package com.example.myapplication;

import java.text.DecimalFormat;

import android.app.Activity;

import android.os.Bundle;

import android.view.View;

import android.widget.Button;

import android.widget.TextView;

public class Calc extends Activity {

private static String deleteChar(String str) {

if (str.length() != 0) {

if ((str.getBytes()[str.length() - 1] == '.')) {

flag\_dot = 0;

}

if ((str.getBytes()[str.length() - 1] == '+')) {

flag\_plus = 0;

}

if ((str.getBytes()[str.length() - 1] == '-')) {

flag\_minus = 0;

}

if ((str.getBytes()[str.length() - 1] == 'X')) {

flag\_into = 0;

}

if ((str.getBytes()[str.length() - 1] == '/')) {

flag\_divide = 0;

}

if ((str.getBytes()[str.length() - 1] == '=')) {

flag\_equals = 0;

}

return str.substring(0, str.length() - 1);

} else

return "";

}

private static String getFirstString(String str) {

if (str.length() != 0) {

return str.substring(0, temp\_len); // temp\_len points to last digit

// just b4 '+'

} else

return "";

}

private static String getSecondString(String str) {

if (str.length() != 0) {

return str.substring(temp\_len + 1, str.length());

} else

return "";

}

private static void calculateAns(/\* String str, String str1, String str2 \*/) {

if (flag\_plus == 2) {

finalAns = x + y;

} else if (flag\_minus == 2) {

finalAns = x - y;

} else if (flag\_into == 2) {

finalAns = x \* y;

} else if (flag\_divide == 2) {

finalAns = x / y;

}

}

private String roundDouble(double value) {

return df.format(value);

}

private void setOperators() {

flag\_plus = 1;

// flag\_minus = 1;

flag\_divide = 1;

flag\_into = 1;

}

private void clearOperators() {

flag\_plus = 0;

flag\_minus = 0;

flag\_divide = 0;

flag\_into = 0;

}

Button zero, one, two, three, four, five, six, seven, eight, nine;

Button plus, minus, divide, into, equals, dot, delete;

int disp;

static int temp\_len, temp\_len\_equals;

static int flag\_dot = 0, flag\_plus = 0, flag\_minus = 0, flag\_divide = 0,

flag\_into = 0, flag\_equals = 1;

TextView display;

// static float x, y;

static double x, y, finalAns;

String entry = "", entry1 = "", entry2 = "", ans = "";

DecimalFormat df = new DecimalFormat("#.###");

@Override

protected void onCreate(Bundle savedInstanceState) {

// TODO Auto-generated method stub

super.onCreate(savedInstanceState);

setContentView(R.layout.calc);

zero = (Button) findViewById(R.id.zero);

one = (Button) findViewById(R.id.one);

two = (Button) findViewById(R.id.two);

three = (Button) findViewById(R.id.three);

four = (Button) findViewById(R.id.four);

five = (Button) findViewById(R.id.five);

six = (Button) findViewById(R.id.six);

seven = (Button) findViewById(R.id.seven);

eight = (Button) findViewById(R.id.eight);

nine = (Button) findViewById(R.id.nine);

dot = (Button) findViewById(R.id.dot);

delete = (Button) findViewById(R.id.delete);

plus = (Button) findViewById(R.id.plus);

minus = (Button) findViewById(R.id.minus);

into = (Button) findViewById(R.id.into);

divide = (Button) findViewById(R.id.divide);

equals = (Button) findViewById(R.id.equals);

display = (TextView) findViewById(R.id.textview);

plus.setOnClickListener(new View.OnClickListener() {

@Override

public void onClick(View v) {

if (flag\_plus == 0) {

if (entry != "") {

entry = entry + '+';

display.setText(entry);

// flag\_plus = 1;

flag\_dot = 0;

temp\_len = entry.length() - 1;

entry1 = getFirstString(entry);

x = Double.parseDouble(entry1);

flag\_equals = 1;

setOperators();

flag\_plus++;

