Лаба 1-7 Тысленко Егор ис221

Лаба
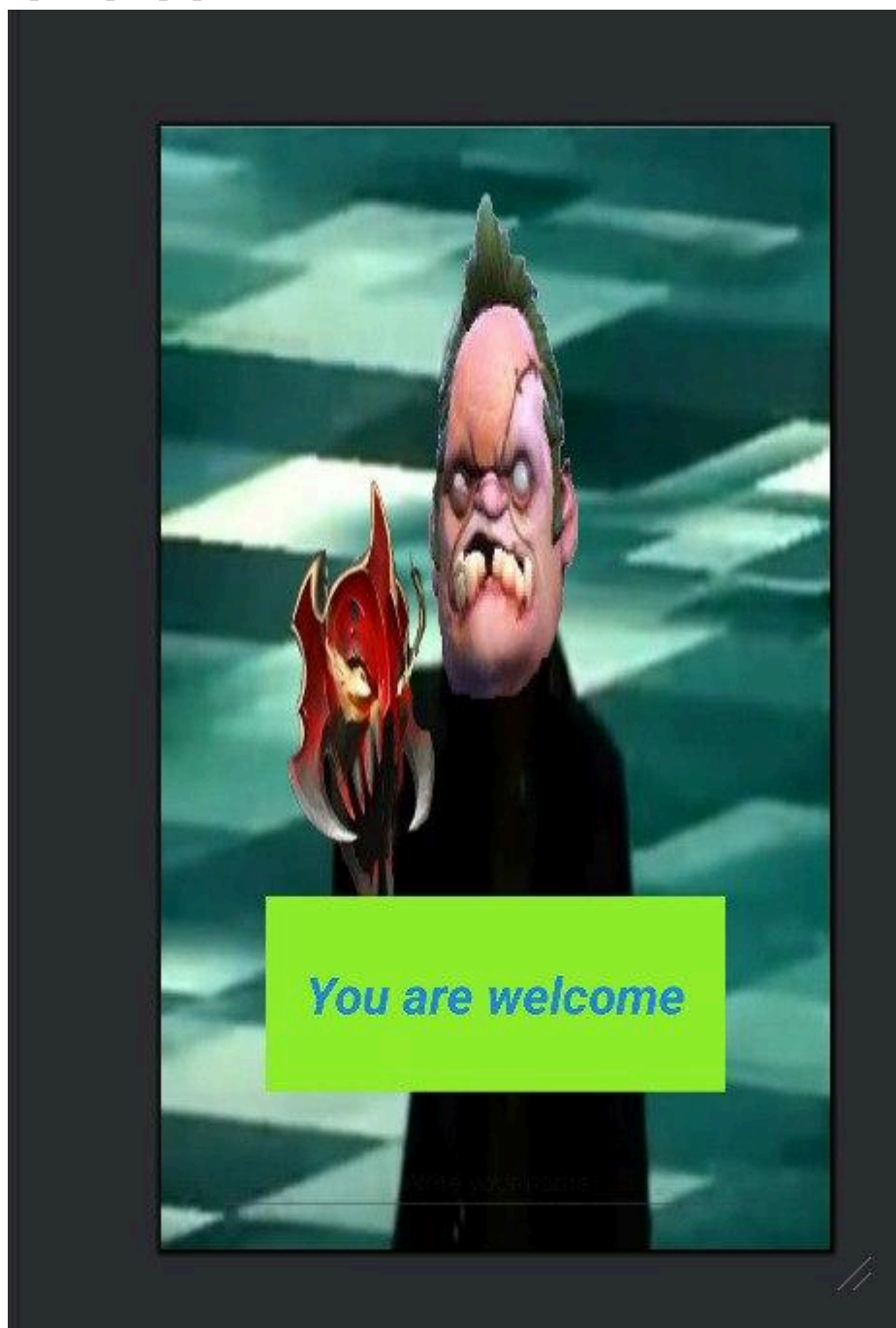
Создаем среду textView и пишем в нее параметры

```xml
<TextView

    android:id="@+id/textView3"
    android:layout_width="317dp"
    android:layout_height="134dp"
    android:layout_gravity="center"
    android:background="@color/green"
    android:gravity="center"
    android:text="You are welcome"
    android:textColor="@color/blue"
    android:textSize="35sp"
    android:textStyle="bold|italic"
    app:layout_constraintBottom_toBottomOf="parent"
    app:layout_constraintEnd_toEndOf="parent"
    app:layout_constraintStart_toStartOf="parent"
    app:layout_constraintTop_toTopOf="parent"
    app:layout_constraintVertical_bias="0.83" />
```

