

# Universidad Don Bosco

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Escuela de Ingeniería en Computación

## Desarrollo de Software para Móviles – G01L

**Desafío 2 :**

Aplicación móvil en Kotlin con Android

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**Campus Soyapango**


2024

**Carrera universitaria:**

Técnico en Ingeniería en Computación

## Pantalla de Inicio de Sesión y Registro

5:09    77% 



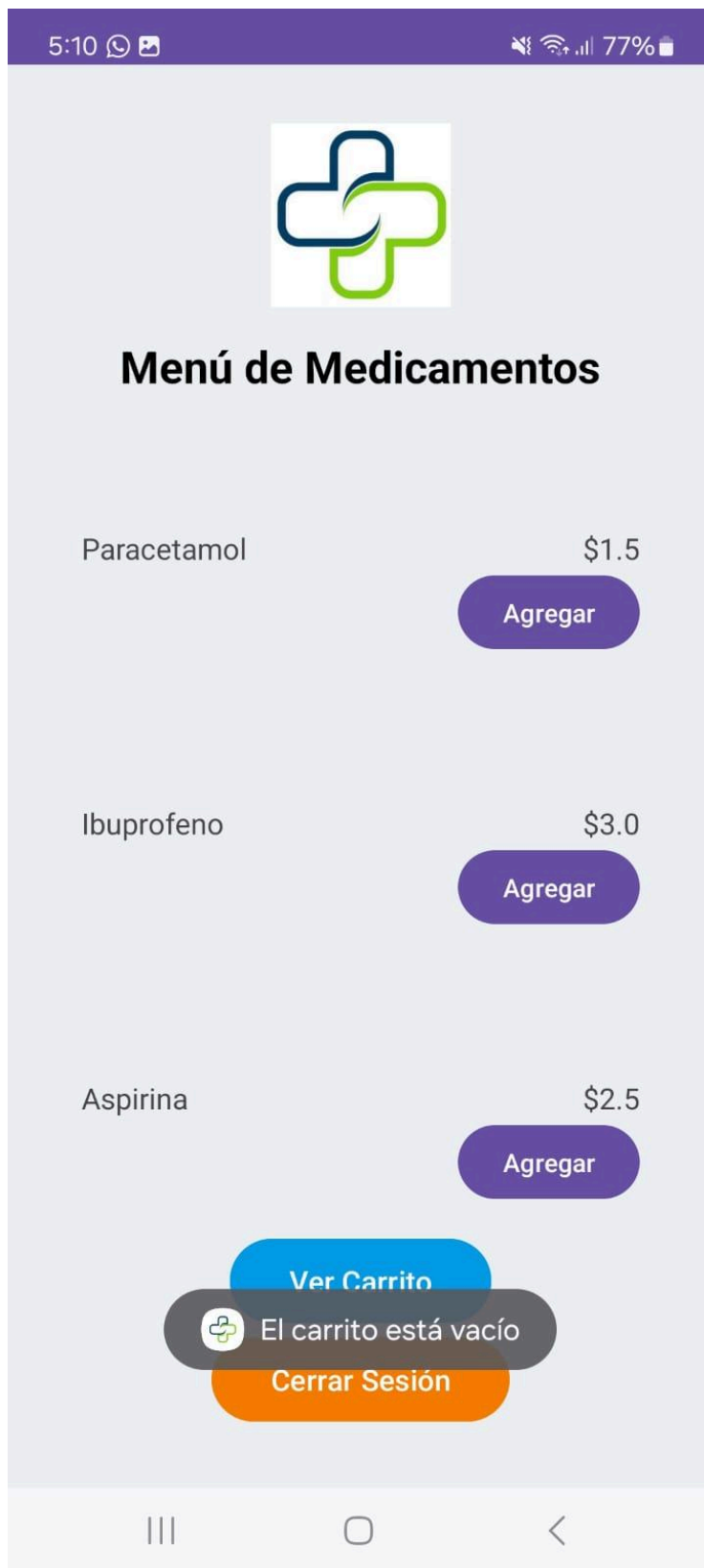
Email

Contraseña

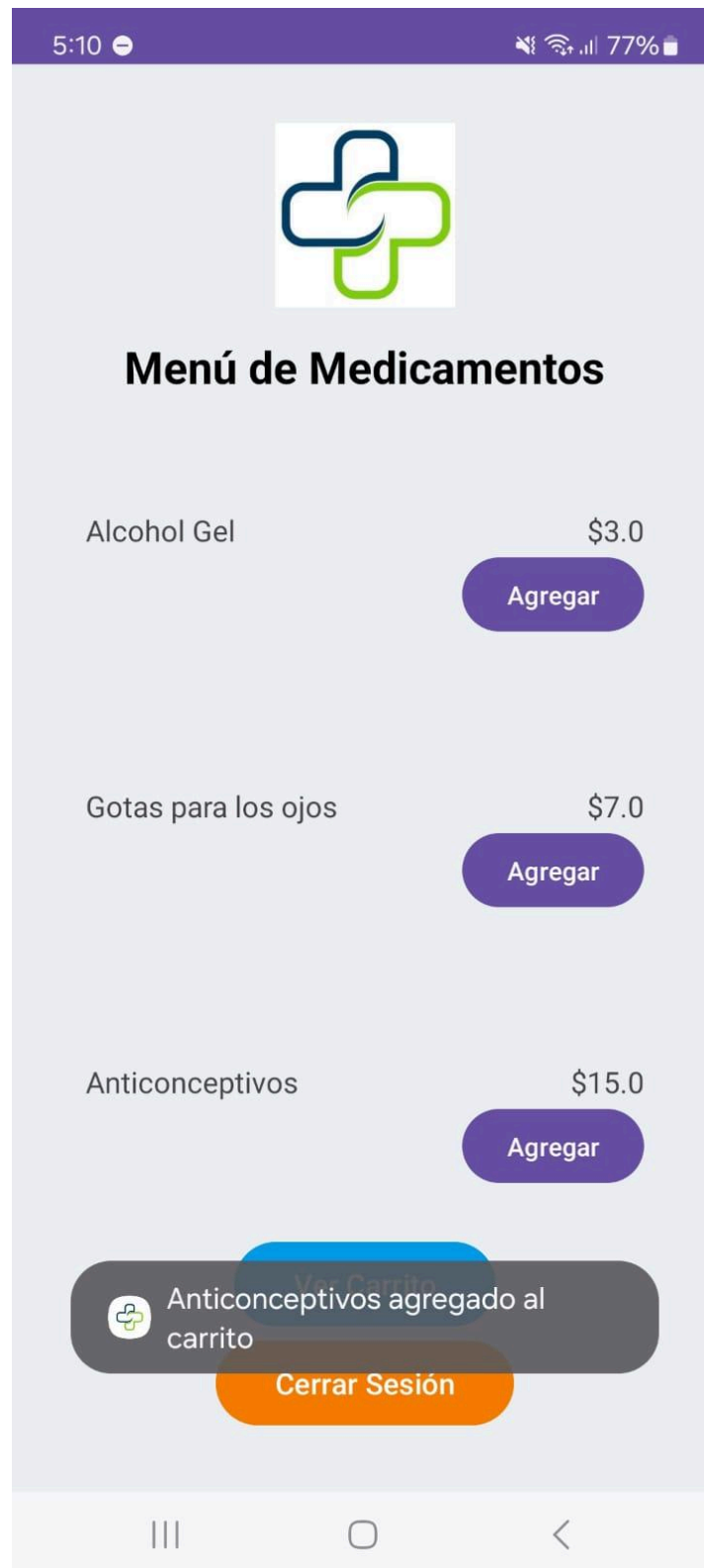
[Registrar](#) [Acceder](#)

