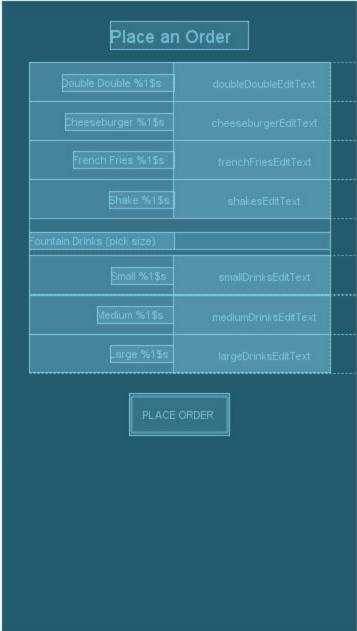Project 02: In And Out
February 17, 2020
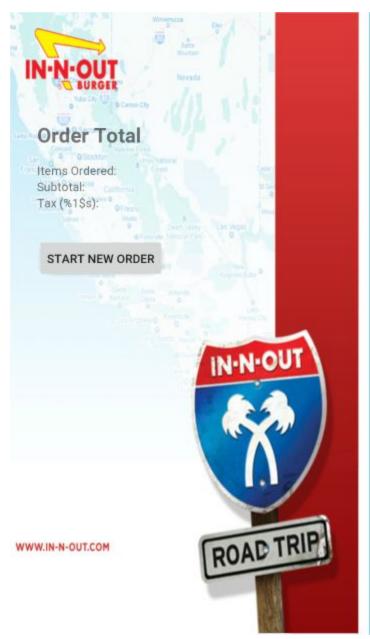

Design

`activity_order.xml`
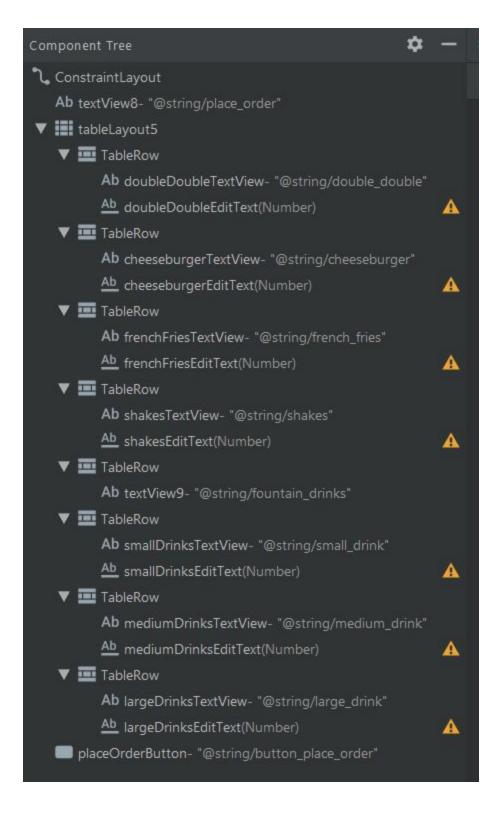
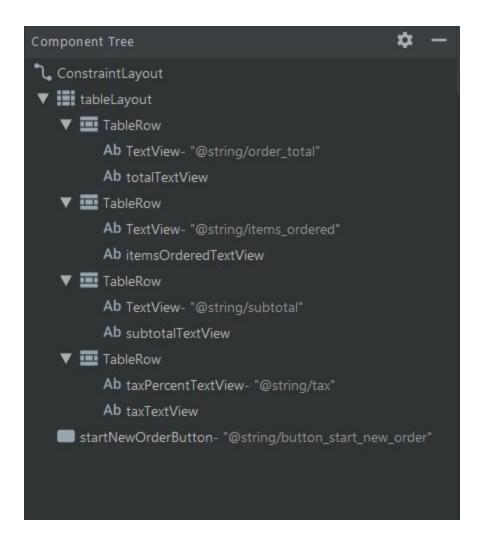**activity_summary.xml**

