 1)
abstract class ItemsDatabase : RoomDatabase() {

    abstract fun ItemsDao(): ItemsDao

    companion object {

        @Volatile
        private var instance: ItemsDatabase? = null

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

```

ItemDatabaseHelper.kt

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

```
import android.annotation.SuppressLint
```

```
import android.content.ContentValues
```

```
import android.content.Context
```

```
import android.database.Cursor
```

```
import android.database.sqlite.SQLiteDatabase
```

```
import android.database.sqlite.SQLiteOpenHelper
```

```
class ItemsDatabaseHelper(context: Context) :
```

```
    SQLiteOpenHelper(context, DATABASE_NAME, null, DATABASE_VERSION){
```

```
    companion object {
```

```
        private const val DATABASE_VERSION = 1
```

```
        private const val DATABASE_NAME = "ItemsDatabase.db"
```

```
        private const val TABLE_NAME = "items_table"
```

```
        private const val COLUMN_ID = "id"
```

```
        private const val COLUMN_ITEM_NAME = "item_name"
```

```
        private const val COLUMN_QUANTITY = "quantity"
```

```
        private const val COLUMN_COST = "cost"
```

```
    }
```

```
    override fun onCreate(db: SQLiteDatabase?) {
```

```
        val createTable = "CREATE TABLE $TABLE_NAME (" +
```

```
            "${COLUMN_ID} INTEGER PRIMARY KEY AUTOINCREMENT, " +
```

```
            "${COLUMN_ITEM_NAME} TEXT, " +
```

```

        "${COLUMN_QUANTITY} TEXT," +
        "${COLUMN_COST} TEXT" +
        ")"

        db?.execSQL(createTable)
    }

    override fun onUpgrade(db: SQLiteDatabase?, oldVersion: Int, newVersion:
Int) {
        db?.execSQL("DROP TABLE IF EXISTS $TABLE_NAME")
        onCreate(db)
    }

    fun insertItems(items: Items) {
        val db = writableDatabase
        val values = ContentValues()
        values.put(COLUMN_ITEM_NAME, items.itemName)
        values.put(COLUMN_QUANTITY, items.quantity)
        values.put(COLUMN_COST, items.cost)
        db.insert(TABLE_NAME, null, values)
        db.close()
    }

    @SuppressWarnings("Range")
    fun getItemsByCost(cost: String): Items? {
        val db = readableDatabase

```

```

        val cursor: Cursor = db.rawQuery("SELECT * FROM $TABLE_NAME WHERE $
COLUMN_COST = ?", arrayOf(cost))

        var items: Items? = null

        if (cursor.moveToFirst()) {

            items = Items(

                id = cursor.getInt(cursor.getColumnIndex(COLUMN_ID)),

                itemName = cursor.getString(cursor.getColumnIndex(
COLUMN_ITEM_NAME)),

                quantity = cursor.getString(cursor.getColumnIndex(
COLUMN_QUANTITY)),

                cost = cursor.getString(cursor.getColumnIndex(COLUMN_COST)),

            )

        }

        cursor.close()

        db.close()

        return items

    }

    @SuppressWarnings("Range")

    fun getItemById(id: Int): Items? {

        val db = readableDatabase

        val cursor: Cursor = db.rawQuery("SELECT * FROM $TABLE_NAME WHERE $
COLUMN_ID = ?", arrayOf(id.toString()))

        var items: Items? = null

        if (cursor.moveToFirst()) {

            items = Items(

                id = cursor.getInt(cursor.getColumnIndex(COLUMN_ID)),

                itemName = cursor.getString(cursor.getColumnIndex(
COLUMN_ITEM_NAME)),

                quantity = cursor.getString(cursor.getColumnIndex(
COLUMN_QUANTITY)),

                cost = cursor.getString(cursor.getColumnIndex(COLUMN_COST)),

```

```

        )
    }
    cursor.close()
    db.close()
    return items
}

```

```

@SuppressLint("Range")
fun getAllItems(): List<Items> {
    val item = mutableListOf<Items>()
    val db = readableDatabase
    val cursor: Cursor = db.rawQuery("SELECT * FROM $TABLE_NAME", null)
    if (cursor.moveToFirst()) {
        do {
            val items = Items(
                id = cursor.getInt(cursor.getColumnIndex(COLUMN_ID)),
                itemName = cursor.getString(cursor.getColumnIndex(
COLUMN_ITEM_NAME)),
                quantity = cursor.getString(cursor.getColumnIndex(
COLUMN_QUANTITY)),
                cost = cursor.getString(cursor.getColumnIndex(COLUMN_COST
)),
            )
            item.add(items)
        } while (cursor.moveToNext())
    }
    cursor.close()
    db.close()
    return item
}

```