III O <

## Menú con los medicamentos y sus precios



Notificación que se han agregando los medicamentos seleccionados



## Carrito de compras

5:11

77%

Paracetamol  
\$1.5

Ibuprofeno  
\$3.0

Aspirina  
\$2.5

Anticonceptivos  
\$15.0

Anticonceptivos  
\$15.0

Total a pagar: \$37.00

## Cerramos Sesión

5:11

77%



Email

Contraseña

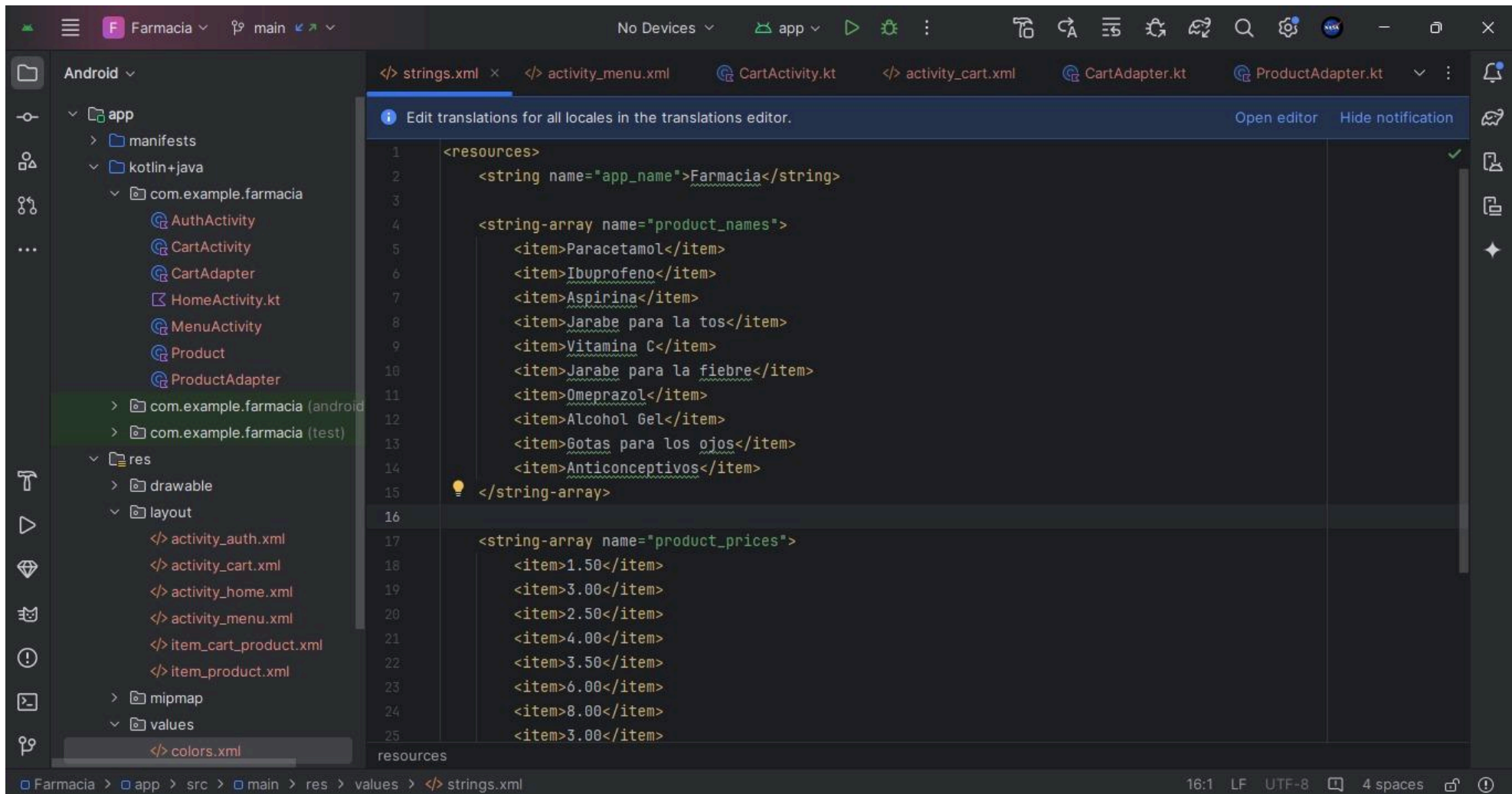
Registrar

Acceder



## CODIGOS

### Strings.xml



## Activity\_menu.xml

Android Studio interface showing the development of the `activity_menu.xml` file for the `Farmacia` app.

**Project Structure (Left Panel):**

- app
  - manifests
  - kotlin+java
    - com.example.farmacia
      - AuthActivity
      - CartActivity
      - CartAdapter
      - HomeActivity.kt
      - MenuActivity
      - Product
      - ProductAdapter
    - com.example.farmacia (android)
    - com.example.farmacia (test)
  - res
    - drawable
    - layout
      - activity\_auth.xml
      - activity\_cart.xml
      - activity\_home.xml
      - activity\_menu.xml
      - item\_cart\_product.xml
      - item\_product.xml
    - mipmap
    - values
      - colors.xml

