

# **CONCEPT**

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# INTRODUCTION

The main objective of Money Matters App control of your finances and simplify your budgeting process, download the expenses tracker app for Android today and start tracking your expenses with ease.

## 1.1 Overview:

- Expense Tracking: The app should allow users to record their expenses, categorize them, and add notes or comments as needed.
- Budget Management: The app should also provide users with alerts when they are approaching or exceeding their budget limits .


## 1.2 Purpose:

- Expense Tracking: An expenses tracker app enables users to track their expenses in real-time, as they occur.
- Financial Planning: An expenses tracker app provides users with a clear picture of their financial situation, allowing them to plan for the future.

# Problem Definition & Design Thinking

## 2.1 Empathy Map:


Template



### Empathy map

Use this framework to develop a deep, shared understanding and empathy for other people. An empathy map helps describe the aspects of a user's experience, needs and pain points, to quickly understand your users' experience and mindset.


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Need some inspiration?

See a featured version of the template to kickstart your work.

[Open example](#)



### Build empathy

The information you add here should be representative of the observations and research you've done about your users.

Says

What have we heard them say?  
What can we imagine them saying?

spending and manage my finances.

the budgeting feature on this income app.

check my spending and budget at a glance.

inputting expenses

Tracking spending

Analysis and insights

Thinks

What are their wants, needs, hopes, and dreams? What other thoughts might influence their behavior?

customer categories and subcategories

meeting their budget limits.

achieve their financial goals.

types of loans and services, such as banking apps

data could be stolen or hacked

Android that is slow, crashes frequently

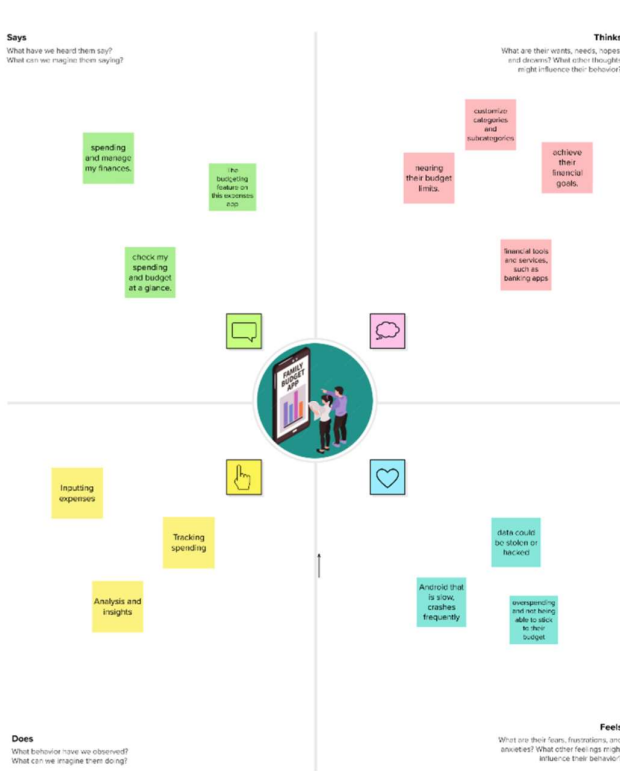
overemphasizing and not being able to stick to their budget


Does

What behavior have we observed?  
What can we imagine them doing?

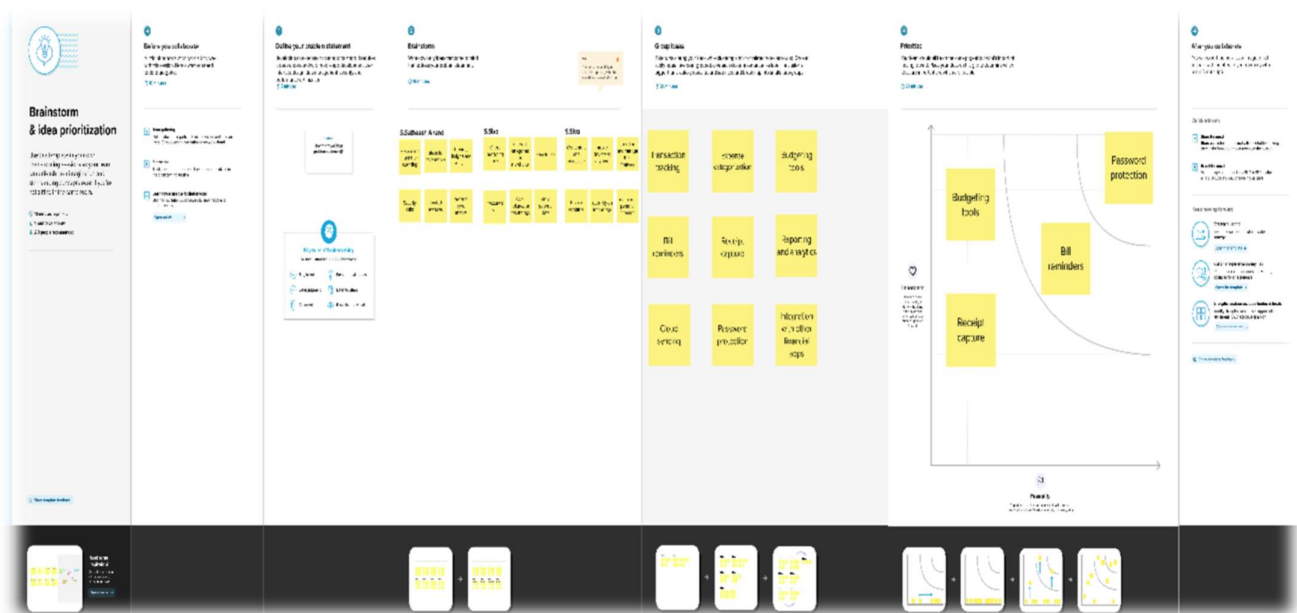
Feels

What are their fears, frustrations, and anxieties? What other feelings might influence their behavior?