```
}
```

```
}
```

LoginActivity.kt

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

```
import android.content.Context
```

```
import android.content.Intent
```

```
import android.os.Bundle
```

```
import androidx.activity.ComponentActivity
```

```
import androidx.activity.compose.setContent
```

```
import androidx.compose.foundation.Image
```

```
import androidx.compose.foundation.layout.*
```

```
import androidx.compose.material.*
```

```
import androidx.compose.runtime.*
```

```
import androidx.compose.ui.Alignment
```

```
import androidx.compose.ui.Modifier
```

```
import androidx.compose.ui.graphics.Color
```

```
import androidx.compose.ui.layout.ContentScale
```

```
import androidx.compose.ui.res.painterResource
```

```
import androidx.compose.ui.text.font.FontFamily
```

```
import androidx.compose.ui.text.font.FontWeight
```

```
import androidx.compose.ui.text.input.PasswordVisualTransformation
```

```
import androidx.compose.ui.text.input.VisualTransformation
```

```
import androidx.compose.ui.tooling.preview.Preview
```

```
import androidx.compose.ui.unit.dp
```

```
import androidx.compose.ui.unit.sp
```

```

import androidx.core.content.ContextCompat

import com.example.expensetracker.ui.theme.ExpensesTrackerTheme

class LoginActivity : ComponentActivity() {
    private lateinit var databaseHelper : UserDatabaseHelper

    override fun onCreate(savedInstanceState : Bundle?) {
        super.onCreate(savedInstanceState)

        databaseHelper = UserDatabaseHelper(this)

        setContent {
            ExpensesTrackerTheme {
                // A surface container using the 'background' color from the
theme
                Surface(
                    modifier = Modifier.fillMaxSize(),
                    color = MaterialTheme.colors.background
                ) {
                    LoginScreen(this, databaseHelper)
                }
            }
        }
    }
}

@Composable
fun LoginScreen(context : Context, databaseHelper : UserDatabaseHelper) {

    Image(
        painterResource(id = R.drawable.img_1), contentDescription = "",
        alpha = 0.3F,

```



```

        contentScale = ContentScale.FillHeight,

    )

    var username by remember { mutableStateOf("") }
    var password by remember { mutableStateOf("") }
    var error by remember { mutableStateOf("") }

    Column(
        modifier = Modifier.fillMaxSize(),
        horizontalAlignment = Alignment.CenterHorizontally,
        verticalArrangement = Arrangement.Center
    ) {

        Text(
            fontSize = 36.sp,
            fontWeight = FontWeight.ExtraBold,
            fontFamily = FontFamily.Cursive,
            color = Color.White,
            text = "Login"
        )

        Spacer(modifier = Modifier.height(10.dp))

        TextField(
            value = username,
            onChange = { username = it },
            label = { Text("Username") },
            modifier = Modifier.padding(10.dp)

```

```

        .width(280.dp)
    )

    TextField(
        value = password,
        onChange = { password = it },
        label = { Text("Password") },
        modifier = Modifier.padding(10.dp)
            .width(280.dp),
        visualTransformation = PasswordVisualTransformation()
    )

    if (error.isNotEmpty()) {
        Text(
            text = error,
            color = MaterialTheme.colors.error,
            modifier = Modifier.padding(vertical = 16.dp)
        )
    }

    Button(
        onClick = {
            if (username.isNotEmpty() && password.isNotEmpty()) {
                val user = databaseHelper.getUserByUsername(username)
                if (user != null && user.password == password) {
                    error = "Successfully log in"
                }
            }
        }
    )
}

```

```

        context.startActivity(
            Intent(
                context,
                MainActivity::class.java
            )
        )
        //onLoginSuccess()
    }
    else {
        error = "Invalid username or password"
    }

    } else {
        error = "Please fill all fields"
    }
},
modifier = Modifier.padding(top = 16.dp)
) {
    Text(text = "Login")
}
Row {
    TextButton(onClick = {context.startActivity(
        Intent(
            context,
            RegisterActivity::class.java
        )
    )})
}
)

```

```

        { Text(color = Color.White, text = "Sign up") }

        TextButton(onClick = {

        })

        {

            Spacer(modifier = Modifier.width(60.dp))

            Text(color = Color.White, text = "Forget password?")