**XML Code (Center Panel):**

```
<?xml version="1.0" encoding="utf-8"?>
<androidx.constraintlayout.widget.ConstraintLayout xmlns:android="http://schemas.android.com/apk/res-auto"
    xmlns:app="http://schemas.android.com/apk/res-auto"
    xmlns:tools="http://schemas.android.com/tools"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    android:padding="16dp"
    android:background="@color/background"
    tools:context=".MenuActivity">

    <ImageView
        android:id="@+id/logoImageView"
        android:layout_width="100dp"
        android:layout_height="100dp"
        android:src="@drawable/logo"
        android:contentDescription="Logo"
        app:layout_constraintTop_toTopOf="parent"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintEnd_toEndOf="parent"
        android:layout_marginTop="16dp" />

    <TextView
        android:id="@+id/menuTitleTextView"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="Menú de Medicamentos"
        android:textSize="24sp"
        android:layout_marginTop="16dp" />

</androidx.constraintlayout.widget.ConstraintLayout>
```

**Preview (Right Panel):**

The preview shows the visual representation of the `activity_menu.xml` layout. It features a white background with a light blue border. At the top center is a green and blue cross logo. Below the logo, the text "Menú de Medicamentos" is displayed in a large, bold, black font. At the bottom right, there are two buttons: a blue button labeled "Ver Carrito" and an orange button labeled "Cerrar Sesión".

**Bottom Bar:**

The bottom bar shows the current file path: `Farmacia > app > src > main > res > layout > activity_menu.xml`. The status bar at the bottom right indicates the file is 59:1 lines long, using LF line endings, UTF-8 encoding, and 4 spaces for indentation.



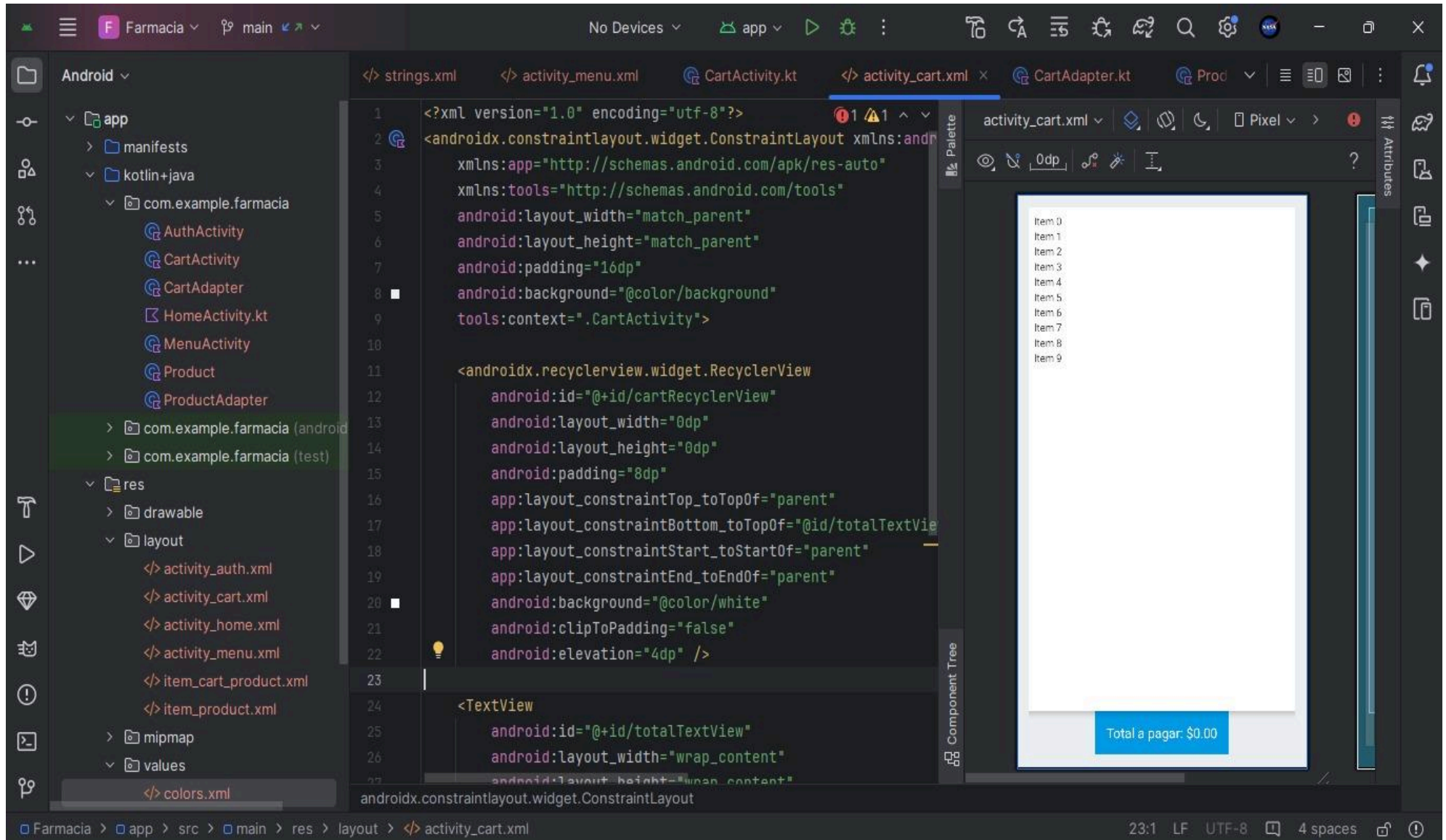
## CartActivity.kt

```
8
9 class CartActivity : AppCompatActivity() {
10
11     private lateinit var cartAdapter: CartAdapter
12     private var cartProducts: ArrayList<Product> = arrayListOf()
13     private lateinit var totalTextView: TextView
14
15     override fun onCreate(savedInstanceState: Bundle?) {
16         super.onCreate(savedInstanceState)
17         setContentView(R.layout.activity_cart)
18
19         totalTextView = findViewById(R.id.totalTextView)
20
21         cartProducts = intent.getParcelableArrayListExtra(name: "cartProducts") ?: arrayListOf()
22
23         setupRecyclerView()
24
25         calculateTotal()
26     }
27
28     private fun setupRecyclerView() {
29         val recyclerView = findViewById<RecyclerView>(R.id.cartRecyclerView)
30         recyclerView.layoutManager = LinearLayoutManager(context: this)
31         cartAdapter = CartAdapter(cartProducts)
32         recyclerView.adapter = cartAdapter
33     }
34
35     private fun calculateTotal() {
```