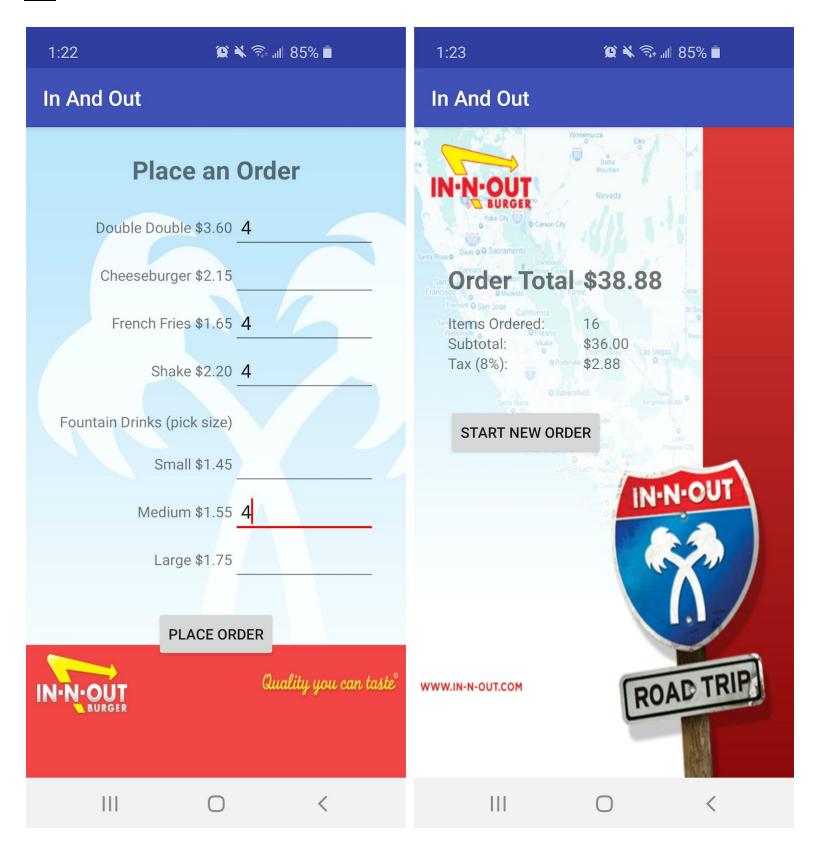## Order Total

Items Ordered:
Subtotal:
Tax (%1$s):

START NEW ORDER

WWW.IN-N-OUT.COM

Order Total

Items Ordered:
Subtotal:
Tax (%1$s):

START NEW ORDER

Component Tree

activity_order.xml

```
Component Tree                              ⚙  —
⌐ ConstraintLayout
  Ab textView8- "@string/place_order"
  ▼ ▦ tableLayout5
    ▼ ▤ TableRow
        Ab doubleDoubleTextView- "@string/double_double"
        Ab doubleDoubleEditText(Number)                    ⚠
    ▼ ▤ TableRow
        Ab cheeseburgerTextView- "@string/cheeseburger"
        Ab cheeseburgerEditText(Number)                    ⚠
    ▼ ▤ TableRow
        Ab frenchFriesTextView- "@string/french_fries"
        Ab frenchFriesEditText(Number)                     ⚠
    ▼ ▤ TableRow
        Ab shakesTextView- "@string/shakes"
        Ab shakesEditText(Number)                          ⚠
    ▼ ▤ TableRow
        Ab textView9- "@string/fountain_drinks"
    ▼ ▤ TableRow
        Ab smallDrinksTextView- "@string/small_drink"
        Ab smallDrinksEditText(Number)                     ⚠
    ▼ ▤ TableRow
        Ab mediumDrinksTextView- "@string/medium_drink"
        Ab mediumDrinksEditText(Number)                    ⚠
    ▼ ▤ TableRow
        Ab largeDrinksTextView- "@string/large_drink"
        Ab largeDrinksEditText(Number)                     ⚠
  ▧ placeOrderButton- "@string/button_place_order"
```

activity_summary.xml

Component Tree ⚙ —

⌐ ConstraintLayout
▼ ▦ tableLayout
    ▼ ▭ TableRow
        Ab TextView- "@string/order_total"
        Ab totalTextView
    ▼ ▭ TableRow
        Ab TextView- "@string/items_ordered"
        Ab itemsOrderedTextView
    ▼ ▭ TableRow
        Ab TextView- "@string/subtotal"
        Ab subtotalTextView
    ▼ ▭ TableRow
        Ab taxPercentTextView- "@string/tax"
        Ab taxTextView
  ▭ startNewOrderButton- "@string/button_start_new_order"

