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package com.simon.mathstraining

import androidx.appcompat.app.AppCompatActivity
import android.os.Bundle
import android.widget.TextView
import android.widget.Toast
import kotlinx.android.synthetic.main.activity_calculation.*
import java.util.logging.Logger.global
import kotlin.concurrent.thread

class CalculationActivity : AppCompatActivity() {

    override fun onCreate(savedInstanceState: Bundle?) {
        super.onCreate(savedInstanceState)
        setContentView(R.layout.activity_calculation)
        val answer : IntArray = intArrayOf(0, 0)
        var count = 0
        var answersum = 0
        var answerinput = 50
        var x = 1
        var attempts = 0

        // Choose random numbers and apply to buttons
        fun chooseRand(string: String) {
            x=1
            while (x>0) {
                val randomChoice = (1..10).random()
                val randomChoice2 = (1..10).random()
                if (randomChoice <= randomChoice2){
                    x=1
                } else x=0
                if (string == "X"){
                    answersum = (randomChoice * randomChoice2)
                }else if (string == "-"){
                    answersum = (randomChoice - randomChoice2)
                }else if (string == "+"){
                    answersum = (randomChoice + randomChoice2)
                }else if (string == "/"){
                    answersum = (randomChoice / randomChoice2)
                }
                button_first.text = randomChoice.toString()
                button_second.text = randomChoice2.toString()

            }
            x=1
       }
        // Output from numberpad
        fun outputAnswer(){
            if ((answer[1] >= 0) and (answer[0] > 0)) {
                button_answer.text = ( answer[0].toString()  + answer[1].toString())
            } else if ((answer[0] < 1) and (answer[1] >= 0)) {
                button_answer.text = answer[1].toString()
            } else if (answer[1] < 0){
                button_answer.text = null
            }
            answerinput = ((answer[0] * 10) + answer[1])
            println(answerinput)
        }
        // Input from numberpad
        fun inputAnswer(int: Int) {
            if (count > 1) {
                return
            }
            // Input number
            if (count == 0) {
                answer[1] = int
            }
            if (count == 1) {
                answer[0] = answer[1]
                answer[1] = int
            }

            outputAnswer()
            count += 1
        }
        // Delete button action
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        fun deleteInput(){
            button_answer.text = null
            count = 0
            answer[0] = 0
            answer[1] = 0
            outputAnswer()
            if (count > 0 ){count -= 1}
        }
        // Check answer and toast
        fun checkAnswer(message: String) {

                if (answersum == answerinput) {
                    Toast.makeText(this, "Well Done You Are Correct", Toast.LENGTH_LONG).show()

                } else {
                    Toast.makeText(this, "Incorrect Please Try Again", Toast.LENGTH_LONG).show()
                }
                attempts ++
                if (attempts > 5){
                    this.finish()
                }
            deleteInput()
            chooseRand(message)
        }

        // Set up screen
        fun multiply(string: String) {
            val textView = findViewById<TextView>(R.id.textView).apply {
                text = "Multiplication"
            }
            button_function.text = string
            outputAnswer()
            button_answer.text = null
            chooseRand(string)
        }

        fun subtract(string: String) {
            findViewById<TextView>(R.id.textView).apply {
              text = "Subtraction"
            }
            button_function.text = string
            outputAnswer()
            button_answer.text = null
            chooseRand(string)
            println("this many$attempts")
        }
        fun addition(string: String) {
            val textView = findViewById<TextView>(R.id.textView).apply {
                text = "Addition"
            }
            button_function.text = string
            outputAnswer()
            button_answer.text = null
            chooseRand(string)
        }
        fun division(string: String) {
            val textView = findViewById<TextView>(R.id.textView).apply {
                text = "Division"
            }
            button_function.text = string
            outputAnswer()
            button_answer.text = null
            chooseRand(string)
        }

        val message = intent.getStringExtra(EXTRA_MESSAGE)
        when (message) {

            "X" -> multiply(message)

            "-" -> subtract(message)

            "+" -> addition(message)

            "/" -> division(message)
        }
```

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154
155         // Listeners for numberpad, next and enter keys
156         button_num0.setOnClickListener {
157             inputAnswer(0)
158         }
159         button_num1.setOnClickListener {
160             inputAnswer(1)
161         }
162         button_num2.setOnClickListener {
163             inputAnswer(2)
164         }
165         button_num3.setOnClickListener {
166             inputAnswer(3)
167         }
168         button_num4.setOnClickListener {
169             inputAnswer(4)
170         }
171         button_num5.setOnClickListener {
172             inputAnswer(5)
173         }
174         button_num6.setOnClickListener {
175             inputAnswer(6)
176         }
177         button_num7.setOnClickListener {
178             inputAnswer(7)
179         }
180         button_num8.setOnClickListener {
181             inputAnswer(8)
182         }
183         button_num9.setOnClickListener {
184             inputAnswer(9)
185         }
186         button_del.setOnClickListener {
187             deleteInput()
188         }
189         button_enter.setOnClickListener {
190             checkAnswer(message)
191         }
192     }
193 }
194
```