Farmacia > app > src > main > java > com > example > farmacia > CartActivity > calculateTotal

35:35 LF UTF-8 4 spaces

## activity\_cart.xml



## CartAdapter.kt

The screenshot shows the Android Studio IDE with the following details:

- Top Bar:** "Farmacia" project name, "main" branch, "No Devices" dropdown, and various tool icons.
- Left Sidebar (Project Structure):**
  - Android > app
    - manifests
    - kotlin+java
      - com.example.farmacia
        - AuthActivity
        - CartActivity
        - CartAdapter
        - HomeActivity.kt
        - MenuActivity
        - Product
        - ProductAdapter
      - com.example.farmacia (android)
      - com.example.farmacia (test)
    - res
      - drawable
      - layout
        - activity\_auth.xml
        - activity\_cart.xml
        - activity\_home.xml
        - activity\_menu.xml
        - item\_cart\_product.xml
        - item\_product.xml
      - mipmap
      - values
        - colors.xml

- Main Editor (CartAdapter.kt):**

```
8
9 class CartAdapter(private val cartProducts: List<Product>) : RecyclerView.Adapter<CartAdapter.CartViewHolder>() {
10
11     class CartViewHolder(itemView: View) : RecyclerView.ViewHolder(itemView) {
12         private val productNameTextView: TextView = itemView.findViewById(R.id.cartProductNameTextView)
13         private val productPriceTextView: TextView = itemView.findViewById(R.id.cartProductPriceTextView)
14
15         fun bind(product: Product) {
16             productNameTextView.text = product.name
17             productPriceTextView.text = "${product.price}"
18         }
19     }
20
21     override fun onCreateViewHolder(parent: ViewGroup, viewType: Int): CartViewHolder {
22         val view = LayoutInflater.from(parent.context).inflate(R.layout.item_cart_product, parent, attachToRoot: false)
23         return CartViewHolder(view)
24     }
25
26     override fun onBindViewHolder(holder: CartViewHolder, position: Int) {
27         val product = cartProducts[position]
28         holder.bind(product)
29     }
30
31     override fun getItemCount(): Int = cartProducts.size
32 }
33
34
```
- Bottom Status Bar:** "Farmacia > app > src > main > java > com > example > farmacia > CartAdapter > CartViewHolder > bind", "15:37", "CRLF", "UTF-8", "4 spaces", and icons for lint and help.