        }

    }

}

private fun startMainPage(context: Context) {

    val intent = Intent(context, MainActivity::class.java)

    ContextCompat.startActivity(context, intent, null)

}

```

MainActivity.kt

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

```

import android.annotation.SuppressLint
import android.content.Intent
import android.os.Bundle
import androidx.activity.ComponentActivity
import androidx.activity.compose.setContent
import androidx.compose.foundation.Image
import androidx.compose.foundation.layout.*
import androidx.compose.material.*
import androidx.compose.runtime.*
import androidx.compose.ui.Alignment

```

```

import androidx.compose.ui.Modifier
import androidx.compose.ui.graphics.Color
import androidx.compose.ui.res.painterResource
import androidx.compose.ui.text.font.FontWeight
import androidx.compose.ui.text.style.TextAlign
import androidx.compose.ui.tooling.preview.Preview
import androidx.compose.ui.unit.dp
import androidx.compose.ui.unit.sp
import com.example.expensetracker.ui.theme.ExpensesTrackerTheme

class MainActivity : ComponentActivity() {
    @SuppressLint("UnusedMaterialScaffoldPaddingParameter")
    override fun onCreate(savedInstanceState: Bundle?) {
        super.onCreate(savedInstanceState)
        setContent {
            Scaffold(
                // in scaffold we are specifying top bar.
                bottomBar = {
                    // inside top bar we are specifying
                    // background color.
                    BottomAppBar(backgroundColor = Color(0xFFadbef4),
                        modifier = Modifier.height(80.dp),
                        // along with that we are specifying
                        // title for our top bar.
                        content = {

                            Spacer(modifier = Modifier.width(15.dp))
                        }
                    )
                }
            )
        }
    }
}

```

```

        Button(
            onClick = {startActivity(Intent(
applicationContext,AddExpensesActivity::class.java))},
            colors = ButtonDefaults.buttonColors(
                backgroundColor = Color.White),
            modifier = Modifier.size(height = 55.dp,
                width = 110.dp)
        )
    {
        Text(
            text = "Add Expenses", color = Color.
            Black, fontSize = 14.sp,
            textAlign = TextAlign.Center
        )
    }

```

```

Spacer(modifier = Modifier.width(15.dp))

```

```

        Button(
            onClick = {
                startActivity(
                    Intent(
                        applicationContext,
                        SetLimitActivity::class.java
                    )
                )
            },
            colors = ButtonDefaults.buttonColors(
                backgroundColor = Color.White),
            modifier = Modifier.size(height = 55.dp,
                width = 110.dp)

```

```

    )
    {
        Text(
            text = "Set Limit", color = Color.Black,
fontSize = 14.sp,

            textAlign = TextAlign.Center
        )
    }

    Spacer(modifier = Modifier.width(15.dp))

    Button(
        onClick = {
            startActivity(
                Intent(
                    applicationContext,
                    ViewRecordsActivity::class.java
                )
            )
        },
        colors = ButtonDefaults.buttonColors(
backgroundColor = Color.White),
        modifier = Modifier.size(height = 55.dp,
width = 110.dp)
    )
    {
        Text(
            text = "View Records", color = Color.
Black, fontSize = 14.sp,

            textAlign = TextAlign.Center

```

```

        )
    }

    }

    )

    }

    ) {
        MainPage()
    }
}

}
}
}

```

@Composable

```

fun MainPage() {
    Column(
        modifier = Modifier.padding(20.dp).fillMaxSize(),
        verticalArrangement = Arrangement.Center,
        horizontalAlignment = Alignment.CenterHorizontally
    ) {

        Text(text = "Welcome To Expense Tracker", fontSize = 42.sp,
fontWeight = FontWeight.Bold,
        textAlign = TextAlign.Center)

        Image(painterResource(id = R.drawable.img_1), contentDescription = "",
modifier = Modifier.size(height = 500.dp, width = 500.dp))

    }
}

```



```
}
```

RegisterActivity.kt

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

