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CLASS:- B.E – 4

ROLL NO:- 04

BATCH:- A

Experiment 3

Develop an application that writes data to SD card

Code:

Main Activity: package com.example.externalstorage; import java.io.BufferedReader; import

|  |  |
| --- | --- |
| java.io.DataInputStream; | import |
| java.io.File; | import |
| java.io.FileInputStream; | import |
| java.io.FileOutputStream; | import |
| java.io.IOException; | import |
| java.io.InputStreamReader; | import |
| android.os.Bundle; | import |
| android.app.Activity; | import |
| android.os.Environment; | import |

android.view.View;

import android.view.View.OnClickListener; import android.widget.Button; import

android.widget.EditText; import android.widget.TextView;

public class MainActivity extends Activity { EditText inputText;

TextView response;

Button saveButton,readButton;

private String filename = "SampleFile.txt"; private String filepath = "MyFileStorage";

File myExternalFile; String myData = "";

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

inputText = (EditText) findViewById(R.id.myInputText); response = (TextView) findViewById(R.id.response);

saveButton =

(Button) findViewById(R.id.saveExternalStorage); saveButton.setOnClickListener(new OnClickListener() { @Override public void onClick(View v) { try {

FileOutputStream fos = new FileOutputStream(myExternalFile); fos.write(inputText.getText().toString().getBytes()); fos.close(); } catch (IOException e)

{

e.printStackTrace();

}

}

});

inputText.setText(""); response.setText("SampleFile.txt saved to External Storage...");

readButton = (Button) findViewById(R.id.getExternalStorage); readButton.setOnClickListener(new OnClickListener() { @Override public void

onClick(View v) { try {

FileInputStream fis = new FileInputStream(myExternalFile); DataInputStream in = new DataInputStream(fis);

BufferedReader br = new BufferedReader(new InputStreamReader(in));

String strLine; while ((strLine = br.readLine()) != null) { myData = myData + strLine; } in.close();

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

}

inputText.setText(myData);

response.setText("SampleFile.txt data retrieved from Internal Storage...");

}

});

if (!isExternalStorageAvailable() || isExternalStorageReadOnly()) { saveButton.setEnabled(false);

} else { myExternalFile = new File(getExternalFilesDir(filepath), filename); }

}

private static boolean isExternalStorageReadOnly() {

String extStorageState = Environment.getExternalStorageState(); if (Environment.MEDIA\_MOUNTED\_READ\_ONLY.equals(extStorageState))

{ return true;

} return false;

}

private static boolean isExternalStorageAvailable() {

String extStorageState = Environment.getExternalStorageState(); if (Environment.MEDIA\_MOUNTED.equals(extStorageState)) { return true;

} return false;

} }

Activity\_main.xml:

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

<LinearLayout xmlns:android="[http://schemas.android.com/apk/res/android"](http://schemas.android.com/apk/res/android) xmlns:tools="<http://schemas.android.com/tools>" android:layout\_width="fill\_parent" android:layout\_height="fill\_parent" android:orientation="vertical" tools:ignore="NamespaceTypo">

<TextView android:layout\_width="fill\_parent" android:layout\_height="wrap\_content" android:background="#FFFFFF" android:text="Reading and Writing to External Storage" android:textSize="24sp" />

<EditText android:id="@+id/myInputText" android:layout\_width="match\_parent" android:layout\_height="wrap\_content" android:ems="10" android:gravity="top|left" android:inputType="textMultiLine"

android:lines="5" android:minLines="3" android:textAppearance="@style/TextAppearance.AppCompat.Display1">

<requestFocus />

</EditText>

<LinearLayout android:layout\_width="match\_parent" android:layout\_height="wrap\_content" android:orientation="horizontal" android:weightSum="1.0" android:layout\_marginTop="20dp">

<Button android:id="@+id/saveExternalStorage" android:layout\_width="match\_parent" android:layout\_height="wrap\_content" android:layout\_weight="0.5" android:background="#ED7B7B"

android:text="SAVE" />

<Button android:id="@+id/getExternalStorage" android:layout\_width="match\_parent" android:layout\_height="wrap\_content" android:layout\_weight="0.5" android:background="#ED7B7B"

android:text="READ" />

</LinearLayout>

<TextView android:id="@+id/response" android:layout\_width="wrap\_content" android:layout\_height="wrap\_content" android:padding="5dp" android:text="" android:textAppearance="?android:attr/textAppearanceMedium" />

</LinearLayout> Output:

