*MAIN ACTIVITY.XML*

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

<androidx.constraintlayout.widget.ConstraintLayout xmlns:android="[http://schemas.android.com/apk/res/android"](http://schemas.android.com/apk/res/android)

xmlns:app="[http://schemas.android.com/apk/res-auto"](http://schemas.android.com/apk/res-auto) xmlns:tools[="http://schemas.android.com/tools"](http://schemas.android.com/tools) android:layout\_width="match\_parent" android:layout\_height="match\_parent" tools:context=".MainActivity">

<Button

android:id="@+id/button" android:layout\_width="208dp" android:layout\_height="59dp" android:text="Download File" tools:layout\_editor\_absoluteX="92dp" tools:layout\_editor\_absoluteY="292dp" />

</androidx.constraintlayout.widget.ConstraintLayout>

MAIN ACTIVITY.JAVA

package com.example.progressbar;

import androidx.appcompat.app.AppCompatActivity; import android.app.ProgressDialog;

import android.os.Handler; import android.os.Bundle; import android.view.View; import android.widget.Button;

import android.os.Bundle;

public class MainActivity extends AppCompatActivity { Button btnStartProgress;

ProgressDialog progressBar; private int progressBarStatus = 0;

private Handler progressBarHandler = new Handler(); private long fileSize = 0;

@Override

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

}

public void addListenerOnButtonClick() { btnStartProgress = findViewById(R.id.*button*);

btnStartProgress.setOnClickListener(new View.OnClickListener(){

@Override

public void onClick(View v) {

*// creating progress bar dialog*

progressBar = new ProgressDialog(v.getContext()); progressBar.setCancelable(true);

progressBar.setMessage("File downloading ...");

progressBar.setProgressStyle(ProgressDialog.*STYLE\_HORIZONTAL*); progressBar.setProgress(0); progressBar.setMax(100);

progressBar.show();

*//reset progress bar and filesize status*

progressBarStatus = 0;

fileSize = 0;

new Thread(new Runnable() { public void run() {

while (progressBarStatus < 100) {

*// performing operation* progressBarStatus = doOperation(); try {

Thread.*sleep*(1000);

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

}

*// Updating the progress bar*

progressBarHandler.post(new Runnable() { public void run() {

progressBar.setProgress(progressBarStatus);

}

});

}

*completed*

*// performing operation if file is downloaded,*

if (progressBarStatus >= 100) {

*// sleeping for 1 second after operation*

try { Thread.*sleep*(1000);

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

}

*// close the progress bar dialog*

progressBar.dismiss();

}

}

});

}

}).start();

}*//end of onClick method*

*// checking how much file is downloaded and updating the filesize*

public int doOperation() {

*//The range of ProgressDialog starts from 0 to 10000*

while (fileSize <= 10000) { fileSize++;

if (fileSize == 1000) { return 10;

} else if (fileSize == 2000) { return 20;

} else if (fileSize == 3000) { return 30; */\* else {*

*return 100;*

*}\*/*

}*//end of while*

return 100;

}*//end of doOperation*

}