Demo

Screen 1 (time 1:22):

In And Out

Place an Order

Double Double $3.60   4

Cheeseburger $2.15

French Fries $1.65   4

Shake $2.20   4

Fountain Drinks (pick size)

Small $1.45

Medium $1.55   4

Large $1.75

PLACE ORDER

IN-N-OUT BURGER

Quality you can taste®

Screen 2 (time 1:23):

In And Out

IN-N-OUT BURGER

Order Total $38.88

Items Ordered: 16
Subtotal: $36.00
Tax (8%): $2.88

START NEW ORDER

WWW.IN-N-OUT.COM

ROAD TRIP

Source Code

Order.java

```java
package edu.miracosta.cs134.kking.model;

/**
 * Order : A model representing a single "In And Out" order.
 */
public class Order {

    public static final double PRICE_CHEESEBURGER = 2.15;
    public static final double PRICE_DOUBLE_DOUBLE = 3.60;
    public static final double PRICE_FRENCH_FRIES = 1.65;
    public static final double PRICE_LARGE_DRINK = 1.75;
    public static final double PRICE_MEDIUM_DRINK = 1.55;
    public static final double PRICE_SMALL_DRINK = 1.45;
    public static final double PRICE_SHAKE = 2.20;
    public static final double TAX_RATE = 0.08;

    private int mCheeseburgers, mDoubleDoubles, mFrenchFries, mLargeDrinks, mMediumDrinks,
            mSmallDrinks, mShakes;

    /**
     * Default constructor.
     */
    public Order() { /* empty */ }

    /**
     * Full parameterized constructor.
     *
     * @param doubleDoubles number of "Double Double" cheeseburgers
     * @param cheeseburgers number of cheeseburgers
     * @param frenchFries number of french fries
     * @param shakes number of milkshakes
     * @param smallDrinks number of small soft drinks
     * @param mediumDrinks number of medium soft drinks
     * @param largeDrinks number of large soft drinks
     */
    public Order(int doubleDoubles, int cheeseburgers, int frenchFries, int shakes,
            int smallDrinks, int mediumDrinks, int largeDrinks) {
        mDoubleDoubles = doubleDoubles;
        mCheeseburgers = cheeseburgers;
        mFrenchFries = frenchFries;
        mShakes = shakes;
        mSmallDrinks = smallDrinks;
        mMediumDrinks = mediumDrinks;
        mLargeDrinks = largeDrinks;
    }
```

```java
/**
 * Calculates the subtotal of this order (before tax).
 *
 * @return the subtotal as a multiple of each item and its corresponding cost per unit
 */
public double calculateSubtotal() {
    return (PRICE_CHEESEBURGER * mCheeseburgers) + (PRICE_DOUBLE_DOUBLE * mDoubleDoubles)
            + (PRICE_FRENCH_FRIES * mFrenchFries) + (PRICE_LARGE_DRINK * mLargeDrinks)
            + (PRICE_MEDIUM_DRINK * mMediumDrinks) + (PRICE_SMALL_DRINK * mSmallDrinks)
            + (PRICE_SHAKE * mShakes);
}

/**
 * Calculates the sales tax of this order.
 *
 * @return the product of this order's subtotal and current tax rate
 */
public double calculateTax() {
    return (calculateSubtotal() * TAX_RATE);
}

/**
 * Calculates the total cost of this order.
 *
 * @return the sum of this order's subtotal and sales tax
 */
public double calculateTotal() {
    return (calculateSubtotal() + calculateTax());
}

/**
 * @return the sum of every item in this order
 */
public int getNumberItemsOrdered() {
    return mCheeseburgers + mDoubleDoubles + mFrenchFries + mLargeDrinks
            + mMediumDrinks + mSmallDrinks + mShakes;
}

// region instance variable getters and setters

/**
 * @return the number of cheeseburgers for this Order
 */
public int getCheeseburgers() {
    return mCheeseburgers;
}
```

```java
/**
 * @return the number of Double Doubles for this Order
 */
public int getDoubleDoubles() {
    return mDoubleDoubles;
}

/**
 * @return the number of french fries for this Order
 */
public int getFrenchFries() {
    return mFrenchFries;
}

/**
 * @return the number of large drinks for this Order
 */
public int getLargeDrinks() {
    return mLargeDrinks;
}

/**
 * @return the number of medium drinks for this Order
 */
public int getMediumDrinks() {
    return mMediumDrinks;
}

/**
 * @return the number of small drinks for this Order
 */
public int getSmallDrinks() {
    return mSmallDrinks;
}

/**
 * @return the number of shakes for this Order
 */
public int getShakes() {
    return mShakes;
}

/**
 * @param cheeseburgers the number of cheeseburgers for this order
 */
public void setCheeseburgers(int cheeseburgers) {
    mCheeseburgers = cheeseburgers;
}
```

```java
    /**
     * @param doubleDoubles the number of Double Doubles for this order
     */
    public void setDoubleDoubles(int doubleDoubles) {
        mDoubleDoubles = doubleDoubles;
    }


    /**
     * @param frenchFries the number of french fries for this order
     */
    public void setFrenchFries(int frenchFries) {
        mFrenchFries = frenchFries;
    }


    /**
     * @param largeDrinks the number of large drinks for this order
     */
    public void setLargeDrinks(int largeDrinks) {
        mLargeDrinks = largeDrinks;
    }


    /**
     * @param mediumDrinks the number of medium drinks for this Order
     */
    public void setMediumDrinks(int mediumDrinks) {
        mMediumDrinks = mediumDrinks;
    }


    /**
     * @param smallDrinks the number of small drinks for this Order
     */
    public void setSmallDrinks(int smallDrinks) {
        mSmallDrinks = smallDrinks;
    }


    /**
     * @param shakes the number of shakes for this Order
     */
    public void setShakes(int shakes) {
        mShakes = shakes;
    }

    // endregion instance variables getters and setters

} // End of class Order
```

