

UNIVERSIDAD DON BOSCO



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Asignatura:

Desarrollo de Software para Moviles

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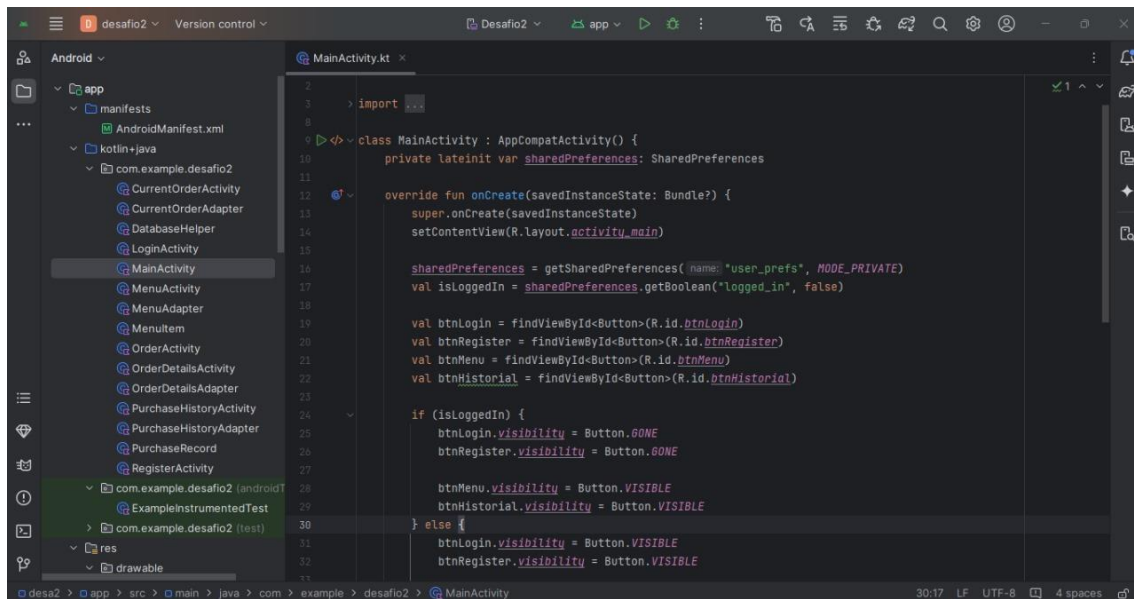
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Grupo:

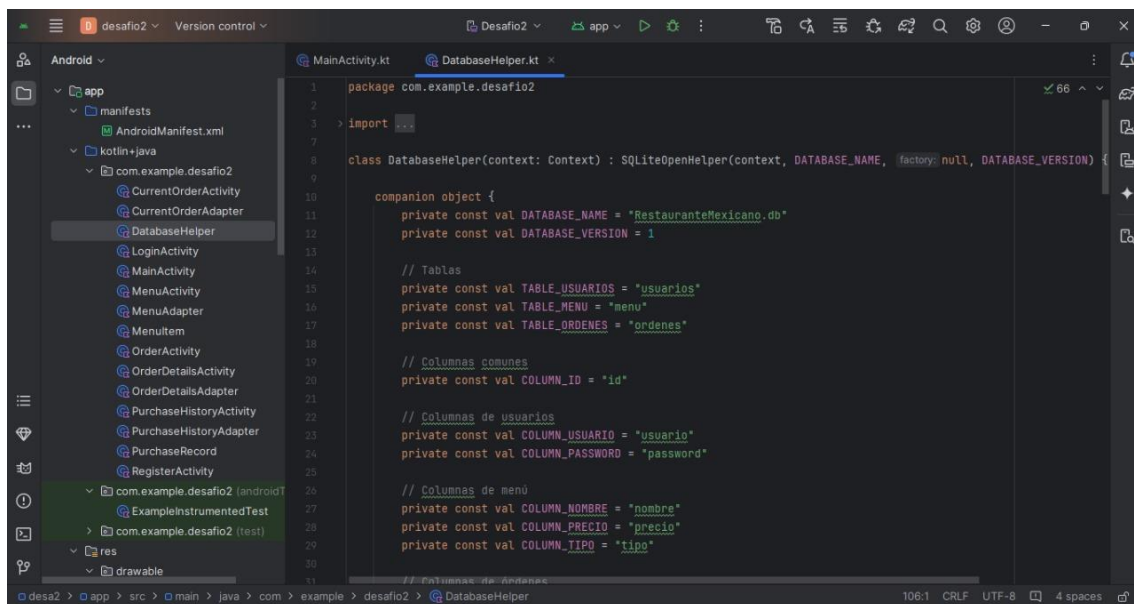
G01L

Desafío 2

Aplicación de "Comida Mexicana" pantalla.



