**Week – 10**

**Q. Develop an applicaƟon that writes data to a ﬁle**

# acƟvity\_main.xml

<?xml version="1.0" encoding="uƞ-8"?>

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

android:layout\_margin="20dp" android:orientaƟon="verƟcal">

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

android:layout\_width="match\_parent" android:layout\_height="wrap\_content" android:ems="10" android:inputType="text"/>

<BuƩon android:id="@+id/read"

android:layout\_width="match\_parent" android:layout\_height="wrap\_content" android:text="READ DATA" />

<BuƩon android:id="@+id/write"

android:layout\_width="match\_parent" android:layout\_height="wrap\_content" android:text="WRITE DATA" />

<BuƩon android:id="@+id/clear"

android:layout\_width="match\_parent" android:layout\_height="wrap\_content" android:text="CLEAR" />

</LinearLayout>

# MainAcƟvity.java

package com.example.week10;

import android.os.Bundle; import android.widget.BuƩon; import android.widget.EditText; import android.widget.Toast;

import androidx.appcompat.app.AppCompatAcƟvity;

import java.io.BuﬀeredReader; import java.io.FileInputStream; import java.io.FileOutputStream; import java.io.InputStreamReader;

public class MainAcƟvity extends AppCompatAcƟvity { EditText e1;

BuƩon write, read, clear;

@Override

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

e1 = ﬁndViewById(R.id.*editTextText*); write = ﬁndViewById(R.id.*write*); read = ﬁndViewById(R.id.*read*);

clear = ﬁndViewById(R.id.*clear*);

// File name for internal storage String ﬁleName = "myﬁle.txt";

write.setOnClickListener(v -> {

String message = e1.getText().toString(); try {

// Write to internal storage

FileOutputStream fout = openFileOutput(ﬁleName, *MODE\_PRIVATE*); fout.write(message.getBytes());

fout.close();

Toast.*makeText*(getBaseContext(), "Data WriƩen to Internal Storage", Toast.*LENGTH\_LONG*).show();

} catch (ExcepƟon e) {

Toast.*makeText*(getBaseContext(), e.getMessage(), Toast.*LENGTH\_LONG*).show();

}

});

read.setOnClickListener(v -> { String message;

StringBuilder buf = new StringBuilder(); try {

// Read from internal storage

FileInputStream ﬁn = openFileInput(ﬁleName);

BuﬀeredReader br = new BuﬀeredReader(new InputStreamReader(ﬁn)); while ((message = br.readLine()) != null) {

buf.append(message);

}

e1.setText(buf.toString()); br.close();

ﬁn.close();

Toast.*makeText*(getBaseContext(), "Data Retrieved from Internal Storage", Toast.*LENGTH\_LONG*).show();

} catch (ExcepƟon e) {

Toast.*makeText*(getBaseContext(), e.getMessage(), Toast.*LENGTH\_LONG*).show();

}

});

clear.setOnClickListener(v -> e1.setText(""));

}

}