Создаем среду editText и пишем в нее параметры

```xml
<EditText
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
    app:layout_constraintStart_toStartOf="parent"
    app:layout_constraintTop_toBottomOf="@+id/textView3"
    android:layout_margin="40dp"
    android:hint="@string/str2"
    android:gravity="center"
    android:textColor="@color/green"/>
```

Пример оформления

Меняем цвет фона

```xml
<TextView
    android:id="@+id/textView3"
    android:layout_width="317dp"
    android:layout_height="134dp"
    android:layout_gravity="center"
    android:background=""
    android:gravity="center"
    android:text="@string/ffewfewfw"
    android:textColor="@color/blue"
    android:textSize="35sp"
    android:textStyle="bold|italic"
    app:layout_constraintBottom_toBottomOf="parent"
    app:layout_constraintEnd_toEndOf="parent"
    app:layout_constraintStart_toStartOf="parent"
    app:layout_constraintTop_toTopOf="parent"
    app:layout_constraintVertical_bias="0.83"
    android:fontFamily="monospace"/>
```
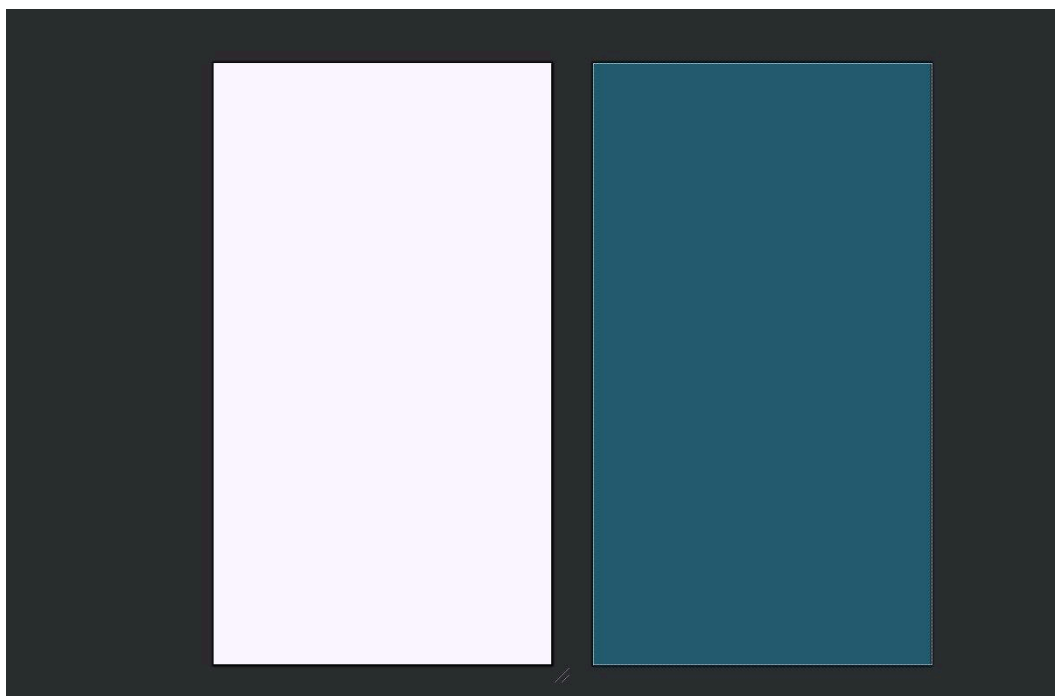
Создаем класс кнопки

```xml
<Button
    android:id="@+id/btn_1"
    android:layout_width="275dp"
    android:layout_height="53dp"
    android:layout_marginBottom="20dp"
    app:layout_constraintBottom_toTopOf="@+id/textView3"
    app:layout_constraintEnd_toEndOf="parent"
    app:layout_constraintStart_toStartOf="parent"
    android:text="START"/>
```
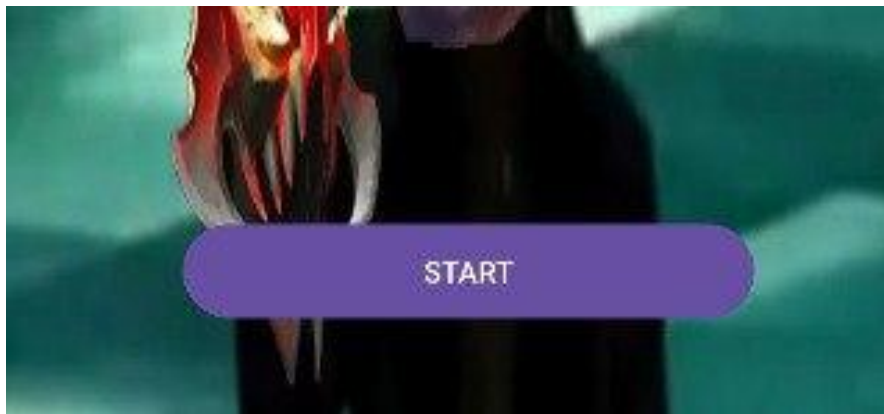
```kotlin
val btn: Button = findViewById(R.id.btn_1)
btn.setOnClickListener{
    val intent  = Intent( packageContext: this, MainActivity2::class.java)
    startActivity(intent)
```