Base de datos MySQLite



Codigo:

```
package com.example.desafio2
```

```
import android.content.ContentValues
import android.content.Context
import android.database.sqlite.SQLiteDatabase
import android.database.sqlite.SQLiteOpenHelper
```

```
class DatabaseHelper(context: Context) : SQLiteOpenHelper(context,
DATABASE_NAME, null, DATABASE_VERSION) {
```

```

companion object {
    private const val DATABASE_NAME = "RestauranteMexicano.db"
    private const val DATABASE_VERSION = 1

    // Tablas
    private const val TABLE_USUARIOS = "usuarios"
    private const val TABLE_MENU = "menu"
    private const val TABLE_ORDENES = "ordenes"

    // Columnas comunes
    private const val COLUMN_ID = "id"

    // Columnas de usuarios
    private const val COLUMN_USUARIO = "usuario"
    private const val COLUMN_PASSWORD = "password"

    // Columnas de menú
    private const val COLUMN_NOMBRE = "nombre"
    private const val COLUMN_PRECIO = "precio"
    private const val COLUMN_TIPO = "tipo"

    // Columnas de órdenes
    private const val COLUMN_USUARIO_ID = "usuario_id"
    private const val COLUMN_FECHA = "fecha"
    private const val COLUMN_TOTAL = "total"
}

override fun onCreate(db: SQLiteDatabase) {
    // Crear tabla de usuarios
    val createUsuariosTable = """
        CREATE TABLE $TABLE_USUARIOS (
            $COLUMN_ID INTEGER PRIMARY KEY AUTOINCREMENT,
            $COLUMN_USUARIO TEXT UNIQUE,
            $COLUMN_PASSWORD TEXT
        )
    """.trimIndent()
    db.execSQL(createUsuariosTable)

    // Crear tabla de menú
    val createMenuTable = """
        CREATE TABLE $TABLE_MENU (
            $COLUMN_ID INTEGER PRIMARY KEY AUTOINCREMENT,
            $COLUMN_NOMBRE TEXT,
            $COLUMN_PRECIO REAL,
            $COLUMN_TIPO TEXT
        )
    """.trimIndent()
    db.execSQL(createMenuTable)

    // Crear tabla de órdenes
    val createOrdenesTable = """

```

```

        CREATE TABLE $TABLE_ORDENES (
            $COLUMN_ID INTEGER PRIMARY KEY AUTOINCREMENT,
            $COLUMN_USUARIO_ID INTEGER,
            $COLUMN_FECHA TEXT,
            $COLUMN_TOTAL REAL,
            FOREIGN KEY($COLUMN_USUARIO_ID) REFERENCES
$TABLE_USUARIOS($COLUMN_ID)
        )
    """.trimIndent()
    db.execSQL(createOrdenesTable)

    // Insertar datos de ejemplo en el menú
    insertarDatosEjemplo(db)
}

override fun onUpgrade(db: SQLiteDatabase, oldVersion: Int, newVersion: Int) {
    // En caso de actualización de la base de datos
    db.execSQL("DROP TABLE IF EXISTS $TABLE_USUARIOS")
    db.execSQL("DROP TABLE IF EXISTS $TABLE_MENU")
    db.execSQL("DROP TABLE IF EXISTS $TABLE_ORDENES")
    onCreate(db)
}

private fun insertarDatosEjemplo(db: SQLiteDatabase) {
    // Insertar alimentos
    val alimentosEjemplo = arrayOf(
        "INSERT INTO $TABLE_MENU ($COLUMN_NOMBRE, $COLUMN_PRECIO, $COLUMN_TIPO) VALUES ('Tacos al Pastor', 5.00, 'Alimento')",
        "INSERT INTO $TABLE_MENU ($COLUMN_NOMBRE, $COLUMN_PRECIO, $COLUMN_TIPO) VALUES ('Enchiladas', 3.00, 'Alimento')",
        "INSERT INTO $TABLE_MENU ($COLUMN_NOMBRE, $COLUMN_PRECIO, $COLUMN_TIPO) VALUES ('Guacamole', 1.75, 'Alimento')",
        "INSERT INTO $TABLE_MENU ($COLUMN_NOMBRE, $COLUMN_PRECIO, $COLUMN_TIPO) VALUES ('Quesadillas', 4.50, 'Alimento')",
        "INSERT INTO $TABLE_MENU ($COLUMN_NOMBRE, $COLUMN_PRECIO, $COLUMN_TIPO) VALUES ('Tamales', 2.00, 'Alimento')",
        "INSERT INTO $TABLE_MENU ($COLUMN_NOMBRE, $COLUMN_PRECIO, $COLUMN_TIPO) VALUES ('Flautas', 4.00, 'Alimento')",
        "INSERT INTO $TABLE_MENU ($COLUMN_NOMBRE, $COLUMN_PRECIO, $COLUMN_TIPO) VALUES ('Tortas', 5.00, 'Alimento')"
    )

    // Insertar bebidas
    val bebidasEjemplo = arrayOf(
        "INSERT INTO $TABLE_MENU ($COLUMN_NOMBRE, $COLUMN_PRECIO, $COLUMN_TIPO) VALUES ('Agua Frescas', 2.50, 'Bebida')",
        "INSERT INTO $TABLE_MENU ($COLUMN_NOMBRE, $COLUMN_PRECIO, $COLUMN_TIPO) VALUES ('Margarita', 4.50, 'Bebida')",
        "INSERT INTO $TABLE_MENU ($COLUMN_NOMBRE, $COLUMN_PRECIO, $COLUMN_TIPO) VALUES ('Tequila', 4.00, 'Bebida')"
    )
}