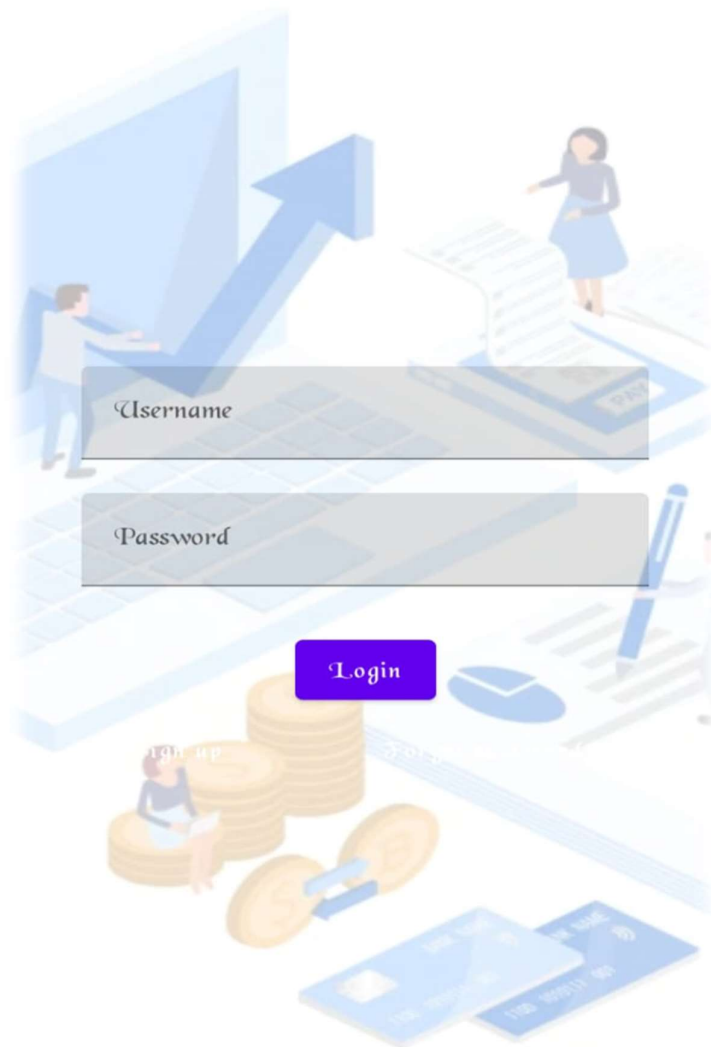


## 2.2 Ideation & Brainstorming Map:

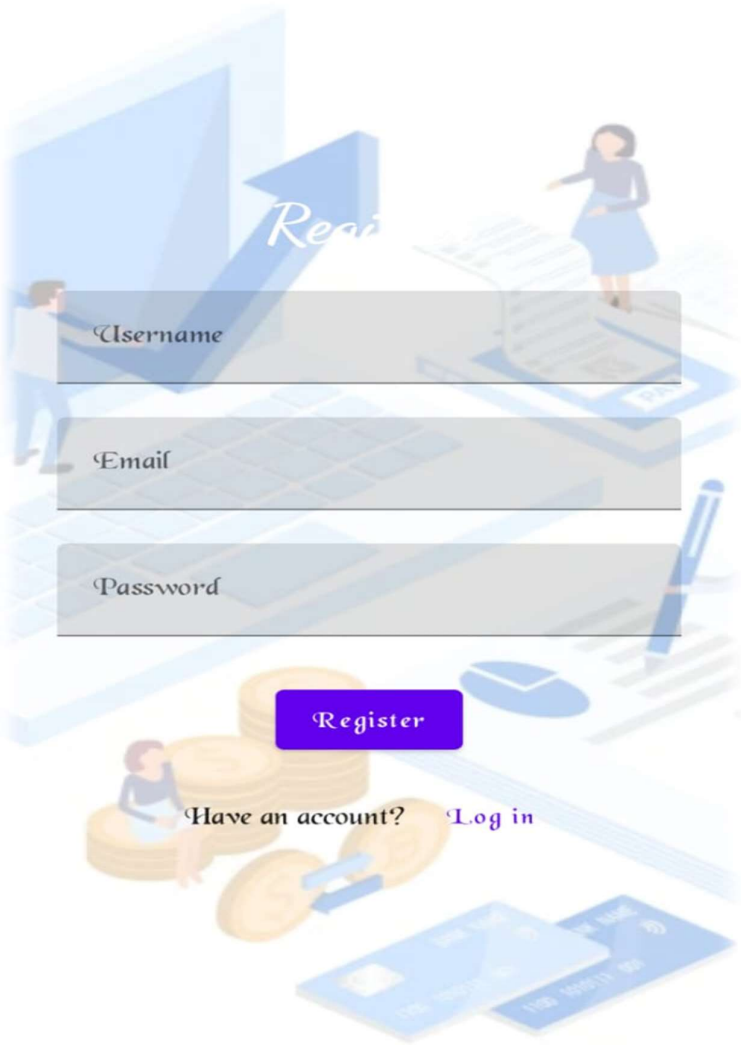


## RESULT

**Sign in page:**



Sign up page:



Home page:

# Welcome To Expense Tracker



Add  
Expenses

Set Limit

View  
Records

**Add Expenses page:**

**Item Name**

Item Name

**Quantity of item**

Quantity

**Cost of the item**

Cost

Submit



Amount limit:

Monthly Amount Limit

Set Amount Limit

Set Limit

Remaining Amount: 10000  
Remaining Amount: 50000  
Remaining Amount: 50000  
Remaining Amount: 50000  
Remaining Amount: 50000  
Remaining Amount: 20000

**View records page:**

# View Records

Item\_Name: flower  
Quantity: 20  
Cost: 10000

Item\_Name: flower  
Quantity: 20  
Cost: 10000

Item\_Name: flower  
Quantity: 20  
Cost: 10000

Item\_Name: flower  
Quantity: 20  
Cost: 10000

Item\_Name: food  
Quantity: 20  
Cost: 3000

Item\_Name: food  
Quantity: 20  
Cost: 3000

## **ADVANTAGES & DISADVANTAGES**

### **Advantages:**

- Easy to use: Expenses tracker apps are designed to be user-friendly and easy to use, even for people who are not tech-savvy.
- Save time: By using an expenses tracker app, you can save time compared to manually tracking your expenses on paper or in a spreadsheet. You can easily input your expenses, categorize them, and track them all in one place.