Создаем вторую страницу чтоб передать параметры в нашу кнопку

```kotlin
package com.example.first1uno

import ...

class MainActivity2 : AppCompatActivity() {
    override fun onCreate(savedInstanceState: Bundle?) {
        super.onCreate(savedInstanceState)
        enableEdgeToEdge()
        setContentView(R.layout.activity_main2)
        ViewCompat.setOnApplyWindowInsetsListener(findViewById(R.id.main)) { v, insets ->
            val systemBars = insets.getInsets(WindowInsetsCompat.Type.systemBars())
            v.setPadding(systemBars.left, systemBars.top, systemBars.right, systemBars.bottom)
            insets
        }
    }
}
```

Вот так выглядит наша кнопка

Наше пива

```xml
<resources>
    <string name="app_name">seconddwatwo</string>
    <string-array name="type_beer">
        <item>Темное</item>
        <item>Светлое</item>
        <item>Фруктовое</item>
        <item>Горькое</item>
        <item>Ржанное</item>
    </string-array>
</resources>
```

Наша кнопка и спиннер

```xml
<Button
    android:id="@+id/btn1"
    android:layout_width="166dp"
    android:layout_height="66dp"
    android:layout_marginBottom="60dp"
    android:text="Узнать пиво"
    app:layout_constraintBottom_toTopOf="@+id/beerra
    app:layout_constraintEnd_toEndOf="parent"
    app:layout_constraintHorizontal_bias="0.485"
    app:layout_constraintStart_toStartOf="parent"
    app:layout_constraintTop_toTopOf="parent"
    app:layout_constraintVertical_bias="1.0" />
```

```xml
<TextView
    android:id="@+id/tvBeer"
    android:layout_width="299dp"
    android:layout_height="86dp"
    android:layout_margin="10dp"
    android:gravity="center"
    android:text="ТИП ПИВА!"
    android:textSize="26dp"
    app:layout_constraintBottom_toBottomOf="parent"
    app:layout_constraintEnd_toEndOf="parent"
    app:layout_constraintStart_toStartOf="parent"
    app:layout_constraintTop_toTopOf="parent"
    app:layout_constraintVertical_bias="0.282" />

<Spinner
    android:id="@+id/beerrand"
    android:layout_width="169dp"
    android:layout_height="80dp"
    android:layout_marginBottom="168dp"
    android:gravity="center"
    app:layout_constraintBottom_toBottomOf="parent"
    app:layout_constraintEnd_toEndOf="parent"
    app:layout_constraintStart_toStartOf="parent"
    app:layout_constraintTop_toBottomOf="@+id/tvBeer"
    app:layout_constraintVertical_bias="1.0"
    android:entries="@array/type_beer"
    />
```