```

```

    )

    alimentosEjemplo.forEach { db.execSQL(it) }
    bebidasEjemplo.forEach { db.execSQL(it) }
}

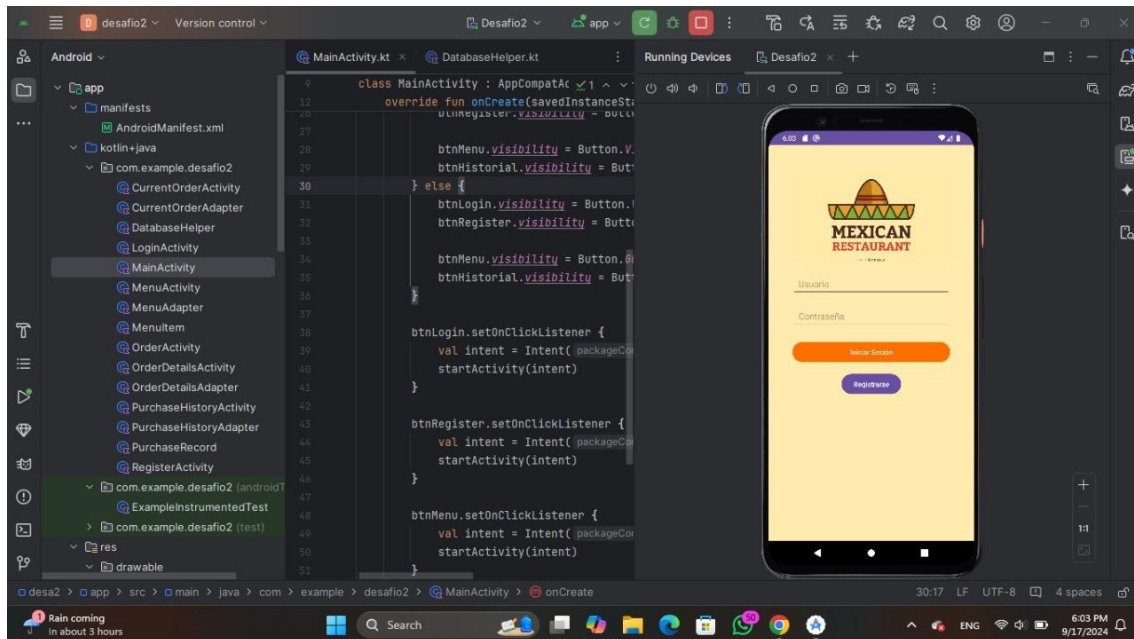
fun savePurchase(usuariold: Int, fecha: String, total: Double) {
    val values = ContentValues().apply {
        put(COLUMN_USUARIO_ID, usuariold)
        put(COLUMN_FECHA, fecha)
        put(COLUMN_TOTAL, total)
    }
    writableDatabase.insert(TABLE_ORDENES, null, values)
}

fun getPurchaseHistory(usuariold: Int): List<PurchaseRecord> {
    val purchaseList = mutableListOf<PurchaseRecord>()
    val query = """
        SELECT $COLUMN_FECHA, $COLUMN_TOTAL
        FROM $TABLE_ORDENES
        WHERE $COLUMN_USUARIO_ID = ?
        ORDER BY $COLUMN_FECHA DESC
    """.trimIndent()
    val cursor = readableDatabase.rawQuery(query, arrayOf(usuariold.toString()))

    with(cursor) {
        while (moveToNext()) {
            val date = getString(getColumnIndexOrThrow(COLUMN_FECHA))
            val total = getDouble(getColumnIndexOrThrow(COLUMN_TOTAL))
            purchaseList.add(PurchaseRecord(date, total))
        }
    }
    cursor.close()
    return purchaseList
}
}

```

LoginActivity.kt (Pantalla de Login)