```
import android.content.Context
```

```
import android.content.Intent
```

```
import android.os.Bundle
```

```
import androidx.activity.ComponentActivity
```

```
import androidx.activity.compose.setContent
```

```
import androidx.compose.foundation.Image
```

```
import androidx.compose.foundation.layout.*
```

```
import androidx.compose.material.*
```

```
import androidx.compose.runtime.*
```

```
import androidx.compose.ui.Alignment
```

```
import androidx.compose.ui.Modifier
```

```
import androidx.compose.ui.graphics.Color
```

```
import androidx.compose.ui.layout.ContentScale
```

```
import androidx.compose.ui.res.painterResource
```

```
import androidx.compose.ui.text.font.FontFamily
```

```
import androidx.compose.ui.text.font.FontWeight

import androidx.compose.ui.text.input.PasswordVisualTransformation

import androidx.compose.ui.tooling.preview.Preview

import androidx.compose.ui.unit.dp

import androidx.compose.ui.unit.sp

import androidx.core.content.ContextCompat

import com.example.expensetracker.ui.theme.ExpensesTrackerTheme

class RegisterActivity : ComponentActivity() {

    private lateinit var databaseHelper : UserDatabaseHelper

    override fun onCreate(savedInstanceState : Bundle?) {

        super.onCreate(savedInstanceState)

        databaseHelper = UserDatabaseHelper(this)

        setContent {

            ExpensesTrackerTheme {

                // A surface container using the 'background' color from the
                theme

                Surface(

                    modifier = Modifier.fillMaxSize(),
```

```

        color = MaterialTheme.colors.background

    ) {

        RegistrationScreen(this, databaseHelper)

    }

}

}

}

```

@Composable

```

fun RegistrationScreen(context: Context, databaseHelper: UserDatabaseHelper)
{

```

```

    Image(

        painterResource(id = R.drawable.img_1), contentDescription = "",

        alpha = 0.3F,

        contentScale = ContentScale.FillHeight,

```

```
)
```

```
var username by remember { mutableStateOf("") }
```

```
var password by remember { mutableStateOf("") }
```

```
var email by remember { mutableStateOf("") }
```

```
var error by remember { mutableStateOf("") }
```

```
Column(
```

```
    modifier = Modifier.fillMaxSize(),
```

```
    horizontalAlignment = Alignment.CenterHorizontally,
```

```
    verticalArrangement = Arrangement.Center
```

```
) {
```

```
    Text(
```

```
        fontSize = 36.sp,
```

```
        fontWeight = FontWeight.ExtraBold,
```

```
        fontFamily = FontFamily.Cursive,
```

```
        color = Color.White,
```

```
        text = "Register"
```

```
)
```

```
Spacer(modifier = Modifier.height(10.dp))
```

```
TextField(  
  
    value = username,  
  
    onChange = { username = it },  
  
    label = { Text("Username") },  
  
    modifier = Modifier  
  
        .padding(10.dp)  
  
        .width(280.dp)  
  
)
```

```
TextField(  
  
    value = email,  
  
    onChange = { email = it },  
  
    label = { Text("Email") },  
  
    modifier = Modifier
```

```
        .padding(10.dp)

        .width(280.dp)

    )
```

```
TextField(

    value = password,

    onChange = { password = it },

    label = { Text("Password") },

    modifier = Modifier

        .padding(10.dp)

        .width(280.dp),

    visualTransformation = PasswordVisualTransformation()

)
```

```
if (error.isNotEmpty()) {

    Text(

        text = error,

        color = MaterialTheme.colors.error,
```

```

        modifier = Modifier.padding(vertical = 16.dp)

    )

}

Button(

    onClick = {

        if (username.isNotEmpty() && password.isNotEmpty() &&
email.isNotEmpty()) {

            val user = User(

                id = null,

                firstName = username,

                lastName = null,

                email = email,

                password = password

            )

            databaseHelper.insertUser(user)

            error = "User registered successfully"

            // Start LoginActivity using the current context

            context.startActivity(

```

```

        Intent(

            context,

            LoginActivity::class.java

        )

    )

    } else {

        error = "Please fill all fields"

    }

},

modifier = Modifier.padding(top = 16.dp)

) {

    Text(text = "Register")

}

Spacer(modifier = Modifier.width(10.dp))

Spacer(modifier = Modifier.height(10.dp))

Row() {

```



```
Text(

    modifier = Modifier.padding(top = 14.dp), text = "Have an
account?"