}

}

}

});

minus.setOnClickListener(new View.OnClickListener() {

@Override

public void onClick(View v) {

if (flag\_minus == 0) {

entry = entry + '-';

display.setText(entry);

flag\_minus = 1;

flag\_dot = 0;

temp\_len = entry.length() - 1;

entry1 = getFirstString(entry);

x = Double.parseDouble(entry1);

flag\_equals = 1;

setOperators();

flag\_minus++;

}

}

});

into.setOnClickListener(new View.OnClickListener() {

@Override

public void onClick(View v) {

if (flag\_into == 0) {

if (entry != "") {

entry = entry + 'x';

display.setText(entry);

// flag\_into = 1;

flag\_dot = 0;

temp\_len = entry.length() - 1;

entry1 = getFirstString(entry);

x = Double.parseDouble(entry1);

flag\_equals = 1;

setOperators();

flag\_into++;

}

}

}

});

divide.setOnClickListener(new View.OnClickListener() {

@Override

public void onClick(View v) {

if (flag\_divide == 0) {

if (entry != "") {

entry = entry + '/';

display.setText(entry);

// flag\_divide = 1;

flag\_dot = 0;

temp\_len = entry.length() - 1;

entry1 = getFirstString(entry);

x = Double.parseDouble(entry1);

flag\_equals = 1;

setOperators();

flag\_divide++;

}

}

}

});

equals.setOnClickListener(new View.OnClickListener() {

@Override

public void onClick(View v) {

if (flag\_equals == 0) {

temp\_len\_equals = entry.length() - 1;

entry2 = getSecondString(entry);

if (entry1 != "") {

y = Double.parseDouble(entry2);

calculateAns();

ans = roundDouble(finalAns);

display.setText(ans);

entry = ans;

flag\_equals = 1;

flag\_dot = 0;

clearOperators();

} else {

display.setText(entry);

}

} else

;

}

});

delete.setOnClickListener(new View.OnClickListener() {

@Override

public void onClick(View v) {

if (flag\_equals == 1) {

flag\_equals = 0;

entry = "";

}

entry = deleteChar(entry);

display.setText(entry);

}

});

dot.setOnClickListener(new View.OnClickListener() {

@Override

public void onClick(View v) {

if (flag\_dot == 0) {

if (entry == "") {

entry = entry + "0.";

} else {

entry = entry + '.';

display.setText(entry);

flag\_dot = 1;

}

}

flag\_equals = 0;

}

});

zero.setOnClickListener(new View.OnClickListener() {

@Override

public void onClick(View v) {

entry = entry + '0';

display.setText(entry);

flag\_equals = 0;

}

});

one.setOnClickListener(new View.OnClickListener() {

@Override

public void onClick(View v) {

entry = entry + '1';

display.setText(entry);

flag\_equals = 0;

}

});

two.setOnClickListener(new View.OnClickListener() {

@Override

public void onClick(View v) {

entry = entry + '2';

display.setText(entry);

flag\_equals = 0;

}

});

three.setOnClickListener(new View.OnClickListener() {

@Override

public void onClick(View v) {

entry = entry + '3';

display.setText(entry);

flag\_equals = 0;

}

});

four.setOnClickListener(new View.OnClickListener() {

@Override

public void onClick(View v) {

entry = entry + '4';

display.setText(entry);

flag\_equals = 0;

}

});

five.setOnClickListener(new View.OnClickListener() {

@Override

public void onClick(View v) {

entry = entry + '5';

display.setText(entry);

flag\_equals = 0;

}

});

six.setOnClickListener(new View.OnClickListener() {

@Override

public void onClick(View v) {

entry = entry + '6';

display.setText(entry);

flag\_equals = 0;

}

});

seven.setOnClickListener(new View.OnClickListener() {

@Override

public void onClick(View v) {

entry = entry + '7';

display.setText(entry);

flag\_equals = 0;

}

});

eight.setOnClickListener(new View.OnClickListener() {

@Override

public void onClick(View v) {

entry = entry + '8';

display.setText(entry);

flag\_equals = 0;

}

});

nine.setOnClickListener(new View.OnClickListener() {

@Override

public void onClick(View v) {

entry = entry + '9';

display.setText(entry);

flag\_equals = 0;

}

});

}

@Override

public void onBackPressed() {

// TODO Auto-generated method stub

super.onBackPressed();

}

}