Money Matters: A Personal Finance Management App

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DESCRIPTION

- The **Expense Tracker App** empowers users to take control of their finances by providing tools for easy tracking, budget setting, and detailed analysis, fostering financial discipline and informed decision-making.
- **Materials**: Build an **Expense Tracker App** with Figma for design, React Native or Flutter for frontend, Firebase or PostgreSQL for backend, and Firebase Authentication for secure login.
- **Resources**: Build the Expense Tracker App in Android Studio with Kotlin/Java, Firebase for backend and authentication, ExchangeRate-API for currency conversion, and Chart.js for analytics. Distribute on Google Play and manage tasks with Trello or Jira.
- **Usage for expense**: The Expense Tracker App helps users log and categorize expenses, set budgets, and track spending. It provides visual reports, supports multiple currencies, syncs data to the cloud, and allows report export, helping users manage finances and make informed decisions.
- **Mobile Apps:** Expense Tracker App can stand out with personalized tracking, real-time currency conversion, dynamic reports via Chart.js, and a simple UI. It can feature cloud syncing through Firebase,push notifications for budget alerts, and secure authentication, offering a competitive edge over apps like Mint and YNAB.
- **Online Platforms**: Platforms like Spendee, Expensify, Wally, and EveryDollar offer expense tracking, budgeting, and financial reporting, providing valuable insights for your Expense Tracker App.

Main Activity.java:

```
package com.example.expensestracker

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.expensestracker.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,
              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.d

    }
}
```

```
class SetLimitActivity : ComponentActivity() {
    private lateinit var expenseDatabaseHelper: ExpenseDatabaseHelper
    @SuppressLint("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(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)
        )
        {
```

```
Button(onClick = {
    if (amount.isNotEmpty()) {
        val expense = Expense(
            id = null,
            amount = amount
        )
        expenseDatabaseHelper.insertExpense(expense)
    }
}) {
    Text(text = "Set Limit")
}
Text(
                        text = "View Records", color = Color.Black, fontSize = 14.sp,
                        textAlign = TextAlign.Center
                    )
                }      })}) {
```

```
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)
                  }
              }
           }
        }

      }
   }
}
```

Activity_main.xml:

```
<?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:supportsRtl="true"
    android:theme="@style/Theme.ExpensesTracker"
    tools:targetApi="31">
```

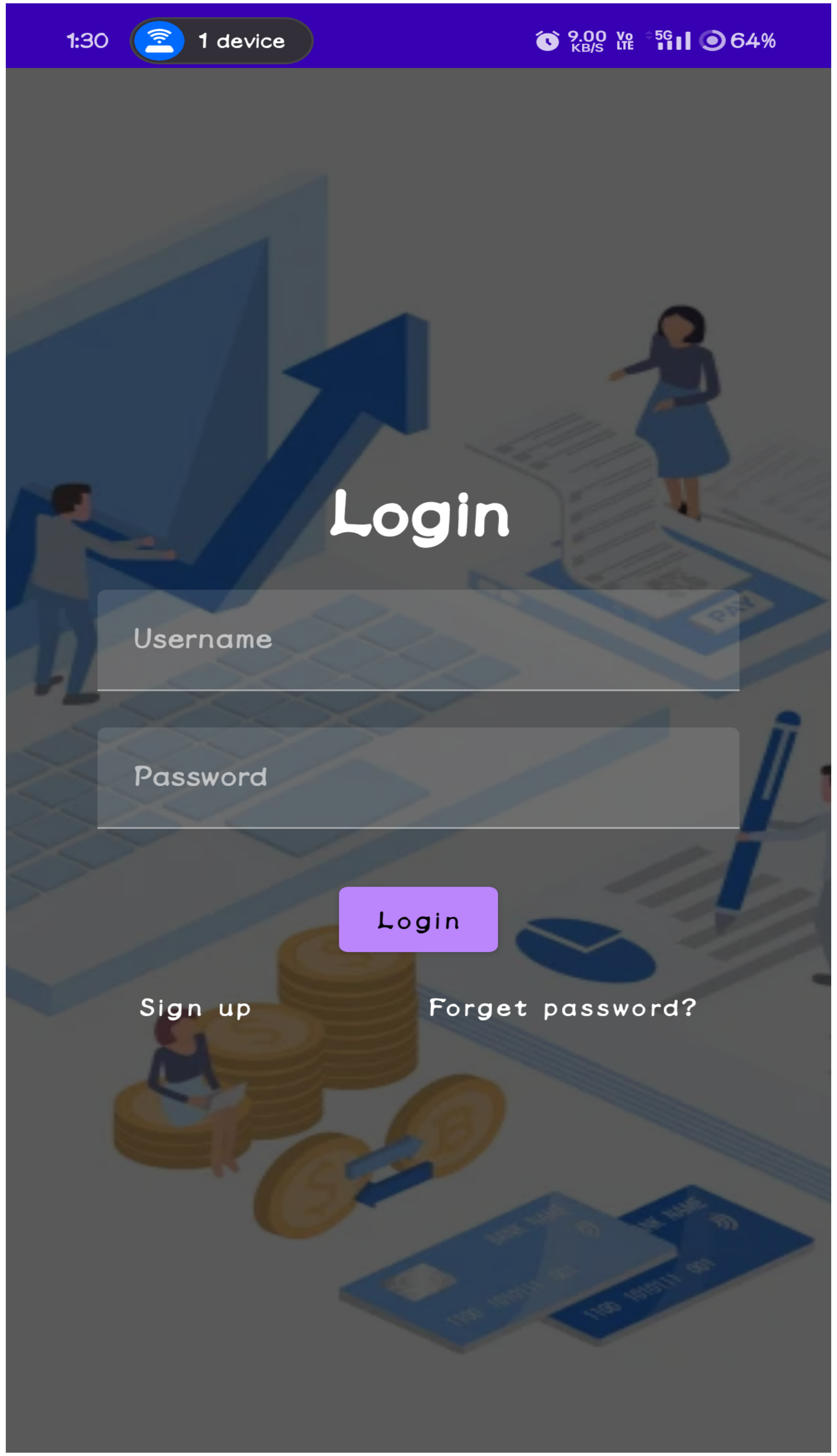
```
<activity
    android:name=".RegisterActivity"
    android:exported="false"
    android:label="@string/title_activity_register"
    android:theme="@style/Theme.ExpensesTracker" />



<activity
    android:name=".MainActivity"
    android:exported="false"
    android:label="MainActivity"
    android:theme="@style/Theme.ExpensesTracker" />
```