)

TextButton(onClick = {

    context.startActivity(

        Intent(

            context,

            LoginActivity::class.java

        )

    )

})

{

    Spacer(modifier = Modifier.width(10.dp))

    Text(text = "Log in")

}

}

}
```

```
}
```

```
private fun startLoginActivity(context: Context) {  
  
    val intent = Intent(context, LoginActivity::class.java)  
  
    ContextCompat.startActivity(context, intent, null)  
  
}
```

SetLimitActivity.kt

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

```
import android.annotation.SuppressLint  
import android.content.Context  
import android.content.Intent  
import android.os.Bundle  
import android.util.Log  
import androidx.activity.ComponentActivity  
import androidx.activity.compose.setContent  
import androidx.compose.foundation.layout.*  
import androidx.compose.foundation.lazy.LazyColumn  
import androidx.compose.foundation.lazy.LazyRow  
import androidx.compose.foundation.lazy.items  
import androidx.compose.material.*  
import androidx.compose.runtime.*  
import androidx.compose.ui.Alignment  
import androidx.compose.ui.Modifier  
import androidx.compose.ui.graphics.Color
```

```

import androidx.compose.ui.text.font.FontWeight
import androidx.compose.ui.text.style.TextAlign
import androidx.compose.ui.unit.dp
import androidx.compose.ui.unit.sp
import com.example.expensetracker.ui.theme.ExpensesTrackerTheme

class SetLimitActivity : ComponentActivity() {
    private lateinit var expenseDatabaseHelper: ExpenseDatabaseHelper
    @SuppressWarnings("UnusedMaterialScaffoldPaddingParameter")
    override fun onCreate(savedInstanceState: Bundle?) {
        super.onCreate(savedInstanceState)
        expenseDatabaseHelper = ExpenseDatabaseHelper(this)
        setContent {
            Scaffold(
                // in scaffold we are specifying top bar.
                bottomBar = {
                    // inside top bar we are specifying
                    // background color.
                    BottomAppBar(backgroundColor = Color(0xFFadbf4),
                        modifier = Modifier.height(80.dp),
                        // along with that we are specifying
                        // title for our top bar.
                        content = {

                            Spacer(modifier = Modifier.width(15.dp))

                            Button(
                                onClick = {

```

```

        startActivity(
            Intent(
                applicationContext,
                AddExpensesActivity::class.java
            )
        )
    },
    colors = ButtonDefaults.buttonColors(
backgroundColor = Color.White),
    modifier = Modifier.size(height = 55.dp,
width = 110.dp)
)
{
    Text(
        text = "Add Expenses", color = Color.
Black, fontSize = 14.sp,
        textAlign = TextAlign.Center
    )
}

Spacer(modifier = Modifier.width(15.dp))

Button(
    onClick = {
        startActivity(
            Intent(
                applicationContext,
                SetLimitActivity::class.java
            )
        )
    }
)

```

```

        },
        colors = ButtonDefaults.buttonColors(
backgroundColor = Color.White),
        modifier = Modifier.size(height = 55.dp,
width = 110.dp)
    )
    {
        Text(
            text = "Set Limit", color = Color.Black,
            textAlign = TextAlign.Center
        )
    }

    Spacer(modifier = Modifier.width(15.dp))

    Button(
        onClick = {
            startActivity(
                Intent(
                    applicationContext,
                    ViewRecordsActivity::class.java
                )
            )
        },
        colors = ButtonDefaults.buttonColors(
backgroundColor = Color.White),
        modifier = Modifier.size(height = 55.dp,
width = 110.dp)
    )

```

```

        {
            Text(
                text = "View Records", color = Color.
Black, fontSize = 14.sp,
                textAlign = TextAlign.Center
            )
        }
    }
) {
    val data=expenseDatabaseHelper.getAllExpense();
    Log.d("swathi" ,data.toString())
    val expense = expenseDatabaseHelper.getAllExpense()
    Limit(this, expenseDatabaseHelper,expense)
}
}
}
}
}

```

@Composable

```

fun Limit(context: Context, expenseDatabaseHelper: ExpenseDatabaseHelper,
expense: List<Expense>) {

```

```

    Column(
        modifier = Modifier
            .padding(top = 100.dp, start = 30.dp)
            .fillMaxHeight()
            .fillMaxWidth(),

```

```

        horizontalAlignment = Alignment.Start
    ) {

        var amount by remember { mutableStateOf("") }
        var error by remember { mutableStateOf("") }

        Text(text = "Monthly Amount Limit", fontWeight = FontWeight.Bold,
fontSize = 20.sp)

        Spacer(modifier = Modifier.height(10.dp))

        TextField(value = amount, onValueChange = { amount = it },
            label = { Text(text = "Set Amount Limit ") })

        Spacer(modifier = Modifier.height(20.dp))

        if (error.isNotEmpty()) {
            Text(
                text = error,
                color = MaterialTheme.colors.error,
                modifier = Modifier.padding(vertical = 16.dp)
            )
        }

