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# SmartWallet



BY

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SmartWallet, an application that helps the user to save, calculate and manage their savings with easy-to-understand graphs, it also converts currencies with ease, you can manage expenses such as Internet, Water, Electricity and shopping bills, it also helps to increase awareness of money saving. The name of the application relates to smart income management, People's burning desire to manage their budget helped us achieve the greatest expense management and currency exchange app.



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# Introduction

In order to assure a high quality user experience, the idea of creating an application came to help the users to manage their budget and economics.

The goal was to reach a wide segment of employees and students who use smartphones frequently and provide them with economic information in a consistent manner.

Our application also provides an easy and smooth management process, a new user can be created or logged in from a previous account, and comments can be added, deleted or modified when needed.

## PROBLEM STATEMENT

- 1-Lack of awareness about money management.
- 2-Users facing difficulty in managing savings and bills.
- 3-Students have the combination of low income and high expenses, so they are a targeted group of this application.



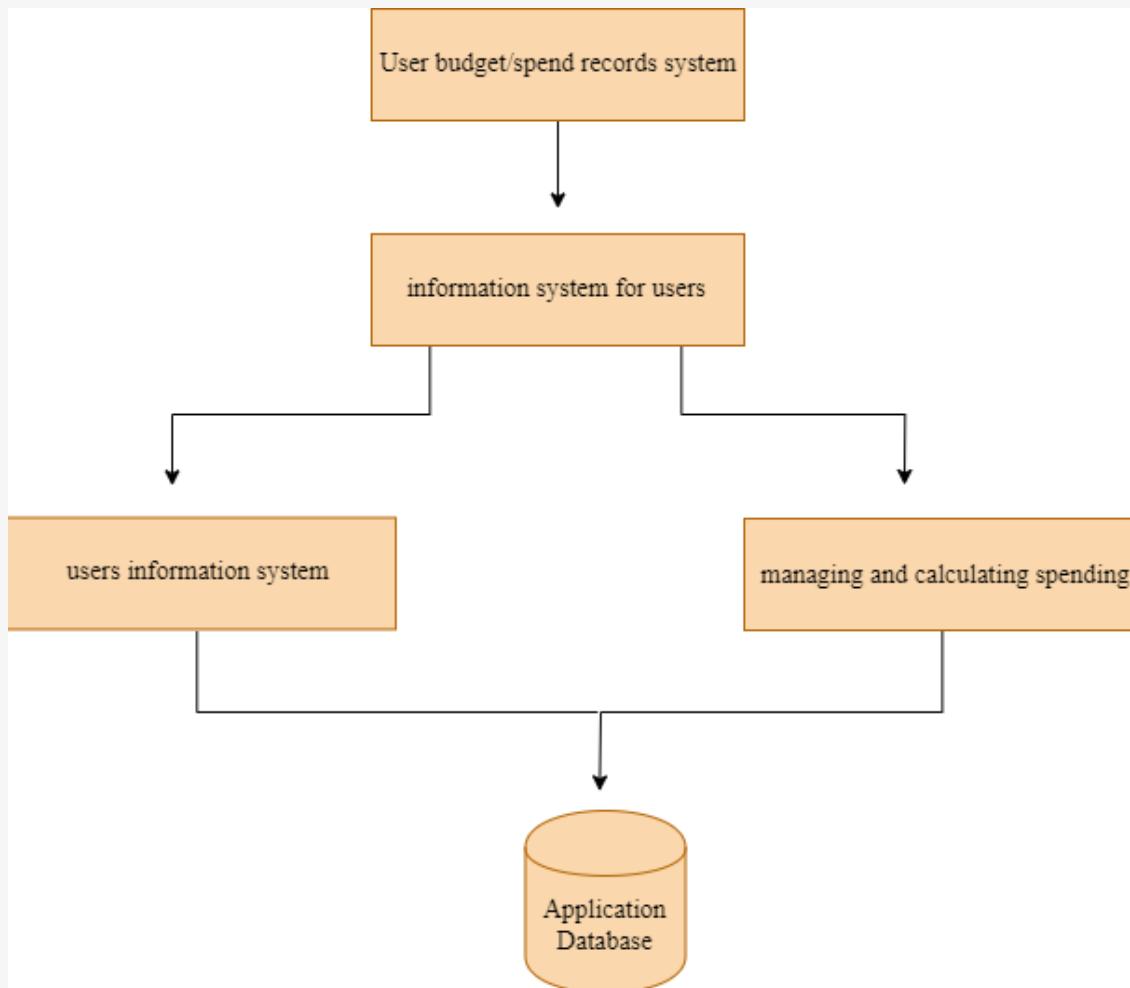
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# OBJECTIVES

