Universidad de Colima

Facultad de Telemática

Ingeniería de software

Programación de Móviles

Trabajo independiente- Dibujar: pintar fondo y dibujar líneas en Android Studio con kotlin

Tercera parcial

Almno. Angel Isaac Bejarano Flores
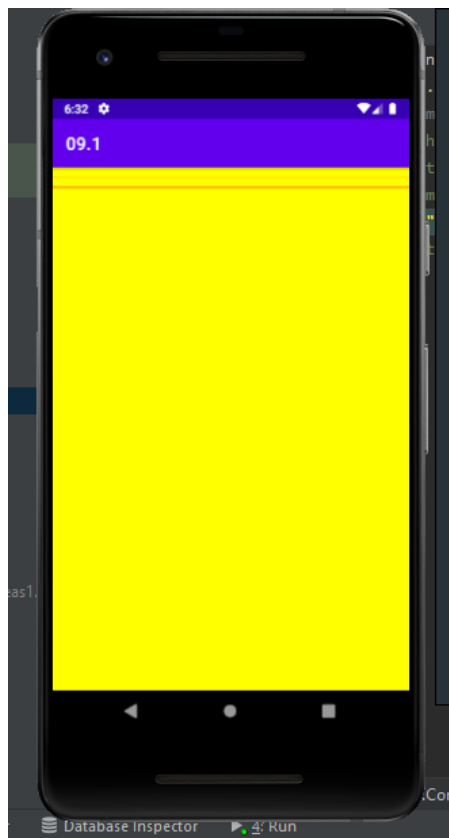
5°D

Mtro. Armando Román Gallardo

Martes 8 de diciembre de 2020. Manzanillo, Col.

Parte 1

activity_main.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:id="@+id/layout1"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    tools:context=".MainActivity" />
```

Interfaz

MainActivity.kt

```kotlin
package com.example.dibujarfondolineas1

import android.content.Context
import android.graphics.Canvas
import android.graphics.Paint
import android.opengl.ETC1.getWidth
import androidx.appcompat.app.AppCompatActivity
import android.os.Bundle
import android.view.View
import kotlinx.android.synthetic.main.activity_main.*
```

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

        val fondo = Lienzo(this)
        layout1.addView(fondo)
    }

    class Lienzo(context: Context) : View(context) {

        override fun onDraw(canvas: Canvas) {
            canvas.drawRGB(255, 255, 0)
            val ancho = getWidth()
            val pincel1 = Paint()
            pincel1.setARGB(255, 255, 0, 0)
            canvas.drawLine(0f, 30f, ancho.toFloat(), 30f, pincel1)
            pincel1.setStrokeWidth(4f)
            canvas.drawLine(0f, 60f, ancho.toFloat(), 60f, pincel1)
        }
    }
}
```
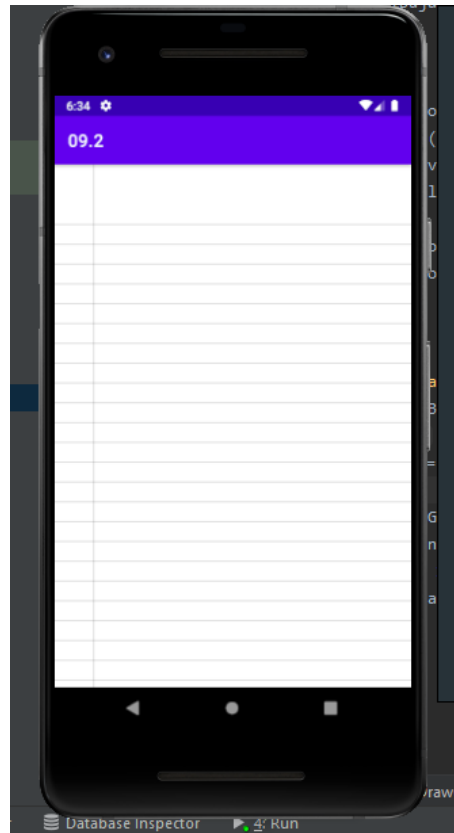
Parte 2

activity_main.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:id="@+id/layout1"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    tools:context=".MainActivity" />
```

Interfaz

MainActivity.kt

```kotlin
package com.example.dibujarfondolineas

import android.content.Context
import android.graphics.Canvas
import android.graphics.Paint
import android.opengl.ETC1
import android.opengl.ETC1.getHeight
import android.opengl.ETC1.getWidth
import androidx.appcompat.app.AppCompatActivity
import android.os.Bundle
import android.view.View
import kotlinx.android.synthetic.main.activity_main.*

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

        val fondo = Lienzo(this)
        layout1.addView(fondo)
    }
    class Lienzo(context: Context) : View(context) {

        override fun onDraw(canvas: Canvas) {
            canvas.drawRGB(255, 255, 255)
            val ancho = getWidth()
```

```kotlin
            val alto= getHeight()
            val pincel1 = Paint()
            pincel1.setARGB(255, 0, 0, 0)
            canvas.drawLine(120f, 0f, 120f, alto.toFloat(), pincel1)
            for(x in 1..(alto/50)) {
                canvas.drawLine(0f, (x*60+120).toFloat(), ancho.toFloat(),
(x*60+120).toFloat(), pincel1)
            }
        }
    }
}
```