Codigo:

```
package com.example.desafio2
```

```
import android.content.Intent
import android.os.Bundle
import android.widget.Button
import android.widget.EditText
import android.widget.Toast
import androidx.appcompat.app.AppCompatActivity
import android.content.SharedPreferences
```

```
class LoginActivity : AppCompatActivity() {
    private lateinit var dbHelper: DatabaseHelper
    private lateinit var sharedPreferences: SharedPreferences
```

```
    override fun onCreate(savedInstanceState: Bundle?) {
        super.onCreate(savedInstanceState)
        setContentView(R.layout.activity_login)
```

```
        dbHelper = DatabaseHelper(this)
        sharedPreferences = getSharedPreferences("user_prefs", MODE_PRIVATE)
```

```
        val etUsername = findViewById<EditText>(R.id.etUsername)
        val etPassword = findViewById<EditText>(R.id.etPassword)
        val btnLogin = findViewById<Button>(R.id.btnLogin)
        val btnGoToRegister = findViewById<Button>(R.id.btnGoToRegister)
```

```
        btnLogin.setOnClickListener {
            val username = etUsername.text.toString()
            val password = etPassword.text.toString()
            if (validateUser(username, password)) {
                saveLoginState(username)
            }
        }
```

```

        Toast.makeText(this, "Login exitoso", Toast.LENGTH_SHORT).show()
        val intent = Intent(this, MainActivity::class.java)
        startActivity(intent)
        finish()
    } else {
        Toast.makeText(this, "Usuario o contraseña incorrectos",
Toast.LENGTH_SHORT).show()
    }
}

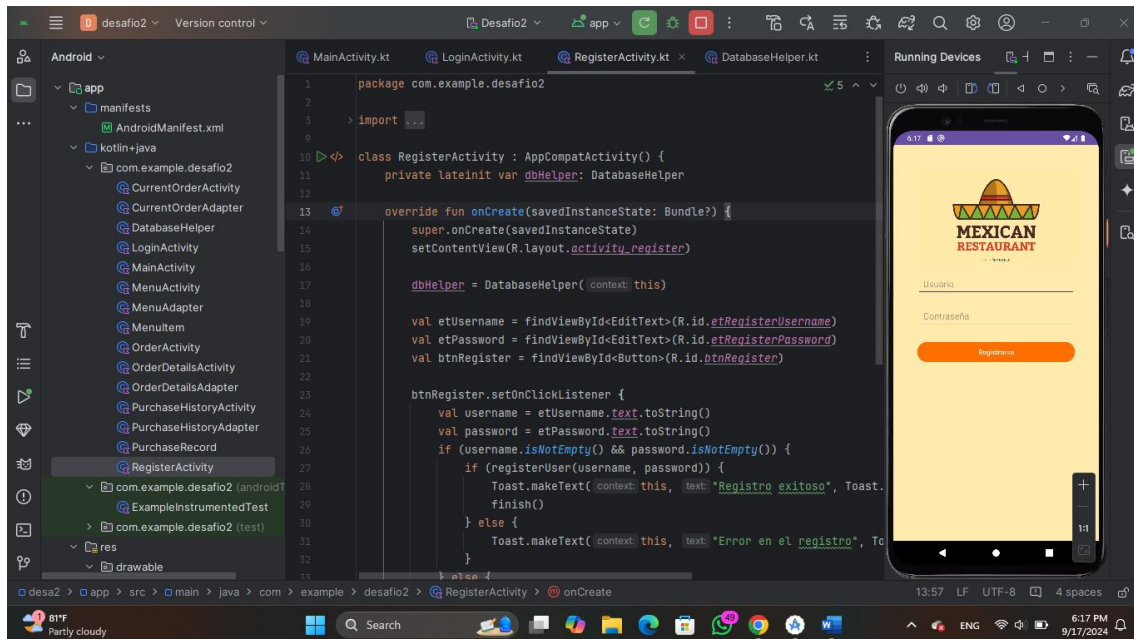
btnGoToRegister.setOnClickListener {
    val intent = Intent(this, RegisterActivity::class.java)
    startActivity(intent)
}

private fun validateUser(username: String, password: String): Boolean {
    val db = dbHelper.readableDatabase
    val cursor = db.query(
        "usuarios",
        arrayOf("id"),
        "usuario = ? AND password = ?",
        arrayOf(username, password),
        null,
        null,
        null
    )
    val isValid = cursor.count > 0
    cursor.close()
    return isValid
}

private fun saveLoginState(username: String) {
    val editor = sharedPreferences.edit()
    editor.putBoolean("logged_in", true)
    editor.putString("username", username)
    editor.apply()
}
}

```

RegisterActivity.kt (Pantalla de Registro)



Codigo:

```
package com.example.desafio2
```

```
import android.content.ContentValues
import android.os.Bundle
import android.widget.Button
import android.widget.EditText
import android.widget.Toast
import androidx.appcompat.app.AppCompatActivity
```

```
class RegisterActivity : AppCompatActivity() {
    private lateinit var dbHelper: DatabaseHelper
```

```
    override fun onCreate(savedInstanceState: Bundle?) {
        super.onCreate(savedInstanceState)
        setContentView(R.layout.activity_register)
```

```
        dbHelper = DatabaseHelper(this)
```

```
        val etUsername = findViewById<EditText>(R.id.etRegisterUsername)
        val etPassword = findViewById<EditText>(R.id.etRegisterPassword)
        val btnRegister = findViewById<Button>(R.id.btnRegister)
```

```
        btnRegister.setOnClickListener {
            val username = etUsername.text.toString()
            val password = etPassword.text.toString()
            if (username.isNotEmpty() && password.isNotEmpty()) {
                if (registerUser(username, password)) {
                    Toast.makeText(this, "Registro exitoso", Toast.LENGTH_SHORT).show()
                    finish()
                } else {
                    Toast.makeText(this, "Error en el registro",
```



