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| **학번 : 202114226, 이름 : 송재현** |
| **2024년 04주차 과제 체크 리스트** |
| |  |  | | --- | --- | | **과제 2** | **완성** | |
| **과제 2 : BMI 계산하기** |
| **소스코드1(MainActivity.kt)** |
| package com.example.homework02  import android.os.Bundle import androidx.activity.ComponentActivity import androidx.activity.compose.setContent import androidx.compose.foundation.layout.Arrangement import androidx.compose.foundation.layout.Column import androidx.compose.foundation.layout.Row import androidx.compose.foundation.layout.Spacer import androidx.compose.foundation.layout.fillMaxSize import androidx.compose.foundation.layout.padding import androidx.compose.foundation.layout.width import androidx.compose.foundation.text.KeyboardOptions import androidx.compose.material3.MaterialTheme import androidx.compose.material3.OutlinedTextField import androidx.compose.material3.Surface import androidx.compose.material3.Switch import androidx.compose.material3.Text import androidx.compose.runtime.Composable import androidx.compose.runtime.getValue import androidx.compose.runtime.mutableStateOf import androidx.compose.runtime.remember import androidx.compose.runtime.setValue import androidx.compose.ui.Alignment import androidx.compose.ui.Modifier import androidx.compose.ui.res.stringResource import androidx.compose.ui.text.input.ImeAction import androidx.compose.ui.text.input.KeyboardType import androidx.compose.ui.unit.dp import androidx.compose.ui.unit.sp import com.example.homework02.ui.theme.Homework02Theme  class MainActivity : ComponentActivity() {  override fun onCreate(savedInstanceState: Bundle?) {  super.onCreate(savedInstanceState)  *setContent* **{** Homework02Theme **{** *// A surface container using the 'background' color from the theme* Surface(  modifier = Modifier.*fillMaxSize*(),  color = MaterialTheme.colorScheme.background  ) **{** MainScreen()  **}  }  }** }   fun calculateBMI(  height: Double,  weight: Double,  isMeter: Boolean  ): Any {  val heightInMeters = if (isMeter) height else height / 100  var bmi = weight / (heightInMeters \* heightInMeters)  return when {  bmi < 18.5 -> "저체중"  bmi < 25 -> "정상"  bmi < 30 -> "과체중"  else -> "비만"  }    }   @Composable  fun EditNumberField(  value: String,  onValueChange: (String) -> Unit,  label: Int  ) {  OutlinedTextField(  value = value,  keyboardOptions = KeyboardOptions(  imeAction = ImeAction.Done,  keyboardType = KeyboardType.Number  ),  modifier = Modifier.*padding*(bottom = 32.*dp*),  onValueChange = onValueChange,  label = **{** Text(text = stringResource(id = label)) **}**,   )  }   @Composable  fun SwitchToMeter(  checked: Boolean,  onCheckedChange: (Boolean) -> Unit  ) {  Row(  modifier = Modifier.*padding*(bottom = 32.*dp*, start = 10.*dp*),  verticalAlignment = Alignment.CenterVertically  ) **{** Text(  text = stringResource(id = R.string.*switchToMeter*)  )  Spacer(modifier = Modifier.*width*(20.*dp*))  Switch(checked = checked, onCheckedChange = onCheckedChange)  **}** }   @Composable  fun MainScreen() {  Text(text = "202114226 송재현")   var heightInput by remember **{** *mutableStateOf*("")  **}** var weightInput by remember **{** *mutableStateOf*("")  **}** var isMeter by remember **{** *mutableStateOf*(false)  **}** val heightLabel = if (isMeter) R.string.*heightMeter* else R.string.*height* val height = heightInput.*toDoubleOrNull*() ?: 0.0  val weight = weightInput.*toDoubleOrNull*() ?: 0.0  val bmi = calculateBMI(height, weight, isMeter)   Column(  modifier = Modifier.*padding*(horizontal = 40.*dp*),  verticalArrangement = Arrangement.Center  ) **{** SwitchToMeter(isMeter, **{** isMeter = **it }**)    EditNumberField(  heightInput,  **{** heightInput = **it }**,  heightLabel  )   EditNumberField(  weightInput,  **{** weightInput = **it }**,  R.string.*weight* )   Row **{** Spacer(modifier = Modifier.*width*(60.*dp*))  Text(  text = if (height > 0.0 && weight > 0.0) "$bmi"  else stringResource(id = R.string.*checkingBMI*),  modifier = Modifier.*padding*(bottom = 16.*dp*),  fontSize = 50.*sp* )  **}** *//TextFieldWithHideKeyboardOnImeAction()* **}** } } |
| **소스코드2(string.xml)** |
| <resources>  <string name="app\_name">Week03C</string>  <string name="switchToMeter">키 입력 단위 미터(m)?</string>  <string name="height">키(cm)</string>  <string name="heightMeter">키(m)</string>  <string name="weight">몸무게(kg)</string>  <string name="checkingBMI">BMI 체크</string>  <string name="bmi">%s</string> </resources> |
| **실행결과** |
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