package com.example.myapplication

import android.os.Bundle

import androidx.activity.ComponentActivity

import androidx.activity.compose.setContent

import androidx.compose.foundation.layout.\*

import androidx.compose.foundation.text.KeyboardOptions

import androidx.compose.material3.\*

import androidx.compose.runtime.\*

import androidx.compose.ui.Modifier

import androidx.compose.ui.text.input.KeyboardType

import androidx.compose.ui.unit.dp

import com.example.myapplication.ui.theme.MyApplicationTheme

class MainActivity : ComponentActivity() {

override fun onCreate(savedInstanceState: Bundle?) {

super.onCreate(savedInstanceState)

setContent {

MyApplicationTheme {

Surface(

modifier = Modifier.fillMaxSize(),

color = MaterialTheme.colorScheme.background

) {

CalculatorApp()

}

}

}

}

}

@Composable

fun CalculatorApp() {

var number1 by remember { mutableStateOf("") }

var number2 by remember { mutableStateOf("") }

var result by remember { mutableStateOf("") }

Column(

modifier = Modifier

.fillMaxSize()

.padding(16.dp),

verticalArrangement = Arrangement.Top

) {

TextField(

value = number1,

onValueChange = { number1 = it },

label = { Text("Enter first number") },

modifier = Modifier.fillMaxWidth(),

keyboardOptions = KeyboardOptions(keyboardType = KeyboardType.Number)

)

Spacer(modifier = Modifier.height(8.dp))

TextField(

value = number2,

onValueChange = { number2 = it },

label = { Text("Enter second number") },

modifier = Modifier.fillMaxWidth(),

keyboardOptions = KeyboardOptions(keyboardType = KeyboardType.Number)

)

Spacer(modifier = Modifier.height(16.dp))

Row(

horizontalArrangement = Arrangement.SpaceEvenly,

modifier = Modifier.fillMaxWidth()

) {

Button(onClick = {

result = calculate(number1, number2, "add")

}) {

Text("Add")

}

Button(onClick = {

result = calculate(number1, number2, "subtract")

}) {

Text("Subtract")

}

Button(onClick = {

result = calculate(number1, number2, "multiply")

}) {

Text("Multiply")

}

Button(onClick = {

result = calculate(number1, number2, "divide")

}) {

Text("Divide")

}

}

Spacer(modifier = Modifier.height(16.dp))

Text(

text = "Result: $result",

style = MaterialTheme.typography.bodyLarge,

modifier = Modifier.padding(top = 16.dp)

)

}

}

fun calculate(num1: String, num2: String, operation: String): String {

if (num1.isEmpty() || num2.isEmpty()) return "Enter valid numbers"

val n1 = num1.toDoubleOrNull() ?: return "Invalid input"

val n2 = num2.toDoubleOrNull() ?: return "Invalid input"

return when (operation) {

"add" -> (n1 + n2).toString()

"subtract" -> (n1 - n2).toString()

"multiply" -> (n1 \* n2).toString()

"divide" -> {

if (n2 == 0.0) "Cannot divide by zero" else (n1 / n2).toString()

}

else -> "Invalid operation"

}

}