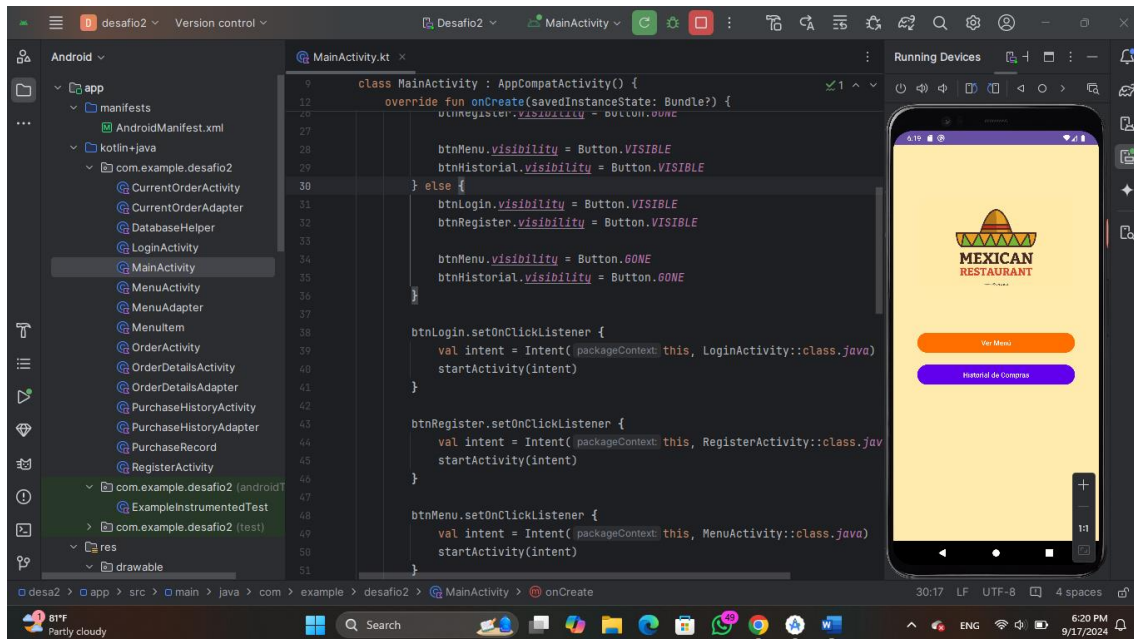
```

Toast.LENGTH_SHORT).show()
    }
    } else {
        Toast.makeText(this, "Por favor, complete todos los campos",
Toast.LENGTH_SHORT).show()
    }
}
}

private fun registerUser(username: String, password: String): Boolean {
    val db = dbHelper.writableDatabase
    val values = ContentValues().apply {
        put("usuario", username)
        put("password", password)
    }
    val newRowId = db.insert("usuarios", null, values)
    return newRowId != -1L
}
}

```

MainActivity.kt (Pantalla del usuario ya logueado, puede ver Menu e historial)



Codigo:

```
package com.example.desafio2
```

```
import android.content.Intent
import android.content.SharedPreferences
import android.os.Bundle
import android.widget.Button
import androidx.appcompat.app.AppCompatActivity
```

```
class MainActivity : AppCompatActivity() {
    private lateinit var sharedPreferences: SharedPreferences
```

```
    override fun onCreate(savedInstanceState: Bundle?) {
        super.onCreate(savedInstanceState)
        setContentView(R.layout.activity_main)
```

```
        sharedPreferences = getSharedPreferences("user_prefs", MODE_PRIVATE)
        val isLoggedIn = sharedPreferences.getBoolean("logged_in", false)
```

```
        val btnLogin = findViewById<Button>(R.id.btnLogin)
        val btnRegister = findViewById<Button>(R.id.btnRegister)
        val btnMenu = findViewById<Button>(R.id.btnMenu)
        val btnHistorial = findViewById<Button>(R.id.btnHistorial)
```

```
        if (isLoggedIn) {
            btnLogin.visibility = Button.GONE
            btnRegister.visibility = Button.GONE

            btnMenu.visibility = Button.VISIBLE
            btnHistorial.visibility = Button.VISIBLE
        } else {
            btnLogin.visibility = Button.VISIBLE
```

```

        btnRegister.visibility = Button.VISIBLE

        btnMenu.visibility = Button.GONE
        btnHistorial.visibility = Button.GONE
    }

    btnLogin.setOnClickListener {
        val intent = Intent(this, LoginActivity::class.java)
        startActivity(intent)
    }

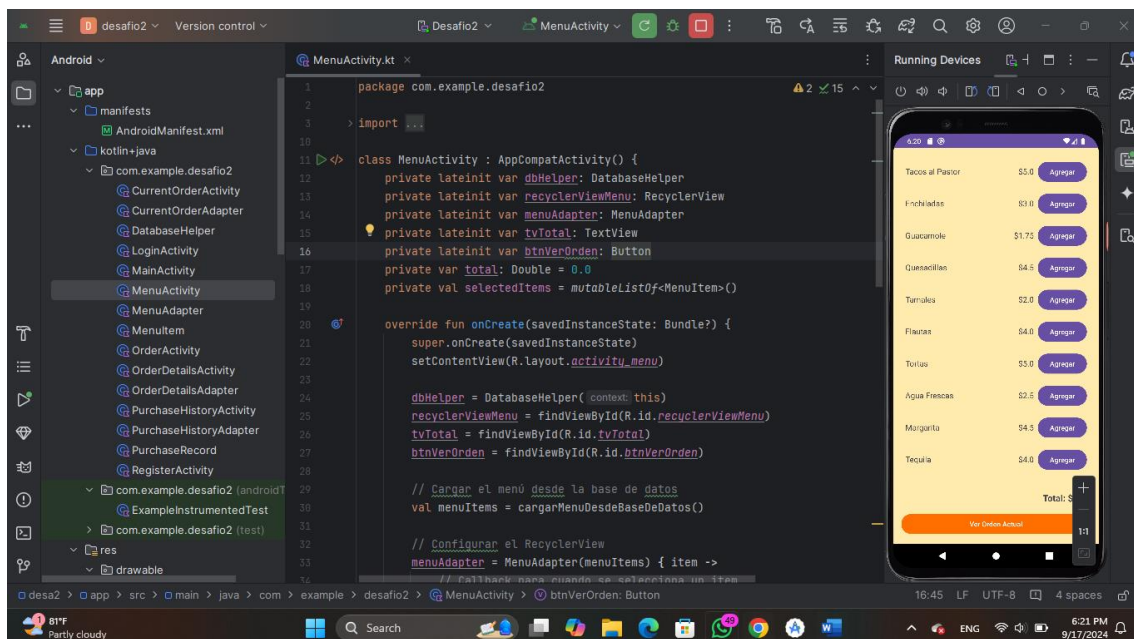
    btnRegister.setOnClickListener {
        val intent = Intent(this, RegisterActivity::class.java)
        startActivity(intent)
    }

    btnMenu.setOnClickListener {
        val intent = Intent(this, MenuActivity::class.java)
        startActivity(intent)
    }

    btnHistorial.setOnClickListener {
        val intent = Intent(this, PurchaseHistoryActivity::class.java)
        startActivity(intent)
    }
}
}
}