        Button(onClick = {
            if (amount.isNotEmpty()) {
                val expense = Expense(
                    id = null,
                    amount = amount
                )
            }
        })
    }
}

```

```

        expenseDatabaseHelper.insertExpense(expense)
    }
}) {
    Text(text = "Set Limit")
}

Spacer(modifier = Modifier.height(10.dp))

LazyRow(
    modifier = Modifier
        .fillMaxSize()
        .padding(top = 0.dp),

    horizontalArrangement = Arrangement.Start
) {
    item {

        LazyColumn {
            items(expense) { expense ->
                Column(

                ) {
                    Text("Remaining Amount : ${expense.amount}",
fontWeight = FontWeight.Bold)
                }
            }
        }
    }
}

```



```
    }  
  }  
}
```

User.kt

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

```
import androidx.room.ColumnInfo
```

```
import androidx.room.Entity
```

```
import androidx.room.PrimaryKey
```

```
@Entity(tableName = "user_table")
```

```
data class User(  
    @PrimaryKey(autoGenerate = true) val id: Int?,  
    @ColumnInfo(name = "first_name") val firstName: String?,  
    @ColumnInfo(name = "last_name") val lastName: String?,  
    @ColumnInfo(name = "email") val email: String?,  
    @ColumnInfo(name = "password") val password: String?,  
)
```

)

UserDao.kt

package com.example.expensetracker

import androidx.room.*

@Dao

interface UserDao {

 @Query("SELECT * FROM user_table WHERE email = :email")

suspend fun getUserByEmail(email: String): User?

 @Insert(onConflict = OnConflictStrategy.REPLACE)

suspend fun insertUser(user: User)

 @Update

suspend fun updateUser(user: User)

 @Delete

suspend fun deleteUser(user: User)

}

UserDatabase.kt

package com.example.expensetracker

import android.content.Context

```

import androidx.room.Database

import androidx.room.Room

import androidx.room.RoomDatabase

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

abstract class UserDatabase : RoomDatabase() {

    abstract fun userDao(): UserDao

    companion object {

        @Volatile

        private var instance: UserDatabase? = null

        fun getDatabase(context: Context): UserDatabase {

            return instance ?: synchronized(this) {

                val newInstance = Room.databaseBuilder(

                    context.applicationContext,

                    UserDatabase::class.java,

                    "user_database"

                ).build()

                instance = newInstance

                newInstance

            }

        }

    }

}

```

UserDataBaseHelper.kt

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

```
import android.annotation.SuppressLint
```

```
import android.content.ContentValues
```

```
import android.content.Context
```

```
import android.database.Cursor
```

```
import android.database.sqlite.SQLiteDatabase
```

```
import android.database.sqlite.SQLiteOpenHelper
```

```
class UserDataBaseHelper(context: Context) :
```

```
    SQLiteOpenHelper(context, DATABASE_NAME, null, DATABASE_VERSION) {
```

```
    companion object {
```

```
        private const val DATABASE_VERSION = 1
```

```
        private const val DATABASE_NAME = "UserDataBase.db"
```

```
        private const val TABLE_NAME = "user_table"
```

```
        private const val COLUMN_ID = "id"
```

```
        private const val COLUMN_FIRST_NAME = "first_name"
```

```
        private const val COLUMN_LAST_NAME = "last_name"
```

```
        private const val COLUMN_EMAIL = "email"
```

```
        private const val COLUMN_PASSWORD = "password"
```

```
    }
```

```
    override fun onCreate(db: SQLiteDatabase?) {
```

```
        val createTable = "CREATE TABLE $TABLE_NAME (" +
```

```
            "$COLUMN_ID INTEGER PRIMARY KEY AUTOINCREMENT, " +
```

```

"$COLUMN_FIRST_NAME TEXT, " +
"$COLUMN_LAST_NAME TEXT, " +
"$COLUMN_EMAIL TEXT, " +
"$COLUMN_PASSWORD TEXT" +
")"

```

```

        db?.execSQL(createTable)
    }

```

```

    override fun onUpgrade(db: SQLiteDatabase?, oldVersion: Int, newVersion:
Int) {
        db?.execSQL("DROP TABLE IF EXISTS $TABLE_NAME")
        onCreate(db)
    }

```

```

fun insertUser(user: User) {
    val db = writableDatabase
    val values = ContentValues()
    values.put(COLUMN_FIRST_NAME, user.firstName)
    values.put(COLUMN_LAST_NAME, user.lastName)
    values.put(COLUMN_EMAIL, user.email)
    values.put(COLUMN_PASSWORD, user.password)
    db.insert(TABLE_NAME, null, values)
    db.close()
}

```