OrderActivity.java

```java
package edu.miracosta.cs134.kking;

import androidx.appcompat.app.AppCompatActivity;

import android.content.Intent;
import android.os.Bundle;
import android.view.View;
import android.widget.EditText;
import android.widget.TextView;

import java.text.NumberFormat;
import java.util.Locale;

import edu.miracosta.cs134.kking.model.Order;

/**
 * OrderActivity : Controller for launcher activity. Obtains quantities of an In And Out
 * order.
 */
public class OrderActivity extends AppCompatActivity {

    // for helper method setTextViews - IDs for (almost) static TextViews listing each menu
    // item
    private static final int[] TEXT_VIEW_IDS = { R.id.doubleDoubleTextView,
            R.id.cheeseburgerTextView, R.id.frenchFriesTextView, R.id.shakesTextView,
            R.id.smallDrinksTextView, R.id.mediumDrinksTextView, R.id.largeDrinksTextView };

    // for helper method setTextViews - IDs for string values populating the above TextViews
    private static final int[] TEXT_VIEW_STRING_IDS = { R.string.double_double,
            R.string.cheeseburger, R.string.french_fries, R.string.shakes,
            R.string.small_drink, R.string.medium_drink, R.string.large_drink };

    // for helper method setTextViews - price constants from Order
    private static final double[] TEXT_VIEW_PRICES = { Order.PRICE_DOUBLE_DOUBLE,
            Order.PRICE_CHEESEBURGER, Order.PRICE_FRENCH_FRIES, Order.PRICE_SHAKE,
            Order.PRICE_SMALL_DRINK, Order.PRICE_MEDIUM_DRINK, Order.PRICE_LARGE_DRINK };

    // View components
    private EditText doubleDoubleEditText, cheeseburgerEditText, frenchFriesEditText,
            shakesEditText, smallDrinksEditText, mediumDrinksEditText, largeDrinksEditText;

    // Formatting
    NumberFormat currency = NumberFormat.getCurrencyInstance(Locale.getDefault());

    /**
     * Initializes this activity with the following contents:
     * Seven EditText objects for the quantities of each In And Out menu item.
```

```java
     *
     * @param savedInstanceState the re-initialized activity, or null
     */
    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_order);

        // Update TextViews listing each item and its corresponding price
        setTextViews();

        doubleDoubleEditText = findViewById(R.id.doubleDoubleEditText);
        cheeseburgerEditText = findViewById(R.id.cheeseburgerEditText);
        frenchFriesEditText = findViewById(R.id.frenchFriesEditText);
        shakesEditText = findViewById(R.id.shakesEditText);
        smallDrinksEditText = findViewById(R.id.smallDrinksEditText);
        mediumDrinksEditText = findViewById(R.id.mediumDrinksEditText);
        largeDrinksEditText = findViewById(R.id.largeDrinksEditText);
    }


    /**
     * Helper method for TextViews displaying each menu item with a formatted price value
     * received from the Order model.
     */
    private void setTextViews() {
        for (int i = 0; i < TEXT_VIEW_IDS.length; i++) {
            // Obtain formatted String with placeholder for Order price
            String formatted = getString(TEXT_VIEW_STRING_IDS[i],
                    currency.format(TEXT_VIEW_PRICES[i]));
            // Set anonymous TextView with the formatted String
            ((TextView)findViewById(TEXT_VIEW_IDS[i])).setText(formatted);
        }
    }


    /**
     * Launches SummaryActivity with information received from each EditText of this
     * activity.
     *
     * @param v the selected "Place Order" Button
     */
    public void placeOrder(View v) {
        // Set up an Intent
        Intent intent = new Intent(this, SummaryActivity.class);

        // Populate Intent with Order data
        intent.putExtra("DoubleDoubles", getValidInput(doubleDoubleEditText));
        intent.putExtra("Cheeseburgers", getValidInput(cheeseburgerEditText));
        intent.putExtra("FrenchFries", getValidInput(frenchFriesEditText));
        intent.putExtra("Shakes", getValidInput(shakesEditText));
```

```java
            intent.putExtra("SmallDrinks", getValidInput(smallDrinksEditText));
            intent.putExtra("MediumDrinks", getValidInput(mediumDrinksEditText));
            intent.putExtra("LargeDrinks", getValidInput(largeDrinksEditText));

            // Go to SummaryActivity
            startActivity(intent);
        }

        /**
         * Helper method for obtaining Order data from EditTexts, which may return empty Strings.
         *
         * @param numberEditText an EditText indicating a quantity of an item for this Order
         * @return an integer parsed from the given EditText, or 0
         */
        private int getValidInput(EditText numberEditText) {
            String numberString = numberEditText.getText().toString();

            if (numberString.length() > 0) {
                return Integer.parseInt(numberString);
            }
            return 0;
        }

} // End of class OrderActivity
```

SummaryActivity.java

```java
package edu.miracosta.cs134.kking;

import androidx.appcompat.app.AppCompatActivity;

import android.content.Intent;
import android.os.Bundle;
import android.view.View;
import android.widget.TextView;

import java.text.NumberFormat;
import java.util.Locale;

import edu.miracosta.cs134.kking.model.Order;

/**
 * SummaryActivity : Controller for activity sent from OrderActivity. Uses the Order model to
 * process an In And Out order for a calculated quantity of items, subtotal, tax, and total.
 */
public class SummaryActivity extends AppCompatActivity {

    // View components
    private TextView totalTextView, itemsOrderedTextView, subtotalTextView, taxTextView,
```

```java
        taxPercentTextView;

    // Models
    private Order order;

    // Formatting
    private NumberFormat currency = NumberFormat.getCurrencyInstance(Locale.getDefault());
    private NumberFormat percent = NumberFormat.getPercentInstance(Locale.getDefault());

    /**
     * Initializes this activity with the following contents:
     * TextViews presenting a number of items, subtotal, tax, and total cost of an In And Out
     * Order,
     * An Order to calculate information received from OrderActivity.
     *
     * @param savedInstanceState the re-initialized activity, or null
     */
    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_summary);

        // Wire up Views
        totalTextView = findViewById(R.id.totalTextView);
        itemsOrderedTextView = findViewById(R.id.itemsOrderedTextView);
        subtotalTextView = findViewById(R.id.subtotalTextView);
        taxTextView = findViewById(R.id.taxTextView);
        taxPercentTextView = findViewById(R.id.taxPercentTextView);

        // Update taxPercentTextView
        taxPercentTextView.setText(getString(R.string.tax, percent.format(Order.TAX_RATE)));

        // Extract data from Intent
        Intent intent = getIntent();
        int doubleDoubles = intent.getIntExtra("DoubleDoubles", 0);
        int cheeseburgers = intent.getIntExtra("Cheeseburgers", 0);
        int frenchFries = intent.getIntExtra("FrenchFries", 0);
        int shakes = intent.getIntExtra("Shakes", 0);
        int smallDrinks = intent.getIntExtra("SmallDrinks", 0);
        int mediumDrinks = intent.getIntExtra("MediumDrinks", 0);
        int largeDrinks = intent.getIntExtra("LargeDrinks", 0);

        // Create new Order (not the English band founded in 1980) with given data
        order = new Order(doubleDoubles, cheeseburgers, frenchFries, shakes, smallDrinks,
                mediumDrinks, largeDrinks);

        // Populate TextViews with Order data
        totalTextView.setText(currency.format(order.calculateTotal()));
        itemsOrderedTextView.setText(String.valueOf(order.getNumberItemsOrdered()));
```

```java
        subtotalTextView.setText(currency.format(order.calculateSubtotal()));
        taxTextView.setText(currency.format(order.calculateTax()));
    }

    /**
     * Returns to OrderActivity.
     *
     * @param v the selected "Start New Order" Button
     */
    public void startNewOrder(View v) {
        finish();
    }

} // End of class SummaryActivity
```