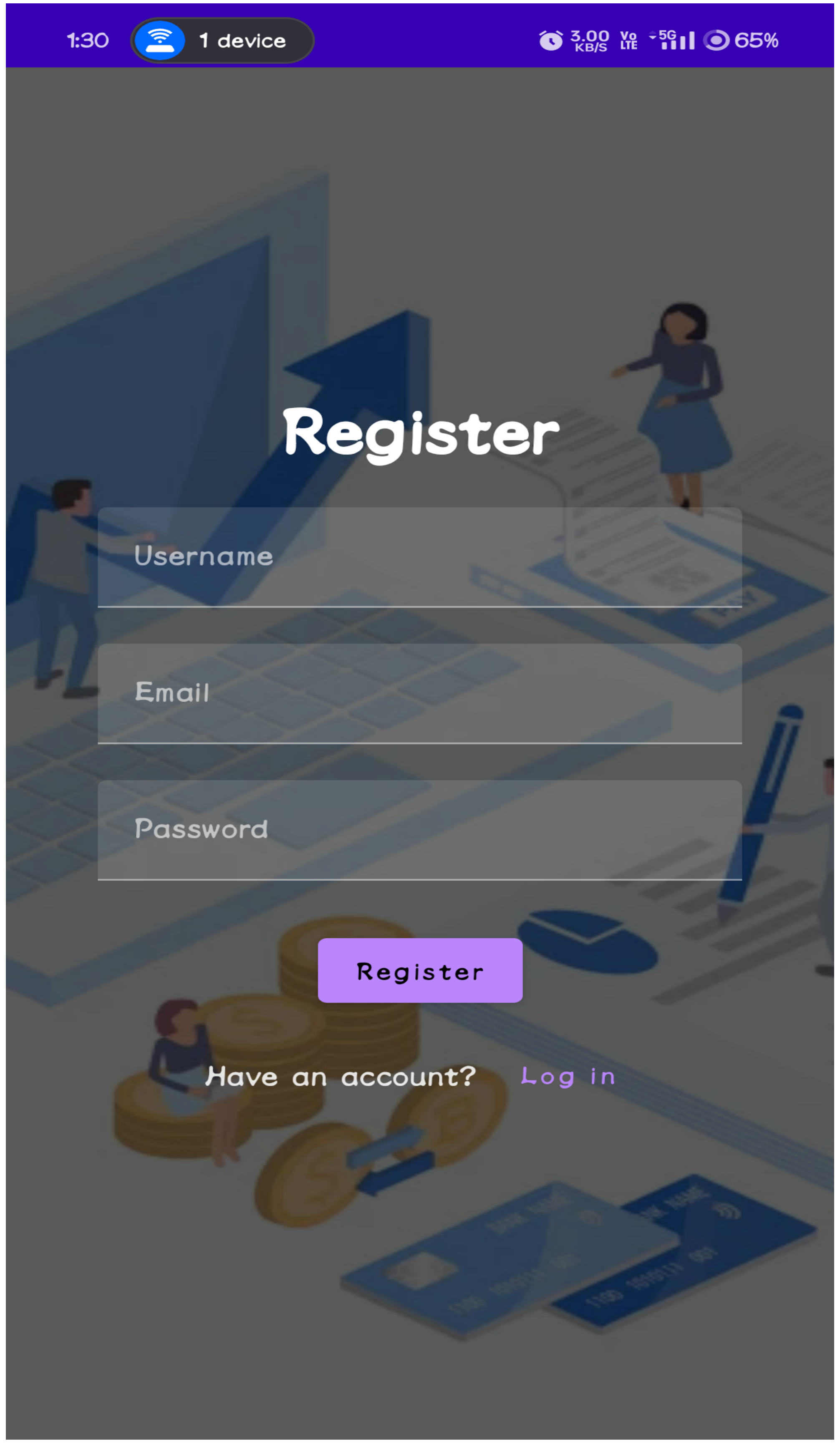
```
<activity
    android:name=".ViewRecordsActivity"
    android:exported="false"
    android:label="@string/title_activity_view_records"
    android:theme="@style/Theme.ExpensesTracker" />


<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" />


<activity
    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>
```

