Name: Michael Osei

Lab 7 – COSC 3380

package com.example.mike168m.lab7;

import android.support.v7.app.AppCompatActivity;

import android.os.Bundle;

import android.util.Log;

import android.view.View;

import android.widget.Button;

import android.widget.EditText;

import java.security.InvalidParameterException;

import java.util.ArrayList;

public class MainActivity extends AppCompatActivity {

private Button addBtn;

private Button subBtn;

private Button mulBtn;

private EditText firstNumberText;

private EditText secondNumberText;

private EditText resultsText;

@Override

protected void onCreate(Bundle savedInstanceState) {

super.onCreate(savedInstanceState);

setContentView(R.layout.activity\_main);

addBtn = findViewById(R.id.addBtn);

subBtn = findViewById(R.id.subBtn);

mulBtn = findViewById(R.id.mulBtn);

resultsText = findViewById(R.id.resultText);

firstNumberText = findViewById(R.id.firstNumberText);

secondNumberText = findViewById(R.id.secondNumberText);

addBtn.setOnClickListener(new View.OnClickListener() {

@Override

public void onClick(View view) {

Float a = textToNumber(firstNumberText);

Float b = textToNumber(secondNumberText);

resultsText.setText(calculate(a, b, "+").toString());

}

});

subBtn.setOnClickListener(new View.OnClickListener() {

@Override

public void onClick(View view) {

Float a = textToNumber(firstNumberText);

Float b = textToNumber(secondNumberText);

resultsText.setText(calculate(a, b, "-").toString());

}

});

mulBtn.setOnClickListener(new View.OnClickListener() {

@Override

public void onClick(View view) {

Float a = textToNumber(firstNumberText);

Float b = textToNumber(secondNumberText);

resultsText.setText(calculate(a, b, "\*").toString());

}

});

Log.d("OnCreate", "On create called");

}

public Float textToNumber(EditText eds) {

return Float.parseFloat(eds.getText().toString());

}

public Float calculate(Float a , Float b, String op) throws NullPointerException {

if (a == null || b == null ) {

throw new NullPointerException();

}

switch (op) {

case "+": return a + b;

case "-": return a - b;

case "\*": return a \* b;

default: throw new InvalidParameterException();

}

}

@Override

protected void onStart() {

super.onStart();

Log.d("OnStart", "App is starting.");

}

@Override

protected void onStop() {

super.onStop();

Log.d("OnStart", "App has been stoppped");

}

@Override

protected void onResume() {

super.onResume();

Log.d("OnResume", "On resume called");

}

@Override

protected void onPause() {

super.onPause();

Log.d("OnPause", "App was paused.");

}

@Override

protected void onDestroy() {

super.onDestroy();

Log.d("OnDestroy", "App was destroyed.");

}

@Override

protected void onRestart() {

super.onRestart();

Log.d("OnRestart", "App was restarted.");

}

}