```

MenuActivity.kt (Pantalla del menú y también puede ver la orden actual)



```

package com.example.desafio2

import android.content.Intent
import android.os.Bundle
import android.widget.Button
import android.widget.TextView
import androidx.appcompat.app.AppCompatActivity
import androidx.recyclerview.widget.LinearLayoutManager
import androidx.recyclerview.widget.RecyclerView

class MenuActivity : AppCompatActivity() {
    private lateinit var dbHelper: DatabaseHelper
    private lateinit var recyclerViewMenu: RecyclerView
    private lateinit var menuAdapter: MenuAdapter
    private lateinit var tvTotal: TextView
    private lateinit var btnVerOrden: Button
    private var total: Double = 0.0
    private val selectedItems = mutableListOf<MenuItem>()

    override fun onCreate(savedInstanceState: Bundle?) {
        super.onCreate(savedInstanceState)
        setContentView(R.layout.activity_menu)

        dbHelper = DatabaseHelper(this)
        recyclerViewMenu = findViewById(R.id.recyclerViewMenu)
        tvTotal = findViewById(R.id.tvTotal)
        btnVerOrden = findViewById(R.id.btnVerOrden)

        // Cargar el menú desde la base de datos
        val menuItems = cargarMenuDesdeBaseDeDatos()

        // Configurar el RecyclerView
        menuAdapter = MenuAdapter(menuItems) { item ->
            // Callback para cuando se selecciona un item
            selectedItems.add(item)
            total += item.price
            actualizarTotal()
        }
        recyclerViewMenu.adapter = menuAdapter
        recyclerViewMenu.layoutManager = LinearLayoutManager(this)

        btnVerOrden.setOnClickListener {
            val intent = Intent(this, CurrentOrderActivity::class.java)
            intent.putParcelableArrayListExtra("selected_items", ArrayList(selectedItems))
            intent.putExtra("total", total)
            startActivity(intent)
        }
    }

    private fun cargarMenuDesdeBaseDeDatos(): ArrayList<MenuItem> {
        val menuItems = ArrayList<MenuItem>()
    }