strings.xml

```xml
<resources>
    <string name="app_name">In And Out</string>

    <!--OrderActivity-->
    <string name="place_order">Place an Order</string>
    <string name="double_double" formatted="true">Double Double %1$s</string>
    <string name="cheeseburger" formatted="true">Cheeseburger %1$s</string>
    <string name="french_fries" formatted="true">French Fries %1$s</string>
    <string name="shakes" formatted="true">Shake %1$s</string>
    <string name="fountain_drinks">Fountain Drinks (pick size)</string>
    <string name="small_drink" formatted="true">Small %1$s</string>
    <string name="medium_drink" formatted="true">Medium %1$s</string>
    <string name="large_drink" formatted="true">Large %1$s</string>
    <string name="button_place_order">Place Order</string>

    <!--SummaryActivity-->
    <string name="order_total">Order Total</string>
    <string name="items_ordered">Items Ordered:</string>
    <string name="subtotal">Subtotal:</string>
    <string name="tax" formatted="true">Tax (%1$s):</string>
    <string name="button_start_new_order">Start New Order</string>
</resources>
```

strings.xml (es)

```xml
<?xml version="1.0" encoding="utf-8"?>
<resources>
    <string name="app_name">Dentro y Fuera</string>

    <!--OrderActivity-->
    <string name="place_order">Hacer un Pedido</string>
```

```xml
        <string name="double_double" formatted="true">Double Double %1$s</string>
        <string name="cheeseburger" formatted="true">Hamburguesa con Queso %1$s</string>
        <string name="french_fries" formatted="true">Papas Fritas %1$s</string>
        <string name="shakes" formatted="true">Malteada %1$s</string>
        <string name="fountain_drinks">Bebidas de la Fuente (elegir tamaño)</string>
        <string name="small_drink" formatted="true">Pequeño %1$s</string>
        <string name="medium_drink" formatted="true">Medio %1$s</string>
        <string name="large_drink" formatted="true">Grande %1$s</string>
        <string name="button_place_order">Realizar Pedido</string>

        <!--SummaryActivity-->
        <string name="order_total">Total del Pedido</string>
        <string name="items_ordered">Artículos Ordenados:</string>
        <string name="subtotal">Total Parcial:</string>
        <string name="tax" formatted="true">Impuesto (%1$s):</string>
        <string name="button_start_new_order" formatted="true">Iniciar Nuevo Pedido</string>
</resources>
```