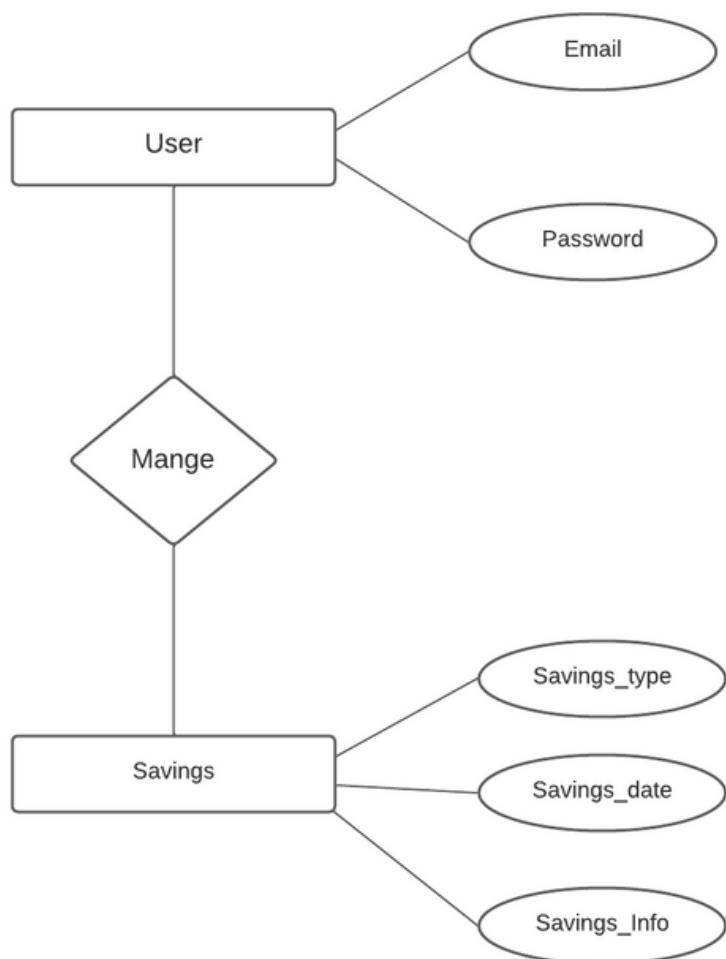
- 1-Making currency exchange easier
- 2- Helping students and employees manage their funds.
- 3-Covering the various requirements of economics and currency.
- 4-Monitor savings with easy-to-understand graphs



# METHODOLOGY



# SCOPE



# RELATED WORKS

App	Price	Free Trial	Security
You Need a Budget (YNAB)	\$98.99 per year	34 days	Bank-Level Security and Encryption
Mint	Free	N/A	Bank-Level Security and Encryption
Simplifi by Quicken	\$47.99 per year	30 days	Bank-Level Security and Encryption
PocketGuard	Free / \$39.99 per year	Free version available, no free trial of paid version	Bank-Level Security and Encryption
Personal Capital	Free	N/A	Bank-Level Security and Encryption
Zeta	Free	N/A	Bank-Level Security and Encryption



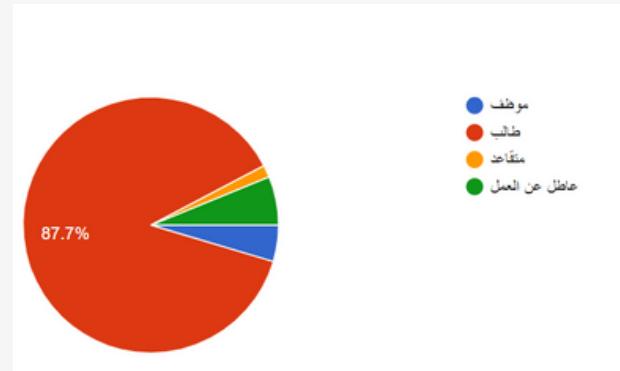
# ANALYSIS

Q1:

هل أنت:

- موظف
- طالب
- منتقاعد
- عاطل عن العمل

Result1:

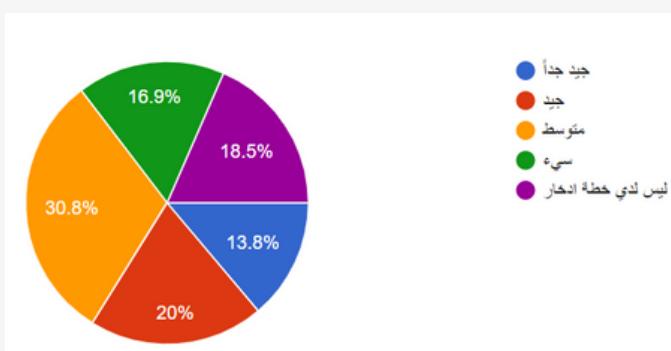


Q2:

سامدى التزامك بالادخار؟

- جيد جداً
- جيد
- متوسط
- سيء
- ليس لدي خطة ادخار

Result2:



المجملى

150,000.00 \$



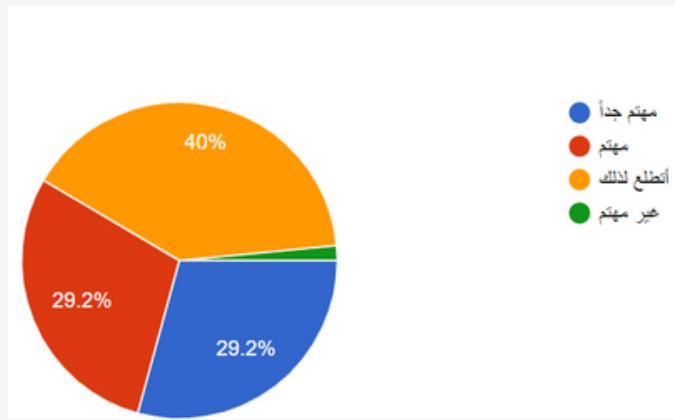
# ANALYSIS

Q3:

ما مدى اهتمامك بإدارة ميزانيتك:

- مهم جداً
- مهم
- انتلع لذلك
- غير مهم

Result3:

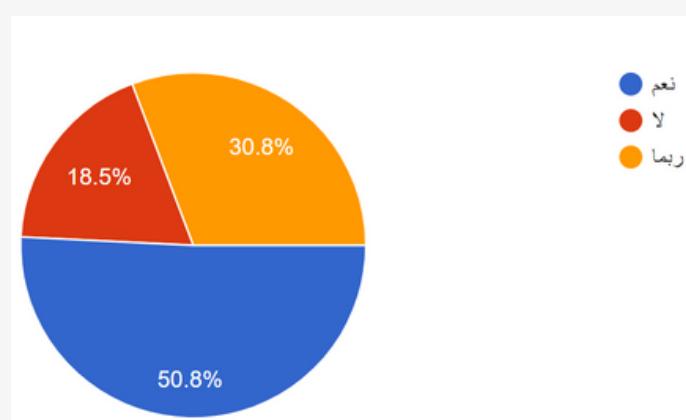


Q4:

هل توجه صعوبه في ادارة الميزانيه لديك من ناحية الادخار و الفواتير؟

- نعم
- لا
- ربما

Result4:



الإجمالي

150,000.00 \$



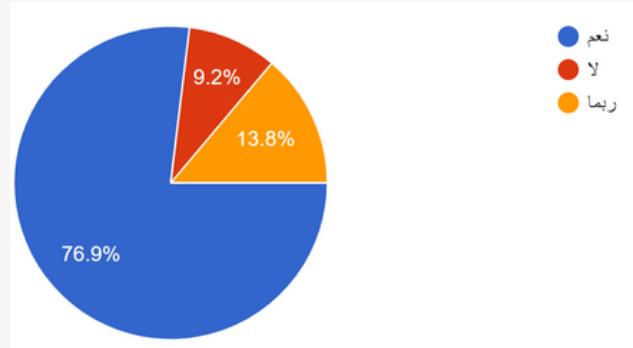
# ANALYSIS

Q5:

هل تفضل تطبيق يدعم خاصية ادارة المدخرات و الفواتير

- نعم
- لا
- ربما

Result5:

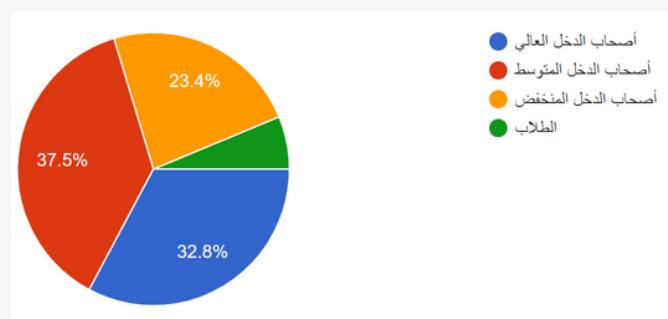


Q6:

برأيك، ما هي الفئة الأكثر اهتمام ووعي في الاداره الميزانيه؟

- أصحاب الدخل العالى
- أصحاب الدخل المتوسط
- أصحاب الدخل المنخفض
- الطلاب

Result6:



الإجمالي

150,000.00 \$



# ANALYSIS

Q7:

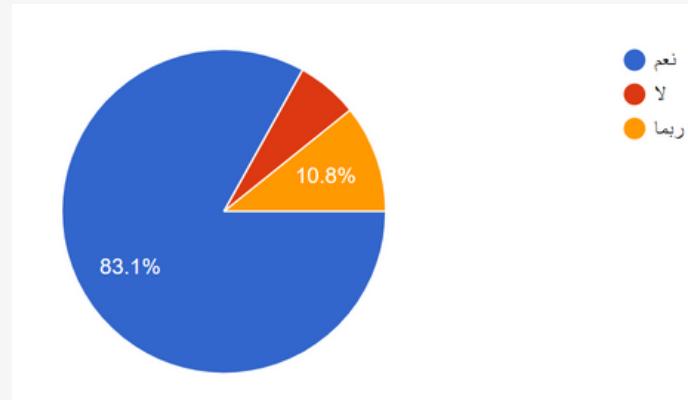
هل تعتقد ان الادخار له علاقة بالوعي؟

نعم

لا

ربما

Result7:



الإجابة

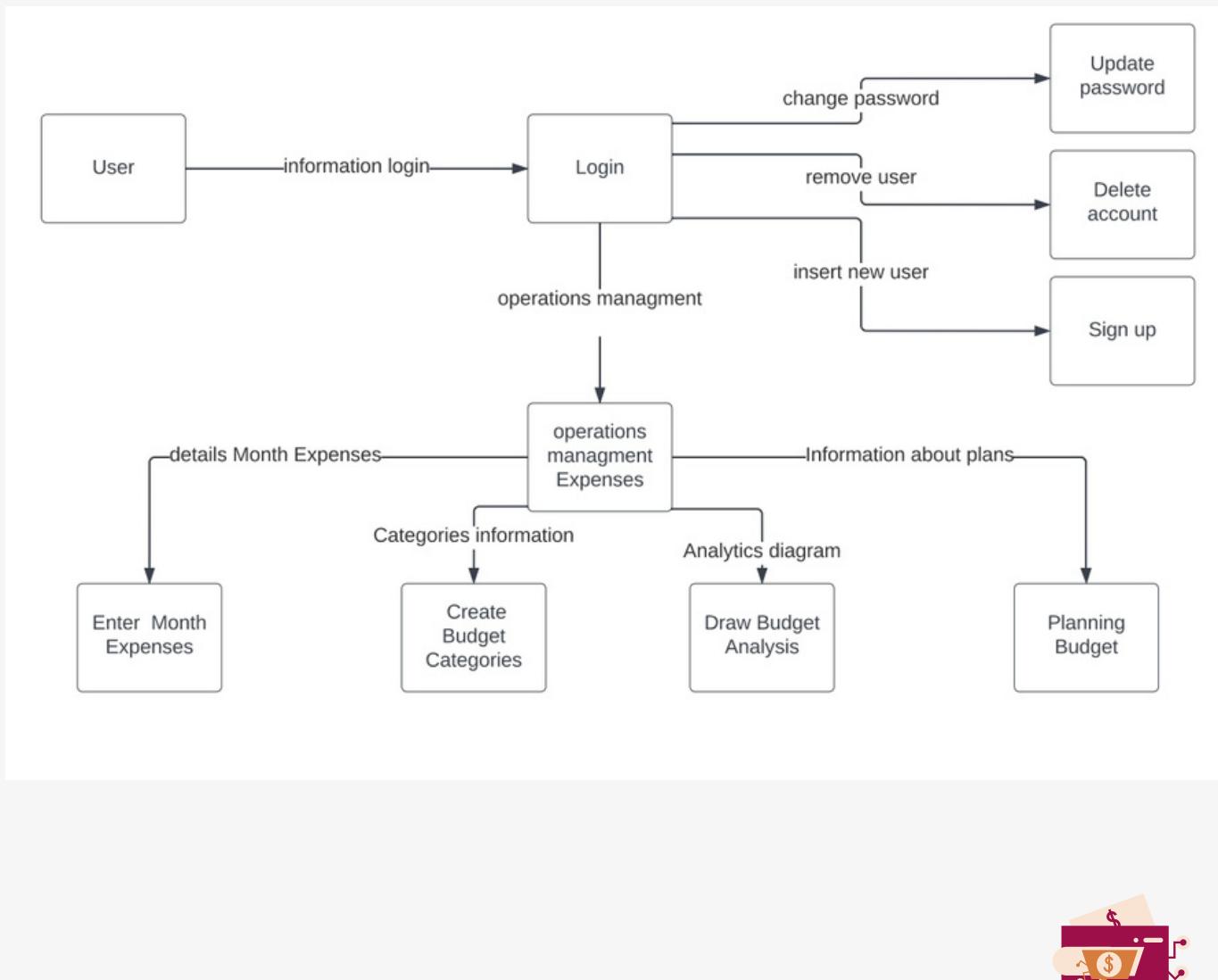
150,000.00 \$



# SYSTEM DESIGN AND IMPLEMENTATION DESIGN AND CODES

## System Architecture

In the following system architecture, we are showing the system from the top in a way that can show the behavior and boundaries of the system. The diagram shows how the applications and multiple components will be orchestrated to deliver the goals.



## Implementations Design and Code

We used android studio to create this application with firebase database. SQLite is an open source SQL database that stores data to a text file on a device.