```

@SuppressLint("Range")

```

```

fun getUserByUsername(username: String): User? {

```

```

        val db = readableDatabase

        val cursor: Cursor = db.rawQuery("SELECT * FROM $TABLE_NAME WHERE $
COLUMN_FIRST_NAME = ?", arrayOf(username))

        var user: User? = null

        if (cursor.moveToFirst()) {
            user = User(
                id = cursor.getInt(cursor.getColumnIndex(COLUMN_ID)),
                firstName = cursor.getString(cursor.getColumnIndex(
COLUMN_FIRST_NAME)),
                lastName = cursor.getString(cursor.getColumnIndex(
COLUMN_LAST_NAME)),
                email = cursor.getString(cursor.getColumnIndex(COLUMN_EMAIL
)),
                password = cursor.getString(cursor.getColumnIndex(
COLUMN_PASSWORD)),
            )
        }
        cursor.close()
        db.close()

        return user
    }

    @SuppressWarnings("Range")
    fun getUserById(id: Int): User? {
        val db = readableDatabase

        val cursor: Cursor = db.rawQuery("SELECT * FROM $TABLE_NAME WHERE $
COLUMN_ID = ?", arrayOf(id.toString()))

        var user: User? = null

        if (cursor.moveToFirst()) {
            user = User(
                id = cursor.getInt(cursor.getColumnIndex(COLUMN_ID)),
                firstName = cursor.getString(cursor.getColumnIndex(
COLUMN_FIRST_NAME)),

```

```

        lastName = cursor.getString(cursor.getColumnIndex(
COLUMN_LAST_NAME)),
        email = cursor.getString(cursor.getColumnIndex(COLUMN_EMAIL
)),
        password = cursor.getString(cursor.getColumnIndex(
COLUMN_PASSWORD)),
    )
}
cursor.close()
db.close()
return user
}

```

`@SuppressWarnings("Range")`

```

fun getAllUsers(): List<User> {
    val users = mutableListOf<User>()
    val db = readableDatabase
    val cursor: Cursor = db.rawQuery("SELECT * FROM $TABLE_NAME", null)
    if (cursor.moveToFirst()) {
        do {
            val user = User(
                id = cursor.getInt(cursor.getColumnIndex(COLUMN_ID)),
                firstName = cursor.getString(cursor.getColumnIndex(
COLUMN_FIRST_NAME)),
                lastName = cursor.getString(cursor.getColumnIndex(
COLUMN_LAST_NAME)),
                email = cursor.getString(cursor.getColumnIndex(
COLUMN_EMAIL)),
                password = cursor.getString(cursor.getColumnIndex(
COLUMN_PASSWORD)),
            )

```

```

        users.add(user)
    } while (cursor.moveToNext())
}
cursor.close()
db.close()
return users
}

}

```

ViewRecordsActivity.kt

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

```
import android.annotation.SuppressLint
```

```
import android.content.Intent
```

```
import android.os.Bundle
```

```
import android.util.Log
```

```
import androidx.activity.ComponentActivity
```

```
import androidx.activity.compose.setContent
```

```
import androidx.compose.foundation.ScrollState
```

```
import androidx.compose.foundation.layout.*
```

```
import androidx.compose.foundation.lazy.LazyColumn
```

```
import androidx.compose.foundation.lazy.LazyRow
```



```
import androidx.compose.foundation.lazy.items

import androidx.compose.foundation.verticalScroll

import androidx.compose.material.*

import androidx.compose.runtime.Composable

import androidx.compose.ui.Modifier

import androidx.compose.ui.graphics.Color

import androidx.compose.ui.text.font.FontWeight

import androidx.compose.ui.text.style.TextAlign

import androidx.compose.ui.tooling.preview.Preview

import androidx.compose.ui.unit.dp

import androidx.compose.ui.unit.sp

import com.example.expensetracker.ui.theme.ExpensesTrackerTheme


class ViewRecordsActivity : ComponentActivity() {

    private lateinit var itemsDatabaseHelper: ItemsDatabaseHelper

    @SuppressLint("UnusedMaterialScaffoldPaddingParameter",
        "SuspiciousIndentation")

    override fun onCreate(savedInstanceState: Bundle?) {

        super.onCreate(savedInstanceState)
```

```
itemsDatabaseHelper = ItemsDatabaseHelper(this)

setContent {

    Scaffold(

        // in scaffold we are specifying top bar.

        bottomBar = {

            // inside top bar we are specifying

            // background color.