activity_order.xml

```xml
<?xml version="1.0" encoding="utf-8"?>
<androidx.constraintlayout.widget.ConstraintLayout
xmlns:android="http://schemas.android.com/apk/res/android"
    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:background="@drawable/order_background"
    tools:context=".OrderActivity">

    <TextView
        android:id="@+id/textView8"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_marginTop="24dp"
        android:text="@string/place_order"
        android:textSize="24sp"
        android:textStyle="bold"
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toTopOf="parent" />

    <TableLayout
        android:id="@+id/tableLayout5"
        android:layout_width="0dp"
        android:layout_height="wrap_content"
        android:layout_marginStart="32dp"
        android:layout_marginTop="16dp"
        android:layout_marginEnd="32dp"
```

```xml
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toBottomOf="@+id/textView8">

    <TableRow
        android:layout_width="match_parent"
        android:layout_height="match_parent">

        <TextView
            android:id="@+id/doubleDoubleTextView"
            android:layout_width="wrap_content"
            android:layout_height="wrap_content"
            android:layout_gravity="center_vertical|end"
            android:text="@string/double_double" />

        <EditText
            android:id="@+id/doubleDoubleEditText"
            android:layout_width="wrap_content"
            android:layout_height="wrap_content"
            android:layout_gravity="start"
            android:ems="10"
            android:inputType="number"
            android:maxLength="5"
            android:paddingStart="8dp"
            android:paddingEnd="0dp" />
    </TableRow>

    <TableRow
        android:layout_width="match_parent"
        android:layout_height="match_parent">

        <TextView
            android:id="@+id/cheeseburgerTextView"
            android:layout_width="wrap_content"
            android:layout_height="wrap_content"
            android:layout_gravity="center_vertical|end"
            android:text="@string/cheeseburger" />

        <EditText
            android:id="@+id/cheeseburgerEditText"
            android:layout_width="wrap_content"
            android:layout_height="wrap_content"
            android:layout_gravity="start"
            android:ems="10"
            android:inputType="number"
            android:maxLength="5"
            android:paddingStart="8dp"
            android:paddingEnd="0dp" />
    </TableRow>
```

```xml
<TableRow
    android:layout_width="match_parent"
    android:layout_height="match_parent">

    <TextView
        android:id="@+id/frenchFriesTextView"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_gravity="center_vertical|end"
        android:text="@string/french_fries" />

    <EditText
        android:id="@+id/frenchFriesEditText"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_gravity="start"
        android:ems="10"
        android:inputType="number"
        android:maxLength="5"
        android:paddingStart="8dp"
        android:paddingEnd="0dp" />
</TableRow>

<TableRow
    android:layout_width="match_parent"
    android:layout_height="match_parent">

    <TextView
        android:id="@+id/shakesTextView"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_gravity="center_vertical|end"
        android:text="@string/shakes" />

    <EditText
        android:id="@+id/shakesEditText"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_gravity="start"
        android:ems="10"
        android:inputType="number"
        android:maxLength="5"
        android:paddingStart="8dp"
        android:paddingEnd="0dp" />
</TableRow>

<TableRow
    android:layout_width="match_parent"
```

```xml
        android:layout_height="match_parent"
        android:layout_marginTop="16dp"
        android:layout_marginBottom="8dp">

        <TextView
            android:id="@+id/textView9"
            android:layout_width="wrap_content"
            android:layout_height="wrap_content"
            android:layout_gravity="end"
            android:text="@string/fountain_drinks" />
    </TableRow>

    <TableRow
        android:layout_width="match_parent"
        android:layout_height="match_parent">

        <TextView
            android:id="@+id/smallDrinksTextView"
            android:layout_width="wrap_content"
            android:layout_height="wrap_content"
            android:layout_gravity="center_vertical|end"
            android:text="@string/small_drink" />

        <EditText
            android:id="@+id/smallDrinksEditText"
            android:layout_width="wrap_content"
            android:layout_height="wrap_content"
            android:layout_gravity="start"
            android:ems="10"
            android:inputType="number"
            android:maxLength="5"
            android:paddingStart="8dp"
            android:paddingEnd="0dp" />
    </TableRow>

    <TableRow
        android:layout_width="match_parent"
        android:layout_height="match_parent">

        <TextView
            android:id="@+id/mediumDrinksTextView"
            android:layout_width="wrap_content"
            android:layout_height="wrap_content"
            android:layout_gravity="center_vertical|end"
            android:text="@string/medium_drink" />

        <EditText
            android:id="@+id/mediumDrinksEditText"
            android:layout_width="wrap_content"
```

```xml
                android:layout_height="wrap_content"
                android:layout_gravity="start"
                android:ems="10"
                android:inputType="number"
                android:maxLength="5"
                android:paddingStart="8dp"
                android:paddingEnd="0dp" />
        </TableRow>

        <TableRow
            android:layout_width="match_parent"
            android:layout_height="match_parent">

            <TextView
                android:id="@+id/largeDrinksTextView"
                android:layout_width="wrap_content"
                android:layout_height="wrap_content"
                android:layout_gravity="center_vertical|end"
                android:text="@string/large_drink" />

            <EditText
                android:id="@+id/largeDrinksEditText"
                android:layout_width="wrap_content"
                android:layout_height="wrap_content"
                android:layout_gravity="start"
                android:ems="10"
                android:inputType="number"
                android:maxLength="5"
                android:paddingStart="8dp"
                android:paddingEnd="0dp" />
        </TableRow>

    </TableLayout>

    <Button
        android:id="@+id/placeOrderButton"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_marginTop="24dp"
        android:onClick="placeOrder"
        android:text="@string/button_place_order"
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toBottomOf="@+id/tableLayout5" />

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

activity_summary.xml