```

```

val db = dbHelper.readableDatabase

val cursor = db.rawQuery("SELECT nombre, precio FROM menu", null)

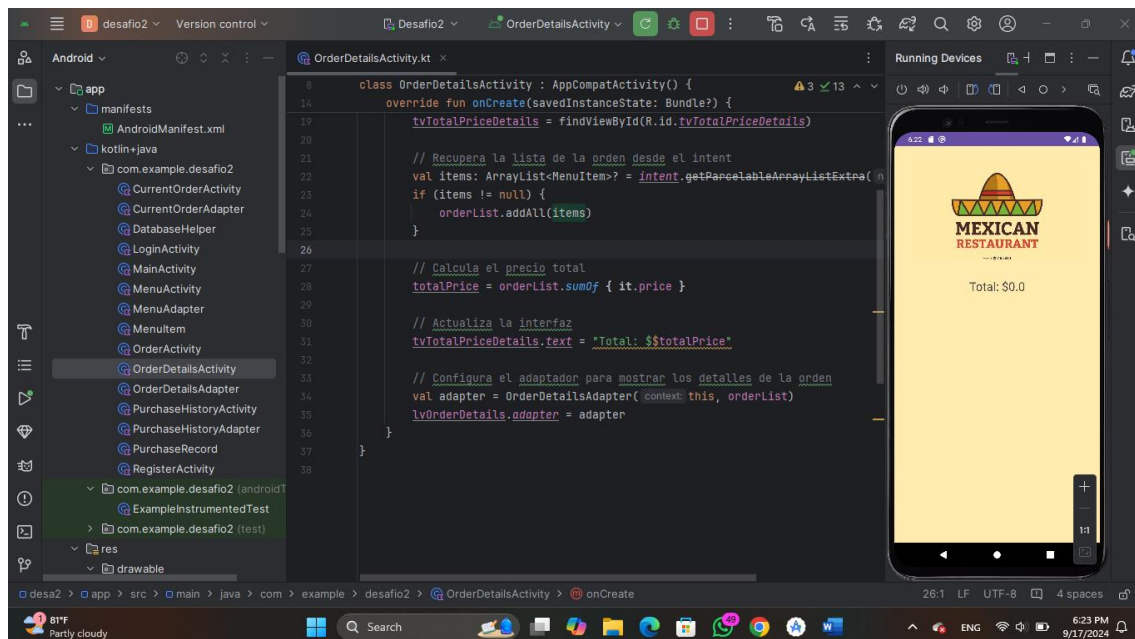
if (cursor.moveToFirst()) {
    do {
        val nombre = cursor.getString(cursor.getColumnIndexOrThrow("nombre"))
        val precio = cursor.getDouble(cursor.getColumnIndexOrThrow("precio"))
        menuItems.add(Menuitem(nombre, precio))
    } while (cursor.moveToNext())
}

cursor.close()
return menuItems
}

private fun actualizarTotal() {
    tvTotal.text = String.format("Total: $%.2f", total)
}
}

```

OrdenDetailsActivity.kt (Pantalla donde se vera la orden actual)



Codigo:

```

package com.example.desafio2

import android.os.Bundle
import android.widget.ListView
import android.widget.TextView
import androidx.appcompat.app.AppCompatActivity

```

```

class OrderDetailsActivity : AppCompatActivity() {
    private lateinit var lvOrderDetails: ListView
    private lateinit var tvTotalPriceDetails: TextView
    private var totalPrice: Double = 0.0
    private val orderList: MutableList<MenuItem> = mutableListOf()

    override fun onCreate(savedInstanceState: Bundle?) {
        super.onCreate(savedInstanceState)
        setContentView(R.layout.activity_order_details)

        lvOrderDetails = findViewById(R.id.lvOrderDetails)
        tvTotalPriceDetails = findViewById(R.id.tvTotalPriceDetails)

        // Recupera la lista de la orden desde el intent
        val items: ArrayList<MenuItem>? = intent.getParcelableArrayListExtra("order_list")
        if (items != null) {
            orderList.addAll(items)
        }

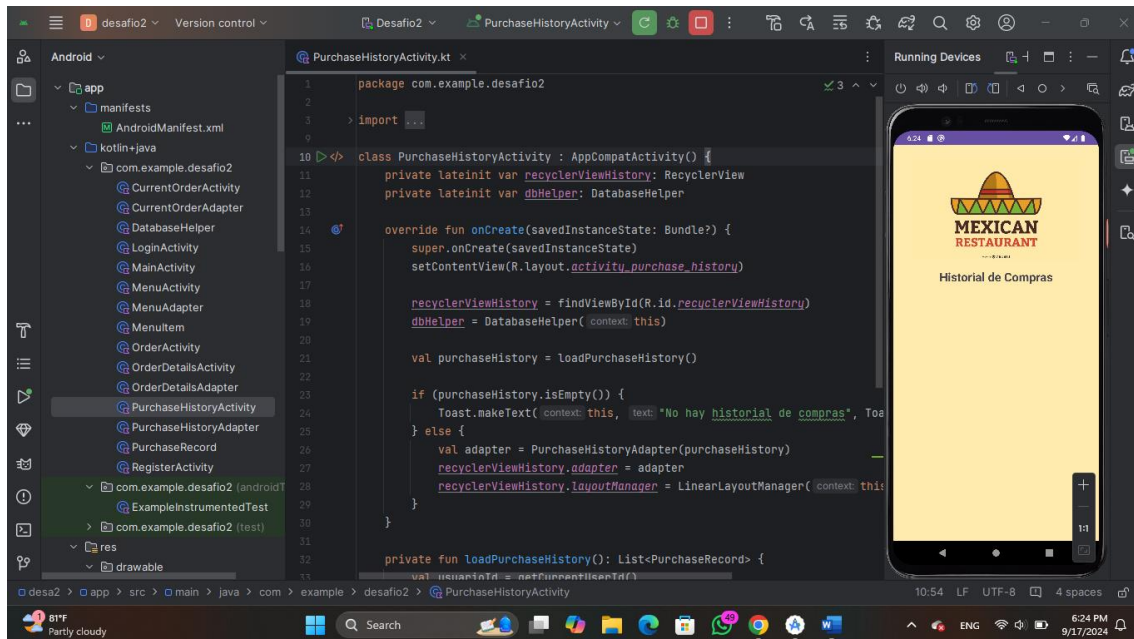
        // Calcula el precio total
        totalPrice = orderList.sumOf { it.price }

        // Actualiza la interfaz
        tvTotalPriceDetails.text = "Total: $$totalPrice"

        // Configura el adaptador para mostrar los detalles de la orden
        val adapter = OrderDetailsAdapter(this, orderList)
        lvOrderDetails.adapter = adapter
    }
}