## ProductAdapter.kt

The screenshot shows the Android Studio IDE with the following components:

- Top Bar:** Project name 'Farmacia', mode 'main', and various tool icons.
- Left Sidebar:** Project structure tree showing the package 'com.example.farmacia' and the class 'ProductAdapter'.
- Main Editor:** Kotlin code for 'ProductAdapter.kt'.
- Bottom Status Bar:** File path 'Farmacia > app > src > main > java > com > example > farmacia > ProductAdapter > ProductViewHolder > bind' and encoding 'UTF-8'.

```
10 class ProductAdapter(  
11     private val productList: List<Product>,  
12     private val onProductSelected: (Product) -> Unit  
13 ) : RecyclerView.Adapter<ProductAdapter.ProductViewHolder>() {  
14  
15     class ProductViewHolder(itemView: View) : RecyclerView.ViewHolder(itemView) {  
16         private val productNameTextView: TextView = itemView.findViewById(R.id.productNameTextView)  
17         private val productPriceTextView: TextView = itemView.findViewById(R.id.productPriceTextView)  
18         private val addButton: Button = itemView.findViewById(R.id.addButton)  
19  
20         fun bind(product: Product, onProductSelected: (Product) -> Unit) {  
21             productNameTextView.text = product.name  
22             productPriceTextView.text = "$${product.price}"  
23  
24             addButton.setOnClickListener {  
25                 onProductSelected(product)  
26             }  
27         }  
28     }  
29  
30     override fun onCreateViewHolder(parent: ViewGroup, viewType: Int): ProductViewHolder {  
31         val view = LayoutInflater.from(parent.context).inflate(R.layout.item_product, parent, attachToRoot: false)  
32         return ProductViewHolder(view)  
33     }  
34  
35     override fun onBindViewHolder(holder: ProductViewHolder, position: Int) {  
36         val product = productList[position]  
37         holder.bind(product, onProductSelected)
```

## item\_cart\_product.xml

The screenshot displays the Android Studio IDE with the following components:

- Project Explorer (Left):** Shows the project structure for 'Farmacia'. The 'res' directory is expanded, showing the 'layout' folder where 'item\_cart\_product.xml' is located.
- Code Editor (Center):** Displays the XML layout for 'item\_cart\_product.xml'. The code is as follows:

```
1 <?xml version="1.0" encoding="utf-8"?>
2 <androidx.constraintlayout.widget.ConstraintLayout xmlns:android="http://schemas.android.com/apk/res-auto"
3   xmlns:app="http://schemas.android.com/apk/res-auto"
4   android:layout_width="match_parent"
5   android:layout_height="wrap_content"
6   android:padding="8dp">
7
8   <TextView
9     android:id="@+id/cartProductNameTextView"
10    android:layout_width="0dp"
11    android:layout_height="wrap_content"
12    android:text="Nombre del producto"
13    android:textSize="16sp"
14    app:layout_constraintStart_toStartOf="parent"
15    app:layout_constraintTop_toTopOf="parent"
16    app:layout_constraintEnd_toEndOf="parent" />
17
18   <TextView
19     android:id="@+id/cartProductPriceTextView"
20     android:layout_width="0dp"
21     android:layout_height="wrap_content"
22     android:text="$0.00"
23     android:textSize="14sp"
24     app:layout_constraintStart_toStartOf="parent"
25     app:layout_constraintTop_toBottomOf="@id/cartProductNameTextView"
26     app:layout_constraintEnd_toEndOf="parent" />
27 </androidx.constraintlayout.widget.ConstraintLayout>
```
- Preview Window (Right):** Shows a visual representation of the layout. It features two text views: one with the text 'Nombre del producto' and another with the text '\$0.00'. The preview is titled 'item\_cart\_product.xml'.
- Component Tree (Bottom Right):** Displays the hierarchy of the UI components, showing the 'TextView' elements.
- Status Bar (Bottom):** Shows the file path 'Farmacia > app > src > main > res > layout > item\_cart\_product.xml' and the time '16:53'.