Прописываем код для того чтоб спиннер выдал нам вкусное пиво

```kotlin
import ...

class MainActivity : AppCompatActivity() {
    override fun onCreate(savedInstanceState: Bundle?) {
        super.onCreate(savedInstanceState)
        enableEdgeToEdge()
        setContentView(R.layout.activity_main)
        ViewCompat.setOnApplyWindowInsetsListener(findViewById(R.id.main)) { v, insets ->
            val systemBars = insets.getInsets(WindowInsetsCompat.Type.systemBars())
            v.setPadding(systemBars.left, systemBars.top, systemBars.right, systemBars.bottom)
            insets
        }
        val btnBeer : Button = findViewById(R.id.btn1)
        val tvBeer : TextView = findViewById(R.id.tvBeer)
        val spinnerbeer : Spinner = findViewById(R.id.beerrand)
        btnBeer.setOnClickListener{
            val type = spinnerbeer.selectedItem
            tvBeer.text = ("Ваш тип пива $type")
        }

    }
}
```

Таймер

```xml
<Button
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:text="Start"
    android:id="@+id/btnstart"
    tools:layout_editor_absoluteX="38dp"
    tools:layout_editor_absoluteY="434dp" />

<Button
    android:id="@+id/btnpause"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:text="Pause"
    tools:layout_editor_absoluteX="157dp"
    tools:layout_editor_absoluteY="434dp" />

<Button
    android:id="@+id/btnreset"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:text="Reset"
    tools:layout_editor_absoluteX="281dp"
    tools:layout_editor_absoluteY="434dp" />

<Chronometer
    android:id="@+id/textTime"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_gravity="center"
    android:textSize="80sp"
    app:layout_constraintTop_toTopOf="@+id/btnpause"
    tools:layout_editor_absoluteX="27dp" />

LinearLayout>
```

```kotlin
class MainActivity : AppCompatActivity() {
    lateinit var chronometr: Chronometer
    var running: Boolean = false
    var offset: Long = 0
    val OFFSET_KEY = "offset"
    val RUNNING_KEY = "running"
    val BASE_KEY = "base_key"


    @SuppressLint("MissingInflatedId")
    override fun onCreate(savedInstanceState: Bundle?) {
        super.onCreate(savedInstanceState)
        enableEdgeToEdge()
        setContentView(R.layout.activity_main)
        ViewCompat.setOnApplyWindowInsetsListener(findViewById(R.id.main)) { v, insets ->
            val systemBars = insets.getInsets(WindowInsetsCompat.Type.systemBars())
            v.setPadding(systemBars.left, systemBars.top, systemBars.right, systemBars.bo
            insets

        }
        chronometr = findViewById(R.id.textTime)
        val btnStart = findViewById<Button>(R.id.btnstart)
        val btnReset = findViewById<Button>(R.id.btnreset)
        val btnPause = findViewById<Button>(R.id.btnpause)
        if(savedInstanceState != null) {
            offset = savedInstanceState.getLong(OFFSET_KEY)
            running = savedInstanceState.getBoolean(RUNNING_KEY)
            if (running) {
                chronometr.base = savedInstanceState.getLong(BASE_KEY)
                chronometr.start()
            } else setBaseTime()
```

```xml
<resources>
    <string name="app_name">cuatrofour4</string>
    <string name="start">Start</string>
    <string name="pause">Pause</string>
    <string name="reset">Reset</string>
</resources>
```