```

PurchaseHistoryActivity.kt (Pantalla para ver el historial de compras)



```
package com.example.desafio2
```

```
import android.os.Bundle
```

```
import android.util.Log
```

```
import android.widget.Toast
```

```
import androidx.appcompat.app.AppCompatActivity
```

```
import androidx.recyclerview.widget.LinearLayoutManager
```

```
import androidx.recyclerview.widget.RecyclerView
```

```
class PurchaseHistoryActivity : AppCompatActivity() {  
    private lateinit var recyclerViewHistory: RecyclerView  
    private lateinit var dbHelper: DatabaseHelper
```

```
    override fun onCreate(savedInstanceState: Bundle?) {  
        super.onCreate(savedInstanceState)  
        setContentView(R.layout.activity_purchase_history)
```

```
        recyclerViewHistory = findViewById(R.id.recyclerViewHistory)  
        dbHelper = DatabaseHelper(this)
```

```
        val purchaseHistory = loadPurchaseHistory()
```

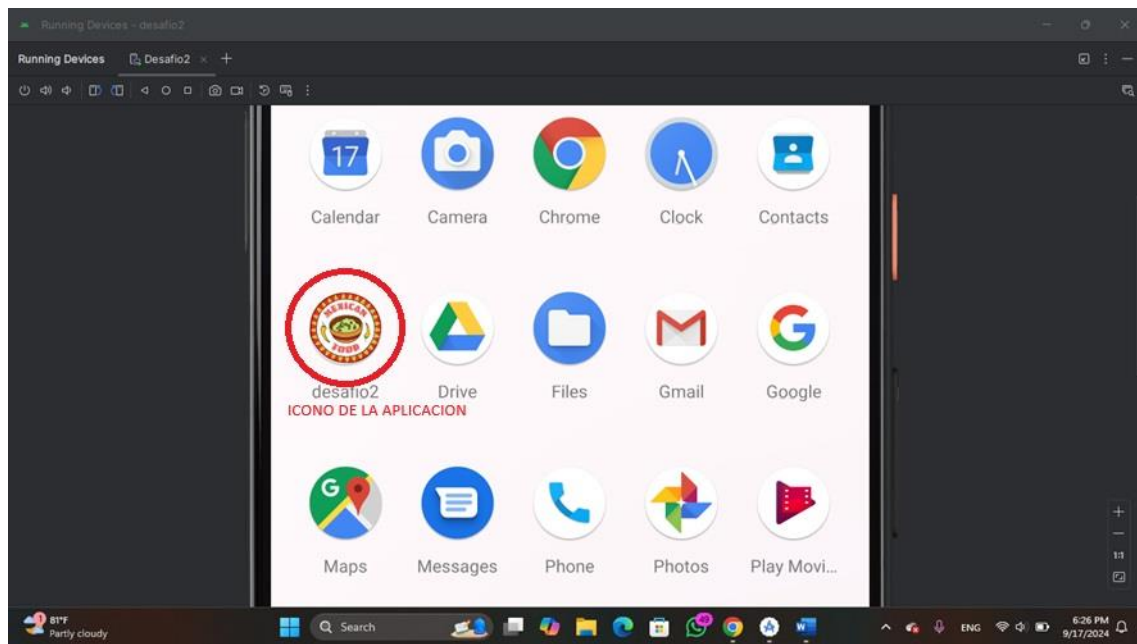
```
        if (purchaseHistory.isEmpty()) {  
            Toast.makeText(this, "No hay historial de compras",  
                Toast.LENGTH_SHORT).show()  
        } else {  
            val adapter = PurchaseHistoryAdapter(purchaseHistory)  
            recyclerViewHistory.adapter = adapter  
            recyclerViewHistory.layoutManager = LinearLayoutManager(this)  
        }  
    }  
}
```

```
private fun loadPurchaseHistory(): List<PurchaseRecord> {
```

```
        val usuariold = getCurrentUserId()
        val history = dbHelper.getPurchaseHistory(usuariold)
        Log.d("PurchaseHistory", "Loaded ${history.size} records for user $usuariold")
        return history
    }

    private fun getCurrentUserId(): Int {
        // TODO: Implement proper user ID retrieval
        return 1 // Using a default value for now
    }
}
```

Iconos de la aplicación



Imágenes





Link del video:

https://udbedu-my.sharepoint.com/:v:/g/personal/gg222955_alumno_udb_edu_sv/EaC_Vr0CaihEieZ-yPMYzdUBMBm_3Ng7wl8eDYd1-i9vXQ?e=hrShuj&nav=eyJyZWZlcnJhbEluZm8iOnsicmVmZXJyYWxBcHAIoiJTdHJIYW1XZWJBcHAIJCjYwZWZlcnJhbFZpZXciOiJTdGFyZURpYWxvZy1MaW5rliwicmVmZXJyYWxBcHBQbGF0Zm9ybSI6IldiYiIsInJlZmVycmFsTW9kZSI6InZpZXcifX0%3D