

ACTIVITY_MAIN.XML

```
<?xml version="1.0" encoding="utf-8"?>
<LinearLayout xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:app="http://schemas.android.com/apk/res-auto"
    xmlns:tools="http://schemas.android.com/tools"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    android:orientation="vertical"
    tools:context=".MainActivity" >

    <TextView
        android:id="@+id/textView"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:layout_margin="50px"
        android:gravity="center"
        android:text="SD File Writer"
        android:textColor="@android:color/black"
        android:textSize="30sp" />

    <EditText
        android:id="@+id/writefile"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:layout_margin="50px"
        android:ems="10"
        android:gravity="center"
        android:hint="File name" />

    <TextView
        android:id="@+id/textView2"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:gravity="center"
        android:text="Content"
        android:textColor="@android:color/black"
        android:textSize="20sp" />

    <EditText
        android:id="@+id/editText2"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:layout_margin="50px"
        android:ems="10"
        android:gravity="start|top"
        android:inputType="textMultiLine" />

    <Button
        android:id="@+id/writeb"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:text="Write" />

    <Button
        android:id="@+id/readb"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:text="Read" />
</LinearLayout>
```

ACTIVITY_READ.XML

```
<?xml version="1.0" encoding="utf-8"?>
<LinearLayout xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:app="http://schemas.android.com/apk/res-auto"
    xmlns:tools="http://schemas.android.com/tools"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    android:orientation="vertical"
    tools:context=".ReadActivity" >

    <TextView
        android:id="@+id/textView"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:layout_margin="50px"
        android:gravity="center"
        android:text="SD File Reader"
        android:textColor="@android:color/black"
        android:textSize="30sp" />

    <EditText
        android:id="@+id/readfile"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:layout_margin="50px"
        android:ems="10"
        android:gravity="center"
        android:hint="File name" />

    <TextView
        android:id="@+id/textView2"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:gravity="center"
        android:text="Content"
        android:textColor="@android:color/black"
        android:textSize="20sp" />

    <TextView
        android:id="@+id/textView3"
        android:layout_width="match_parent"
        android:layout_height="240dp"
        android:layout_margin="50px"
        android:textColor="@android:color/black" />

    <Button
        android:id="@+id/rreadb"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:text="Read" />

    <Button
        android:id="@+id/rwriteb"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:text="Write" />
</LinearLayout>
```

MAINACTIVITY.JAVA

```
package com.example.sdfileapplication;

import androidx.appcompat.app.AppCompatActivity;
import androidx.core.app.ActivityCompat;

import android.Manifest;
import android.content.Intent;
import android.content.pm.PackageManager;
import android.os.Build;
import android.os.Bundle;
import android.os.Environment;
import android.view.View;
import android.widget.Button;
import android.widget.EditText;
import android.widget.Toast;

import java.io.File;
import java.io.FileWriter;
import java.io.IOException;

public class MainActivity extends AppCompatActivity {

    EditText writefile, content;
    Button readb, writeb;
    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main);
        writefile = findViewById(R.id.writefile);
        content = findViewById(R.id.editText2);
        writeb = findViewById(R.id.writeb);
        readb = findViewById(R.id.readb);
        final File sdcard = Environment.getExternalStorageDirectory();
        writeb.setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick(View v) {
                if (Build.VERSION.SDK_INT >= Build.VERSION_CODES.M) {
                    if
                    (checkSelfPermission(Manifest.permission.WRITE_EXTERNAL_STORAGE) !=
                    PackageManager.PERMISSION_GRANTED) {

                        ActivityCompat.requestPermissions(MainActivity.this, new
                        String[]{Manifest.permission.WRITE_EXTERNAL_STORAGE}, 0);
                    }
                    String c = content.getText().toString();
                    try {
                        FileWriter writer = new
                        FileWriter(sdcard.getAbsolutePath() + "/" + writefile.getText().toString(),
                        false);

                        writer.write(c);
                        writer.close();
                        Toast.makeText(getApplicationContext(), "Write
                        complete!", Toast.LENGTH_SHORT).show();
                    } catch (IOException e) {
                        e.printStackTrace();
                        Toast.makeText(getApplicationContext(), "Write error!",
                        Toast.LENGTH_SHORT).show();
                    }
                }
            }
        });
    }
}
```

```

        readb.setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick(View v) {
                Intent intent = new Intent(getApplicationContext(),
ReadActivity.class);
                startActivity(intent);
            }
        });
    }
}

```

READACTIVITY.JAVA

```

package com.example.sdfileapplication;

import androidx.annotation.RequiresPermission;
import androidx.appcompat.app.AppCompatActivity;
import androidx.core.app.ActivityCompat;

import android.Manifest;
import android.content.Intent;
import android.content.pm.PackageManager;
import android.os.Build;
import android.os.Bundle;
import android.os.Environment;
import android.view.View;
import android.widget.Button;
import android.widget.EditText;
import android.widget.TextView;
import android.widget.Toast;

import java.io.BufferedReader;
import java.io.File;
import java.io.FileNotFoundException;
import java.io.FileReader;
import java.util.Scanner;

public class ReadActivity extends AppCompatActivity {

    EditText f;
    TextView t;
    Button rreadb, rwriteb;
    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_read);
        f = findViewById(R.id.readfile);
        t = findViewById(R.id.textView3);
        rreadb = findViewById(R.id.rreadb);
        rwriteb = findViewById(R.id.rwriteb);
        final File sdcard = Environment.getExternalStorageDirectory();
        rreadb.setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick(View v) {
                if (Build.VERSION.SDK_INT >= Build.VERSION_CODES.M) {
                    if
(checkSelfPermission(Manifest.permission.READ_EXTERNAL_STORAGE) !=
PackageManager.PERMISSION_GRANTED) {

```

```
ActivityCompat.requestPermissions(ReadActivity.this, new
String[]{Manifest.permission.READ_EXTERNAL_STORAGE}, 0);
    }
    }
    File file = new File(sdcard, f.getText().toString());
    try {
        Scanner r = new Scanner(file);
        r.useDelimiter("\\Z");
        t.setText(r.next());
        Toast.makeText(getApplicationContext(), "Read
complete!", Toast.LENGTH_SHORT).show();
    } catch (FileNotFoundException e) {
        e.printStackTrace();
        t.setText("");
        Toast.makeText(getApplicationContext(), "File does not
exist!", Toast.LENGTH_SHORT).show();
    }
    }
});
rwriteb.setOnClickListener(new View.OnClickListener() {
    @Override
    public void onClick(View v) {
        Intent intent = new Intent(getApplicationContext(),
MainActivity.class);
        startActivity(intent);
    }
});
}
}
```