**Insert or add:**

```
package com.example.expensestracker;

import androidx.annotation.NonNull;
import androidx.appcompat.app.AppCompatActivity;

import android.app.AlertDialog;
import android.content.Intent;
import android.os.Bundle;
import android.text.TextUtils;
import android.view.View;
import android.widget.Button;
import android.widget.EditText;
import android.widget.TextView;
import android.widget.Toast;

import com.example.expensestracker.MainActivity;
import com.google.android.gms.tasks.OnCompleteListener;
import com.google.android.gms.tasks.Task;
import com.google.firebase.auth.AuthResult;
import com.google.firebase.auth.FirebaseAuth;
import com.google.firebaseio.database.DatabaseReference;
import com.google.firebaseio.database.FirebaseDatabase;
public class RegistrationActivity extends AppCompatActivity {

    private EditText mEmail;
    private EditText mPass;
    private Button btnReg;
    private TextView mSignin;
    private ProgressDialog mDialog;

    private FirebaseDatabase database;
    private DatabaseReference myRef;
    private FirebaseAuth mAuth;
```

Expense

150,000.00 \$



```

@Override
protected void onCreate(Bundle savedInstanceState) {
    super.onCreate(savedInstanceState);
    setContentView(R.layout.activity_registration);

    FirebaseDatabase database = FirebaseDatabase.getInstance();
    DatabaseReference myRef = database.getReference("message");

    mAuth = FirebaseAuth.getInstance();
    mDialog=new ProgressDialog(this);
    registration();
}

private void registration(){

    mEmail=findViewById(R.id.email_reg);
    mPass=findViewById(R.id.password_reg);
    btnReg=findViewById(R.id.btn_reg);
    mSignin=findViewById(R.id.Signin_here);

    btnReg.setOnClickListener(new View.OnClickListener() {
        @Override
        public void onClick(View view) {

            String email=mEmail.getText().toString().trim();
            String pass=mPass.getText().toString().trim();

            if(TextUtils.isEmpty(email)){
                mEmail.setError("Email Required..");
                return;
            }
            if(TextUtils.isEmpty(pass)){
                mPass.setError("Password Required..");
                return;
            }

            mDialog.setMessage("Processing..");
            mDialog.show();
        }
    });
}

```

المحتملي

150,000.00 \$



```

mAuth.createUserWithEmailAndPassword(email,pass).addOnCompleteListener(new
OnCompleteListener<AuthResult>() {
    @Override
    public void onComplete(@NonNull Task<AuthResult> task) {
        if (task.isSuccessful()){

            mDialog.dismiss();
            Toast.makeText(getApplicationContext(),"Registration
Complete",Toast.LENGTH_SHORT).show();
            startActivity(new Intent(getApplicationContext(), MainActivity.class));
        }else {
            mDialog.dismiss();
            Toast.makeText(getApplicationContext(),"Registration
Field..",Toast.LENGTH_SHORT).show();
        }
    }
});

mSignin.setOnClickListener(new View.OnClickListener() {
    @Override
    public void onClick(View view) {
        startActivity(new Intent(getApplicationContext(),MainActivity2.class));
    }
});
}

```



150,000.00 \$

## Update

```
package com.example.expensestracker;

import androidx.annotation.NonNull;
import androidx.appcompat.app.AppCompatActivity;

import android.content.Intent;
import android.os.Bundle;
import android.text.TextUtils;
import android.view.View;
import android.widget.Button;
import android.widget.EditText;
import android.widget.TextView;
import android.widget.Toast;

import com.example.expensestracker.MainActivity;
import com.google.android.gms.tasks.OnCompleteListener;
import com.google.android.gms.tasks.Task;
import com.google.firebase.auth.FirebaseAuth;

public class ReseatActivity extends AppCompatActivity {

    private EditText email;
    private Button btn;
    private FirebaseAuth mAuth;

    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_reseat);
        email=(EditText) findViewById(R.id.reset_email);
        btn=(Button) findViewById(R.id.reset_btn);
        mAuth = FirebaseAuth.getInstance();

        btn.setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick(View view) {
                String useremail=email.getText().toString().trim();
                if(TextUtils.isEmpty(useremail))
                    Toast.makeText(getApplicationContext(),"Please enter your email",Toast.LENGTH_SHORT).show();
                else
                    mAuth.sendPasswordResetEmail(useremail).addOnCompleteListener(new OnCompleteListener<Task<Void>>() {
                        @Override
                        public void onComplete(@NonNull Task<Void> task) {
                            if(task.isSuccessful())
                                Toast.makeText(getApplicationContext(),"Reset password link has been sent to your email",Toast.LENGTH_SHORT).show();
                            else
                                Toast.makeText(getApplicationContext(),"Error while sending reset password link",Toast.LENGTH_SHORT).show();
                        }
                    });
            }
        });
    }
}
```

الإنجليزي



```
if(TextUtils.isEmpty(useremail)){
    Toast.makeText(ReseatActivity.this,"Please enter the
email",Toast.LENGTH_LONG).show();
}else {

mAuth.sendPasswordResetEmail(useremail).addOnCompleteListener(new
OnCompleteListener<Void>() {
    @Override
    public void onComplete(@NonNull Task<Void> task) {
        if (task.isSuccessful()){
            Toast.makeText(ReseatActivity.this,"please check
your mail account\nand reset"+ "your
password",Toast.LENGTH_SHORT).show();
            startActivity(new Intent(getApplicationContext(),
MainActivity2.class));
        }else {
            String message=task.getException().getMessage();
            Toast.makeText(ReseatActivity.this,"Error
Occured.." + message,Toast.LENGTH_SHORT).show();
        }
    }
});
```



## Delete

```
package com.example.expensestracker;

import android.content.Intent;
import android.os.Bundle;
import android.util.Log;
import android.view.View;
import android.widget.Button;
import android.widget.EditText;
import android.widget.Toast;

import androidx.annotation.NonNull;
import androidx.appcompat.app.AppCompatActivity;

import com.example.expensestracker.R;
import com.google.android.gms.tasks.OnCompleteListener;
import com.google.android.gms.tasks.Task;
import com.google.firebase.auth.AuthCredential;
import com.google.firebase.auth.EmailAuthProvider;
import com.google.firebase.auth.FirebaseAuth;
import com.google.firebase.auth.FirebaseUser;

public class DeleteActivity extends AppCompatActivity {

    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_delete);
        final EditText email = findViewById(R.id.email);
        final EditText password = findViewById(R.id.logpass);
        Button submit = findViewById(R.id.submit);
        submit.setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick(View v) {
                deleteuser(email.getText().toString(), "150,000.00 $"
                        + password.getText().toString());
            }
        });
    }
}
```

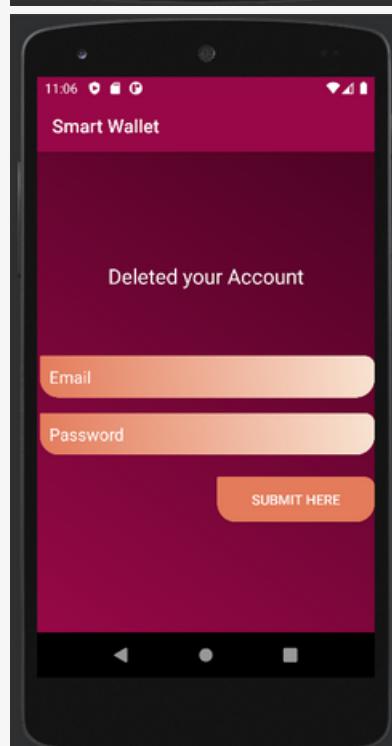
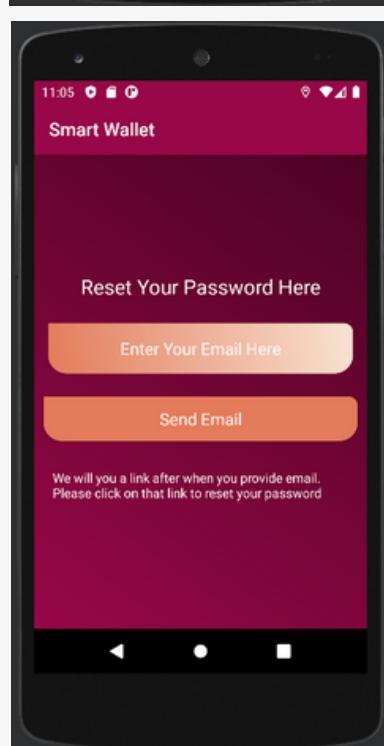
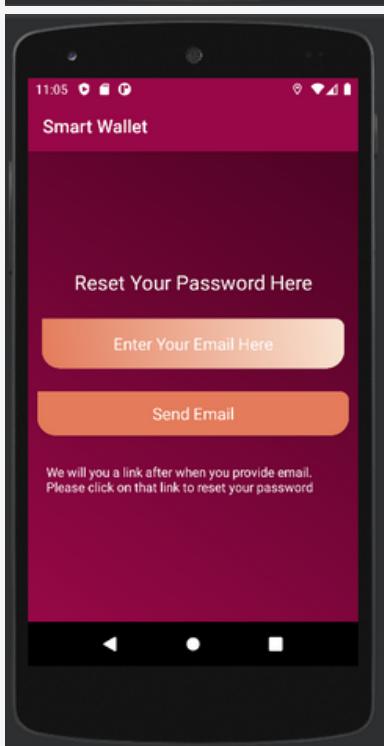
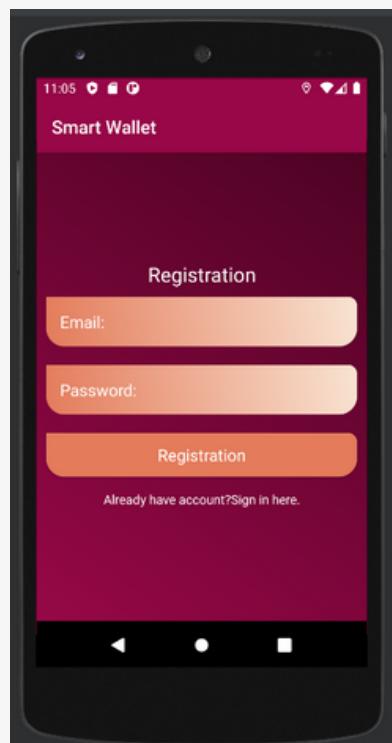
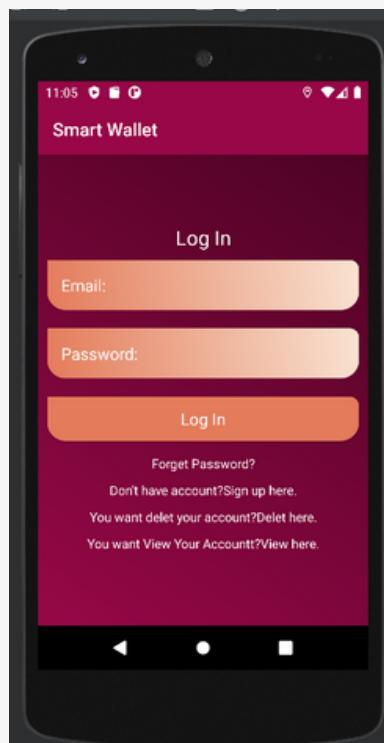
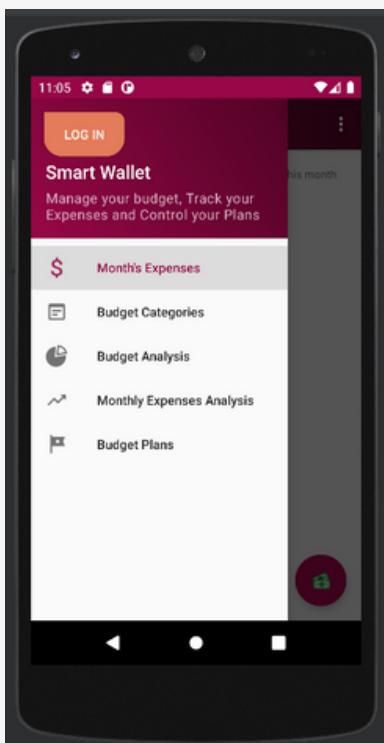