```xml
<?xml version="1.0" encoding="utf-8"?>
<androidx.constraintlayout.widget.ConstraintLayout
xmlns:android="http://schemas.android.com/apk/res/android"
    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:background="@drawable/summary_background"
    tools:context=".SummaryActivity">

    <TableLayout
        android:id="@+id/tableLayout"
        android:layout_width="0dp"
        android:layout_height="wrap_content"
        android:layout_marginStart="32dp"
        android:layout_marginTop="128dp"
        android:layout_marginEnd="32dp"
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toTopOf="parent">

        <TableRow
            android:layout_width="match_parent"
            android:layout_height="match_parent"
            android:layout_marginBottom="16dp">

            <TextView
                android:layout_width="wrap_content"
                android:layout_height="wrap_content"
                android:paddingStart="0dp"
                android:paddingEnd="8dp"
                android:text="@string/order_total"
                android:textSize="24sp"
                android:textStyle="bold" />

            <TextView
                android:id="@+id/totalTextView"
                android:layout_width="wrap_content"
                android:layout_height="wrap_content"
                android:textSize="24sp"
                android:textStyle="bold" />
        </TableRow>

        <TableRow
            android:layout_width="match_parent"
            android:layout_height="match_parent">
```

```xml
        <TextView
            android:layout_width="wrap_content"
            android:layout_height="wrap_content"
            android:text="@string/items_ordered" />

        <TextView
            android:id="@+id/itemsOrderedTextView"
            android:layout_width="wrap_content"
            android:layout_height="wrap_content" />
    </TableRow>

    <TableRow
        android:layout_width="match_parent"
        android:layout_height="match_parent">

        <TextView
            android:layout_width="wrap_content"
            android:layout_height="wrap_content"
            android:text="@string/subtotal" />

        <TextView
            android:id="@+id/subtotalTextView"
            android:layout_width="wrap_content"
            android:layout_height="wrap_content" />
    </TableRow>

    <TableRow
        android:layout_width="match_parent"
        android:layout_height="match_parent">

        <TextView
            android:id="@+id/taxPercentTextView"
            android:layout_width="wrap_content"
            android:layout_height="wrap_content"
            android:text="@string/tax" />

        <TextView
            android:id="@+id/taxTextView"
            android:layout_width="wrap_content"
            android:layout_height="wrap_content" />
    </TableRow>
</TableLayout>

<Button
    android:id="@+id/startNewOrderButton"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_marginStart="32dp"
    android:layout_marginTop="32dp"
```

```
        android:onClick="startNewOrder"
        android:text="@string/button_start_new_order"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toBottomOf="@+id/tableLayout" />
</androidx.constraintlayout.widget.ConstraintLayout>
```