**Assignment2**

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

<LinearLayout xmlns:android="http://schemas.android.com/apk/res/android"

android:layout\_width="fill\_parent" android:layout\_height="fill\_parent"

android:orientation="vertical">

<TextView android:layout\_width="fill\_parent"

android:layout\_height="wrap\_content"

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:lines="5"

android:minLines="3" android:gravity="top|left"

android:inputType="textMultiLine">

<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:text="SAVE"

android:layout\_weight="0.5"/>

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

android:layout\_width="match\_parent"

android:layout\_height="wrap\_content"

android:layout\_weight="0.5"

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>

The MainActivity.java class is given below:

package com.journaldev.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;

}

}