## item\_product.xml

The screenshot displays the Android Studio interface with the following components:

- Top Bar:** Shows the project name "Farmacia", the current branch "main", and various tool icons.
- Left Panel (Project Explorer):** Displays the project structure under "Android" > "app". It includes folders for "manifests", "kotlin+java", and "res". The "kotlin+java" folder contains several Kotlin files like "AuthActivity", "CartActivity", "CartAdapter", "HomeActivity.kt", "MenuActivity", "Product", and "ProductAdapter". The "res" folder contains "drawable" and "layout" subfolders. The "layout" folder lists several XML files, with "item\_product.xml" selected.
- Editor:** Shows the XML code for "item\_product.xml". The code defines a `ConstraintLayout` with two `TextView` widgets. The first `TextView` displays the product name, and the second displays the price. Both are constrained to the parent layout.
- Right Panel (Preview):** Shows a visual representation of the XML layout. It features a white background with a light blue border. At the top, there is a text label "Nombre del producto" and a price label "\$0.00". Below these, there is a purple button labeled "Agregar".

```
1 <?xml version="1.0" encoding="utf-8"?>
2 <androidx.constraintlayout.widget.ConstraintLayout xmlns:android="http://schemas.android.com/apk/res-auto"
3   xmlns:app="http://schemas.android.com/apk/res-auto"
4   android:layout_width="match_parent"
5   android:layout_height="wrap_content"
6   android:padding="16dp">
7
8   <TextView
9     android:id="@+id/productNameTextView"
10    android:layout_width="0dp"
11    android:layout_height="wrap_content"
12    android:text="Nombre del producto"
13    android:textSize="16sp"
14    app:layout_constraintStart_toStartOf="parent"
15    app:layout_constraintEnd_toStartOf="@+id/productPriceTextView"
16    app:layout_constraintTop_toTopOf="parent"
17    app:layout_constraintBottom_toBottomOf="parent" />
18
19   <TextView
20     android:id="@+id/productPriceTextView"
21     android:layout_width="wrap_content"
22     android:layout_height="wrap_content"
23     android:text="$0.00"
24     android:textSize="16sp"
25     app:layout_constraintEnd_toEndOf="parent"
26     app:layout_constraintTop_toTopOf="parent"
27     app:layout_constraintBottom_toBottomOf="parent" />
28 </androidx.constraintlayout.widget.ConstraintLayout>
```

At the bottom of the screen, the breadcrumb navigation shows the path: `Farmacia > app > src > main > res > layout > item_product.xml`. The status bar at the very bottom indicates the current settings: "1:1 CRLF UTF-8 4 spaces".



## Product.kt

The screenshot displays the Android Studio IDE with the following components:

- Top Toolbar:** Contains icons for running, debugging, and other development tools.
- Left Sidebar:** Shows the project structure under the 'Android' tab. The 'app' directory is expanded, showing 'manifests', 'kotlin+java', and 'res' subdirectories. The 'kotlin+java' directory is further expanded, showing the 'com.example.farmacia' package with files like 'AuthActivity', 'CartActivity', 'CartAdapter', 'HomeActivity.kt', 'MenuActivity', 'Product', and 'ProductAdapter'. The 'Product' file is selected.
- Central Code Editor:** Displays the code for 'Product.kt'. The code is as follows:

```
5
6 data class Product(
7     val name: String,
8     val price: Double
9 ) : Parcelable {
10     constructor(parcel: Parcel) : this(
11         name: parcel.readString() ?: "",
12         parcel.readDouble()
13     )
14
15     override fun writeToParcel(parcel: Parcel, flags: Int) {
16         parcel.writeString(name)
17         parcel.writeDouble(price)
18     }
19
20     override fun describeContents(): Int = 0
21
22     companion object CREATOR : Parcelable.Creator<Product> {
23         override fun createFromParcel(parcel: Parcel): Product {
24             return Product(parcel)
25         }
26
27         override fun newArray(size: Int): Array<Product?> {
28             return arrayOfNulls(size)
29         }
30     }
31 }
```
- Bottom Status Bar:** Shows the current file path: 'Farmacia > app > src > main > java > com > example > farmacia > Product'. It also displays settings like '6:12', 'CRLF', 'UTF-8', and '4 spaces'.

**LINK DEL VIDEO**

[https://youtu.be/5qcnHijBI\\_M?si=yefCILx8PP5Olq6o](https://youtu.be/5qcnHijBI_M?si=yefCILx8PP5Olq6o)