Машины + реклама

```xml
<TextView
    android:id="@+id/textView"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:text="Привет!"
    android:textSize="40dp"
    app:layout_constraintBottom_toBottomOf="parent"
    app:layout_constraintEnd_toEndOf="parent"
    app:layout_constraintHorizontal_bias="0.532"
    app:layout_constraintStart_toStartOf="parent"
    app:layout_constraintTop_toTopOf="parent"
    app:layout_constraintVertical_bias="0.323" />

<CheckBox
    android:id="@+id/cbCar"
    android:layout_width="97dp"
    android:layout_height="54dp"
    android:text="Машина"
    app:layout_constraintBottom_toTopOf="@+id/btnChoose"
    app:layout_constraintEnd_toEndOf="parent"
    app:layout_constraintStart_toStartOf="parent"
    app:layout_constraintTop_toBottomOf="@+id/textView" />

<CheckBox
    android:id="@+id/cbBus"
    android:layout_width="103dp"
    android:layout_height="52dp"
    android:layout_marginEnd="20dp"
    android:text="Автобус"
    app:layout_constraintBottom_toTopOf="@+id/btnChoose"
    app:layout_constraintEnd_toEndOf="parent"
    app:layout_constraintStart_toEndOf="@+id/cbCar"
    app:layout_constraintTop_toBottomOf="@+id/textView" />
```

Мы выбираем тип машины

```xml
<CheckBox
    android:id="@+id/cbTrack"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:text="Трактор"
    app:layout_constraintBottom_toTopOf="@+id/btnChoose"
    app:layout_constraintEnd_toStartOf="@+id/cbCar"
    app:layout_constraintHorizontal_bias="0.757"
    app:layout_constraintStart_toStartOf="parent"
    app:layout_constraintTop_toBottomOf="@+id/textView"
    app:layout_constraintVertical_bias="0.507" />

<Button
    android:id="@+id/btnChoose"
    android:layout_width="166dp"
    android:layout_height="76dp"
    android:gravity="center"
    android:text="Выбор"
    app:layout_constraintBottom_toBottomOf="parent"
    app:layout_constraintEnd_toEndOf="parent"
    app:layout_constraintHorizontal_bias="0.538"
    app:layout_constraintStart_toStartOf="parent"
    app:layout_constraintTop_toBottomOf="@+id/textView"
    app:layout_constraintVertical_bias="0.48" />

<TextView
    android:id="@+id/tvChoose"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_gravity="center"
    android:textSize="40dp"
    app:layout_constraintBottom_toBottomOf="parent"
    app:layout_constraintEnd_toEndOf="parent"
    app:layout_constraintStart_toStartOf="parent"
    app:layout_constraintTop_toBottomOf="@+id/btnChoose" />

<WebView
```

Веб ссылка (забыл заскринить код для того чтоб работало)

```xml
<?xml version="1.0" encoding="utf-8"?>
<manifest xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:tools="http://schemas.android.com/tools">
<uses-permission android:name="android.permission.INTERNET"/>


    <application
        android:allowBackup="true"
        android:dataExtractionRules="@xml/data_extraction_rules"
        android:fullBackupContent="@xml/backup_rules"
        android:icon="@mipmap/ic_launcher"
        android:label="3third"
        android:roundIcon="@mipmap/ic_launcher_round"
        android:supportsRtl="true"
        android:theme="@style/Theme._3third"
        tools:targetApi="31">
        <activity
            android:name=".MainActivity"
            android:exported="true">
            <intent-filter>
                <action android:name="android.intent.action.MAIN" />

                <category android:name="android.intent.category.LAUNCHER" />
            </intent-filter>
        </activity>
    </application>

</manifest>
```

```xml
<WebView
    android:id="@+id/wvMain"
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
    android:layout_marginStart="8dp"
    app:layout_constraintBottom_toTopOf="@+id/textView
    app:layout_constraintStart_toStartOf="parent"
    app:layout_constraintTop_toTopOf="parent"
    app:layout_constraintVertical_bias="0.08" />
```

