# Develop an application to Store the following details in the SD Card and retrieve the same.

<?xml version="1.0" encoding="utf-8"?>

<LinearLayout xmlns:android="<http://schemas.android.com/apk/res/android>" xmlns:tools="<http://schemas.android.com/tools>" android:layout\_width="match\_parent" android:layout\_height="match\_parent"

android:orientation="vertical" android:padding="16dp" tools:context=".MainActivity">

<EditText android:id="@+id/etFirstName" android:layout\_width="match\_parent" android:layout\_height="wrap\_content" android:hint="First Name"/>

<EditText android:id="@+id/etLastName" android:layout\_width="match\_parent" android:layout\_height="wrap\_content" android:hint="Last Name"/>

<EditText android:id="@+id/etDOB"

android:layout\_width="match\_parent" android:layout\_height="wrap\_content" android:hint="Date of Birth"/>

<EditText android:id="@+id/etPhoneNumber" android:layout\_width="match\_parent" android:layout\_height="wrap\_content" android:hint="Phone Number"/>

<Button android:id="@+id/btnSave"

android:layout\_width="wrap\_content" android:layout\_height="wrap\_content" android:text="Save Details"/>

<Button android:id="@+id/btnLoad"

android:layout\_width="wrap\_content" android:layout\_height="wrap\_content" android:text="Load Details"/>

</LinearLayout>

# Mainactivity

package com.example.myapplication;

import androidx.appcompat.app.AppCompatActivity;

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.BufferedReader; import java.io.File;

import java.io.FileInputStream; import java.io.FileOutputStream; import java.io.IOException;

import java.io.InputStreamReader;

public class MainActivity extends AppCompatActivity {

EditText etFirstName, etLastName, etDOB, etPhoneNumber; Button btnSave, btnLoad;

@Override

protected void onCreate(Bundle savedInstanceState) { super.onCreate(savedInstanceState); setContentView(R.layout.activity\_main);

etFirstName = findViewById(R.id.etFirstName); etLastName = findViewById(R.id.etLastName); etDOB = findViewById(R.id.etDOB);

etPhoneNumber = findViewById(R.id.etPhoneNumber); btnSave = findViewById(R.id.btnSave);

btnLoad = findViewById(R.id.btnLoad);

btnSave.setOnClickListener(new View.OnClickListener() { @Override

public void onClick(View v) { saveDetails();

}

});

btnLoad.setOnClickListener(new View.OnClickListener() { @Override

public void onClick(View v) { loadDetails();

}

});

}

private void saveDetails() {

String firstName = etFirstName.getText().toString().trim(); String lastName = etLastName.getText().toString().trim(); String dob = etDOB.getText().toString().trim();

String phoneNumber = etPhoneNumber.getText().toString().trim();

if (firstName.isEmpty() || lastName.isEmpty() || dob.isEmpty() || phoneNumber.isEmpty()) { Toast.makeText(MainActivity.this, "Please fill in all fields", Toast.LENGTH\_SHORT).show(); return;

}

if (!isExternalStorageWritable()) {

Toast.makeText(MainActivity.this, "External storage not available", Toast.LENGTH\_SHORT).show(); return;

}

// Prepare the data to be saved

String data = "First Name: " + firstName + "\n" + "Last Name: " + lastName + "\n" +

"Date of Birth: " + dob + "\n" + "Phone Number: " + phoneNumber;

// Get the directory for the user's public directory (e.g., SD card) File directory =

Environment.getExternalStoragePublicDirectory(Environment.DIRECTORY\_DOCUMENTS); File file = new File(directory, "user\_details.txt");

try {

// Write the data to the file

FileOutputStream fos = new FileOutputStream(file); fos.write(data.getBytes());

fos.close();

Toast.makeText(MainActivity.this, "Details saved successfully", Toast.LENGTH\_SHORT).show();

} catch (IOException e) { e.printStackTrace();

Toast.makeText(MainActivity.this, "Failed to save details", Toast.LENGTH\_SHORT).show();

}

}

private void loadDetails() {

// Get the directory for the user's public directory (e.g., SD card) File directory =

Environment.getExternalStoragePublicDirectory(Environment.DIRECTORY\_DOCUMENTS); File file = new File(directory, "user\_details.txt");

if (!file.exists()) {

Toast.makeText(MainActivity.this, "No saved details found", Toast.LENGTH\_SHORT).show(); return;

}

try {

// Read the data from the file

FileInputStream fis = new FileInputStream(file); InputStreamReader isr = new InputStreamReader(fis); BufferedReader br = new BufferedReader(isr); StringBuilder stringBuilder = new StringBuilder(); String line;

while ((line = br.readLine()) != null) { stringBuilder.append(line).append("\n");

}

br.close();

// Display the loaded data

String loadedData = stringBuilder.toString();

Toast.makeText(MainActivity.this, loadedData, Toast.LENGTH\_SHORT).show();

} catch (IOException e) { e.printStackTrace();

Toast.makeText(MainActivity.this, "Failed to load details", Toast.LENGTH\_SHORT).show();

}

}

public boolean isExternalStorageWritable() {

String state = Environment.getExternalStorageState(); return Environment.MEDIA\_MOUNTED.equals(state);

}

}