### **Disadvantages:**

- Cost: Some expenses tracker apps require a subscription or may have in-app purchases, which can add up over time.
- Learning curve: Even though expenses tracker apps are designed to be user-friendly, there may still be a learning curve to understand how to use the app effectively.
- Dependence on technology: If you rely too heavily on an expenses tracker app, you may be at a loss if you lose your phone or if there is a problem with the app.

## APPLICATIONS

- Research and download an expenses tracker app from the Google Play Store. There are many options available, including popular apps like Mint, Personal Capital, and You Need a Budget (YNAB).
- Open the app and set up an account. You may need to enter personal information, such as your name, email, and password.
- Link your financial accounts, such as bank accounts, credit cards, and investment accounts. This will allow the app to automatically track your expenses and income.
- Create a budget by setting up categories for your expenses, such as groceries, entertainment, and transport.

## **CONCLUSION**

In conclusion, an expenses tracker app can be a valuable tool for managing your finances on an Android device. It can help you stay organized, save time, avoid overspending, and make better financial decisions. However, it's important to choose an app that aligns with your financial goals and values, and to be aware of the potential disadvantages, such as cost, learning curve, and privacy concerns. By using an expenses tracker app in Android, you can take control of your finances and achieve your financial goals.

## **FUTURE SCOPE**

In future scope of expenses tracker app in Android is promising, as more and more people are becoming interested in managing their finances through their smartphones. Here are some potential areas of growth and development for expenses tracker apps in the future. With the use of AI, expenses tracker apps can learn your spending habits and make personalized recommendations for saving money. This can include suggestions on how to reduce expenses or earn more income.

## APPENDIX

### Source Code:

<https://github.com/Satheesh-Anand/Money-Matters>

### Code:

#### 1. 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(background-color = 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.j
                    ava))},
                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  
        )  
    }  
}  
)  
}  
) {  
    AddExpenses(this, itemsDatabaseHelper, expenseDatabaseHelper)  
}  
}  
}
```

```
}
```

```
@SuppressWarnings("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")
    }

}
}

```

## 2. 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,  
onValueChange = { username = it },  
    label = { Text("Username") },  
    modifier = Modifier.padding(10.dp)  
        .width(280.dp)  
)
```

```
TextField(  
    value = password,  
onValueChange = { 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)
}
```

### 3. 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.ExpensesTrackerThe
me

class MainActivity : ComponentActivity() {

    @SuppressWarnings("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(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,AddExpensesActivit
                    y::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))

    }
}
```

#### 4. 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.ExpensesTrackerThe
me
```

```
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,  
        onValueChange = { username = it },  
        label = { Text("Username") },  
        modifier = Modifier  
            .padding(10.dp)
```



```
.width(280.dp)
```

```
)
```

```
TextField(
```

```
    value = email,
```

```
    onValueChange = { email = it },
```

```
    label = { Text("Email") },
```

```
    modifier = Modifier
```

```
        .padding(10.dp)
```

```
        .width(280.dp)
```

```
)
```

```
TextField(
```

```
    value = password,
```

```
    onValueChange = { 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)
}

```

## 5. 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.ExpensesTrackerThe
me

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,
            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
            )
        }

    }

) {

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)
```

```
                    }
```

```
                }
```

```
            }
```

```
        }
```

```
    }
```

```
}
```

```
}
```

## 6. ViewRecordActivity.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.ExpensesTrackerThe
me
```

```
class ViewRecordsActivity : ComponentActivity() {
    private lateinit var itemsDatabaseHelper:
ItemsDatabaseHelper
```

```
@SuppressWarnings("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(background-color = 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,
        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
    )
    }
}
)
}
) {
val data=itemsDatabaseHelper.getAllItems();
Log.d("swathi" ,data.toString())
val items = itemsDatabaseHelper.getAllItems()
    Records(items)
}
}
}
}
}
@Composable
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}")
                }
            }
        }
    }
}

```