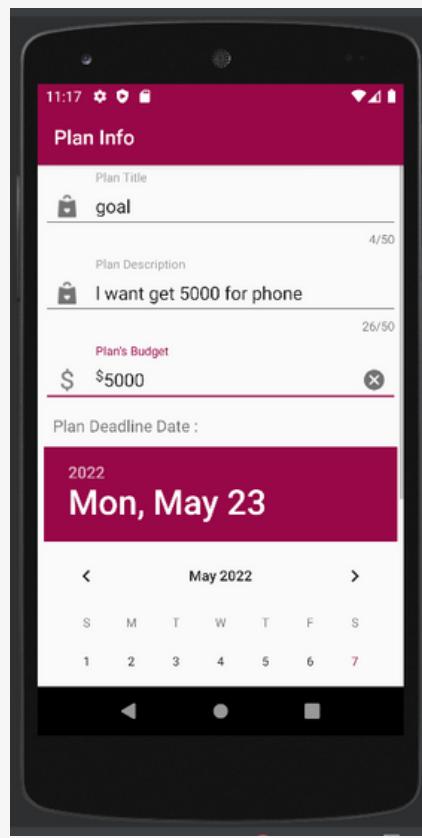
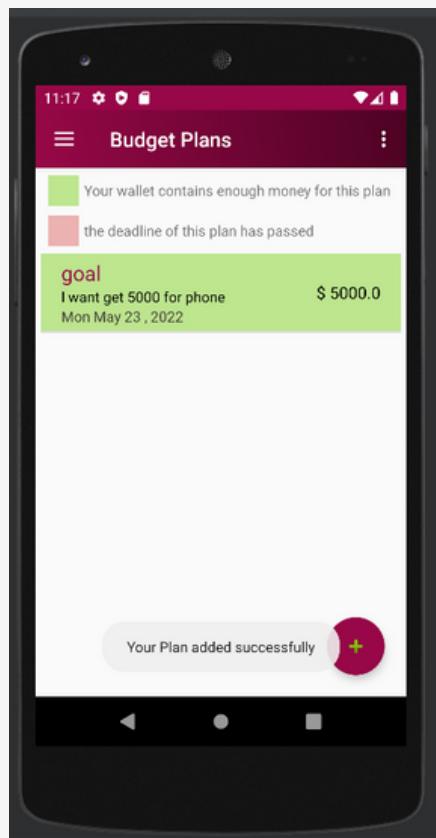
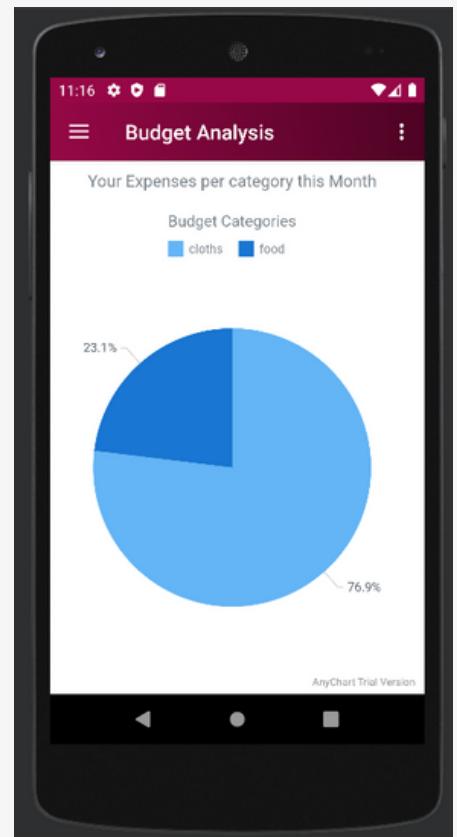
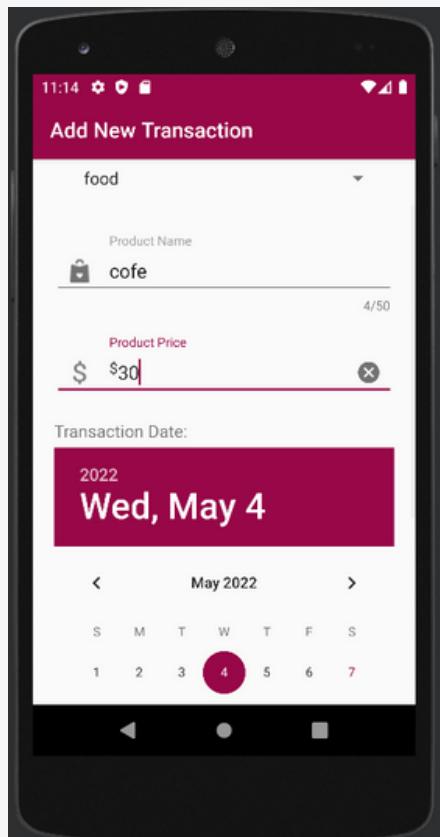
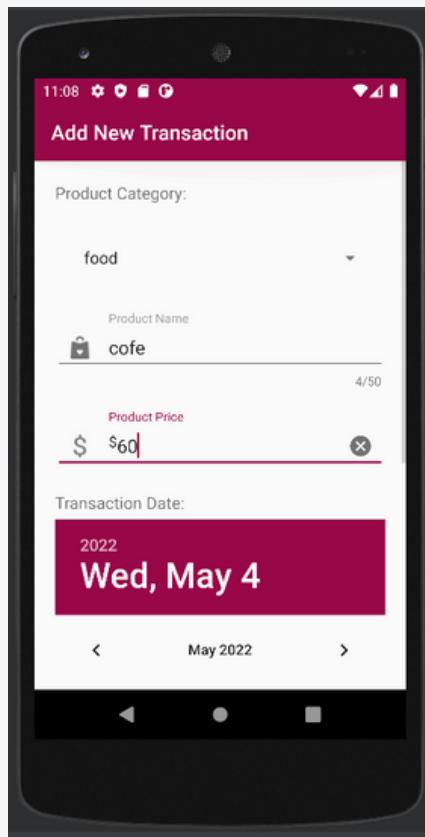
```
private void deleteuser(String email, String password) {  
  
    final FirebaseAuth user =  
FirebaseAuth.getInstance().getCurrentUser();  
  
    // Get auth credentials from the user for re-authentication. The  
example below shows  
    // email and password credentials but there are multiple possible  
providers,  
    // such as GoogleAuthProvider or FacebookAuthProvider.  
    AuthCredential credential =  
EmailAuthProvider.getCredential(email, password);  
  
    // Prompt the user to re-provide their sign-in credentials  
    if (user != null) {  
        user.reauthenticate(credential)  
            .addOnCompleteListener(new OnCompleteListener<Void>  
() {  
                @Override  
                public void onComplete(@NonNull Task<Void> task) {  
                    user.delete()  
                        .addOnCompleteListener(new  
OnCompleteListener<Void>() {  
                            @Override  
                            public void onComplete(@NonNull  
Task<Void> task) {  
                                if (task.isSuccessful()) {  
                                    Log.d("TAG", "User account deleted.");  
                                    startActivity(new  
Intent(DeleteActivity.this, MainActivity2.class));  
                                    Toast.makeText(DeleteActivity.this,  
"Deleted User Successfully.", Toast.LENGTH_LONG).show();  
                                }  
                            }  
                        });  
                }  
            });  
    }  
}
```



150,000.00 \$

# Implementation pictures





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# REFERENCES

- <https://www.youtube.com/watch?v=qo5vdTSxI6s>
- <https://www.youtube.com/watch?v=tbh9YaWPKKs>
- <https://youtu.be/S3zqxVoIUig>
- <https://youtu.be/x0stYND4UL0>