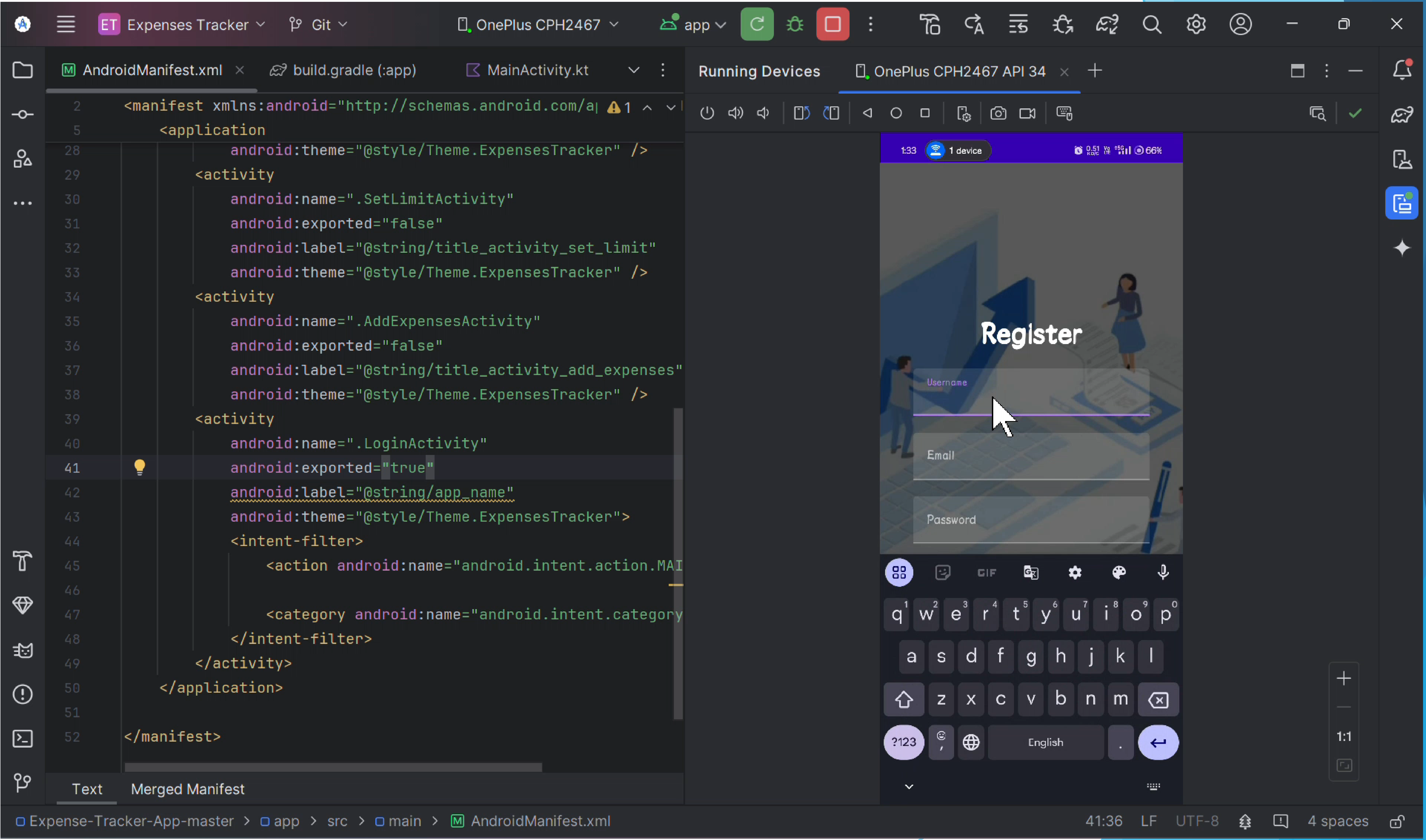
OUTPUT:


1:30
1 device
9.00 KB/S
64%
Login
Username
Password
Login
Sign up
Forget password?



Register

Have an account? Log in



```
<manifest xmlns:android="http://schemas.android.com/a|
    <application
            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" />
        <activity
            android:name=".LoginActivity"
            android:exported="true"
            android:label="@string/app_name"
            android:theme="@style/Theme.ExpensesTracker">
            <intent-filter>
                <action android:name="android.intent.action.MAI

                <category android:name="android.intent.category
            </intent-filter>
        </activity>
    </application>

</manifest>
```