Прописываем изображение и список

```xml
<?xml version="1.0" encoding="utf-8"?>
<androidx.constraintlayout.widget.ConstraintLayout xmlns:android="http://schemas.android.com/apk/res/andro
    xmlns:app="http://schemas.android.com/apk/res-auto"
    xmlns:tools="http://schemas.android.com/tools"
    android:id="@+id/main"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    tools:context=".MainActivity">


    <ListView
        android:id="@+id/lvMain"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        app:layout_constraintBottom_toBottomOf="parent"
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toTopOf="parent" />


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

```xml
<?xml version="1.0" encoding="utf-8"?>
<LinearLayout xmlns:android="http://schemas.android.com/apk/res/android"
    android:layout_width="match_parent"
    android:layout_height="match_parent">

    <ImageView
        android:id="@+id/ImageView"
        android:layout_width="84dp"
        android:layout_height="86dp"
        android:layout_margin="15dp"
         />


    <TextView
        android:layout_width="196dp"
        android:layout_height="53dp"
        android:layout_margin="15dp"
        android:text="Some text"
        android:textSize="52px"
        android:id="@+id/tvList"/>
</LinearLayout>
```

Пропишим акшены

```kotlin
        }
        val adapter = Adapte( context: this, items)
        listView.adapter = adapter
        listView.setOnItemClickListener { parent, view, position, id ->
            val selectedItem = items[position]
            when (selectedItem.action) {
                "Action1" -> {
                    Toast.makeText( context: this, text: "Первый элемент списка", Toast.LENGTH_SHORT).show()
                }
                "Action2" -> {
                    Toast.makeText( context: this, text: "Второй элемент списка", Toast.LENGTH_SHORT).show()
                }

                "Action3" -> Toast.makeText( context: this, text: "Третий элемент списка", Toast.LENGTH_SHORT).show()
            }
        }


    }

}
```

Добавим дата класс (он очень важен)

```kotlin
package com.example.cincofive5

data class lists(val imageR:Int,  val text: String,val action : String)
```

Осталось прописать листы

```kotlin
package com.example.cincofive5

import ...

class MainActivity : AppCompatActivity() {
    @SuppressLint("MissingInflatedId")
    override fun onCreate(savedInstanceState: Bundle?) {
        super.onCreate(savedInstanceState)
        enableEdgeToEdge()
        setContentView(R.layout.activity_main)
        ViewCompat.setOnApplyWindowInsetsListener(findViewById(R.id.main)) { v, insets ->
            val systemBars = insets.getInsets(WindowInsetsCompat.Type.systemBars())
            v.setPadding(systemBars.left, systemBars.top, systemBars.right, systemBars.bottom)
            insets
        }
        val items = listOf(
            lists(R.drawable.cat, text: "Hello", action: "Action1"),
            lists(R.drawable.cat, text: "H", action: "Action2"),
            lists(R.drawable.cat, text: "AAA", action: "Action3"),
            lists(R.drawable.cat, text: "HHHH", action: "Action4"),
            lists(R.drawable.cat, text: "SSSS", action: "Action5"),
            lists(R.drawable.cat, text: "IIIII", action: "Action6")
        )
        val listView : ListView = findViewById(R.id.lvMain)
        val arrayAdapter : ArrayAdapter<*>
        val names = arrayOf("Misha","Sasho","Grisha","VaZya")
        arrayAdapter = ArrayAdapter( context: this, android.R.layout.simple_list_item_1, names)
        listView.adapter = arrayAdapter
        listView.setOnItemClickListener { parent, view, position, id ->
            val selectItem =  names[position]
            Toast.makeText( context: this, text: "Вы нажали на элемент", Toast.LENGTH_SHORT).show()
```