            BottomAppBar(backgroundColor = Color(0xFFadbef4),

                modifier = Modifier.height(80.dp),

                // along with that we are specifying

                // title for our top bar.

                content = {

                    Spacer(modifier = Modifier.width(15.dp))

                    Button(

                        onClick = {

                            startActivity(

                                Intent(
```

```

        applicationContext,

        AddExpensesActivity::class.java

    )

)

},

    colors = ButtonDefaults.buttonColors(
backgroundColor = Color.White),

    modifier = Modifier.size(height = 55.dp,
width = 110.dp)

)

{

    Text(

        text = "Add Expenses", color = Color.
Black, fontSize = 14.sp,

        textAlign = TextAlign.Center

    )

}

Spacer(modifier = Modifier.width(15.dp))

```

```

Button(

    onClick = {

        startActivity(

            Intent(

                applicationContext,

                SetLimitActivity::class .java

            )

        )

    },

    backgroundColor = Color.White),

    width = 110.dp)

    modifier = Modifier.size(height = 55.dp,

)

{

    Text(

        text = "Set Limit", color = Color.Black,

        fontSize = 14.sp,

        textAlign = TextAlign.Center

    )

}

```

```
Spacer(modifier = Modifier.width(15.dp))
```

```
Button(
```

```
    onClick = {
```

```
        startActivity(
```

```
            Intent(
```

```
                applicationContext,
```

```
                ViewRecordsActivity::class.java
```

```
            )
```

```
        )
```

```
    },
```

```
    backgroundColor = Color.White, colors = ButtonDefaults.buttonColors(
```

```
    width = 110.dp, modifier = Modifier.size(height = 55.dp,
```

```
)
```

```
{
```

```
    Text(
```

```

        text = "View Records", color = Color.
        Black, fontSize = 14.sp,

        textAlign = TextAlign.Center

    )

}

}

)

}

) {

    val data=itemsDatabaseHelper.getAllItems();

    Log.d("swathi" ,data.toString())

    val items = itemsDatabaseHelper.getAllItems()

        Records(items)

}

}

}

}

```

```
fun Records(items : List<Items>) {

    Text(text = "View Records", modifier = Modifier.padding(top = 24.dp,
start = 106.dp, bottom = 24.dp ), fontSize = 30.sp, fontWeight = FontWeight.
Bold)

    Spacer(modifier = Modifier.height(30.dp))

    LazyRow(

        modifier = Modifier

            .fillMaxSize()

            .padding(top = 80.dp),

        horizontalArrangement = Arrangement.SpaceBetween

    ){

        item {

            LazyColumn {

                items(items) { items ->

                    Column(modifier = Modifier.padding(top = 16.dp, start =
48.dp, bottom = 20.dp)) {

                        Text("Item_Name : ${items.itemName}")

                        Text("Quantity : ${items.quantity}")

                    }

                }

            }

        }

    }

}
```

```

        Text("Cost : ${items.cost}")
    }
}
}
}
}

}

}

```

ExampleInstrumentedTest.kt

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

```
import androidx.test.platform.app.InstrumentationRegistry
```

```
import androidx.test.ext.junit.runners.AndroidJUnit4
```

```
import org.junit.Test
```

```
import org.junit.runner.RunWith
```

```
import org.junit.Assert.*
```

```
/**
```

```
 * Instrumented test, which will execute on an Android device.
```

```
 *
```

```
 * See [testing documentation](http://d.android.com/tools/testing).
```



```

*/

@RunWith(AndroidJUnit4::class)
class ExampleInstrumentedTest {

    @Test

    fun useAppContext() {

        // Context of the app under test.

        val appContext = InstrumentationRegistry.getInstrumentation().
targetContext

        assertEquals("com.example.expensetracker", appContext.packageName)

    }

}

```

ExampleUnitTest.kt

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

```
import org.junit.Test
```

```
import org.junit.Assert.*
```

```

/**
 * Example local unit test, which will execute on the development machine
 (host).
 *
 * See [testing documentation] (http://d.android.com/tools/testing).
 */

class ExampleUnitTest {

    @Test

    fun addition_isCorrect() {

        assertEquals(4, 2 + 2)

    }

}

```

}

10.OUTPUT:

Monthly Amount

Set Monthly Amount Limit

[Set Limit](#)

[Add](#)

[Set Limit](#)

[View](#)

