Bài tập 1: Trong bài luyện tập 1, viết code để mỗi khi chạy lên sẽ ra một màu nền khác nhau

và 1 icon khác nhau.

Ảnh có chứa văn bản, ảnh chụp màn hình, Hệ điều hành, phim hoạt hình

Nội dung do AI tạo ra có thể không chính xác.

**<M000ActSplash.java>**

package com.example.lab8;  
  
import android.graphics.Color;  
import android.os.Bundle;  
import android.widget.ImageView;  
import android.widget.LinearLayout;  
  
import androidx.appcompat.app.AppCompatActivity;  
  
import java.util.Random;  
  
public class M000ActSplash extends AppCompatActivity {  
  
 @Override  
 protected void onCreate(Bundle savedInstanceState) {  
 super.onCreate(savedInstanceState);  
 setContentView(R.layout.*m001\_act\_splash*);  
  
 // Lấy các view theo ID đã khai báo trong XML  
 LinearLayout lnSplash = findViewById(R.id.*ln\_splash*);  
 ImageView ivAnimal = findViewById(R.id.*iv\_animal*);  
  
 // Danh sách màu nền (tùy chọn)  
 int[] colors = {  
 Color.*parseColor*("#3F51B5"), // Indigo  
 Color.*parseColor*("#009688"), // Teal  
 Color.*parseColor*("#673AB7"), // Deep Purple  
 Color.*parseColor*("#FF5722"), // Deep Orange  
 Color.*parseColor*("#4CAF50") // Green  
 };  
  
 // Danh sách icon (đảm bảo các file tồn tại trong res/drawable)  
 int[] icons = {  
 R.drawable.*ic\_penguin*,  
 R.drawable.*ic\_launcher\_foreground* };  
  
 // Chọn ngẫu nhiên  
 Random random = new Random();  
 int randomColor = colors[random.nextInt(colors.length)];  
 int randomIcon = icons[random.nextInt(icons.length)];  
  
 // Gán màu và icon ngẫu nhiên  
 lnSplash.setBackgroundColor(randomColor);  
 ivAnimal.setImageResource(randomIcon);  
 }  
}

**<m001\_act\_splash.xml>**

<?xml version="1.0" encoding="utf-8"?>  
<LinearLayout xmlns:android="http://schemas.android.com/apk/res/android"  
 xmlns:tools="http://schemas.android.com/tools"  
 android:id="@+id/ln\_splash"  
 android:layout\_width="match\_parent"  
 android:layout\_height="match\_parent"  
 android:background="@color/design\_default\_color\_primary\_dark"  
 android:gravity="center"  
 android:orientation="vertical">  
  
 <ImageView  
 android:id="@+id/iv\_animal"  
 android:layout\_width="128dp"  
 android:layout\_height="128dp"  
 android:src="@drawable/ic\_penguin"  
 tools:ignore="ContentDescription" />  
  
 <TextView  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_marginTop="10dp"  
 android:fontFamily="sans-serif-light"  
 android:text="@string/app\_name"  
 android:textColor="@color/white"  
 android:textSize="24sp" />  
</LinearLayout>

Bài tập 2: Trong bài luyện tập 2, sử dụng Custom ProgressBar để làm giao diện đẹp hơn.

Ảnh có chứa văn bản, ảnh chụp màn hình, phim hoạt hình, thiết kế đồ họa

Nội dung do AI tạo ra có thể không chính xác.

**M000ActSplash.java**

public class M000ActSplash extends AppCompatActivity {

@Override

protected void onCreate(Bundle savedInstanceState) {

super.onCreate(savedInstanceState);

setContentView(R.layout.m001\_act\_splash);

// Ẩn khối loading sau 3 giây (giả lập tải dữ liệu)

new Handler().postDelayed(() -> {

findViewById(R.id.progressBar).setVisibility(View.GONE);

findViewById(R.id.ln\_splash).setVisibility(View.VISIBLE);

}, 3000);

}

}

**item\_loading.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"

android:gravity="center"

android:orientation="vertical"

android:background="#80000000">

<ProgressBar

android:id="@+id/progressBar"

style="?android:attr/progressBarStyleLarge"

android:layout\_width="80dp"

android:layout\_height="80dp"

android:indeterminate="true"

android:indeterminateTint="@color/white" />

<TextView

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:layout\_marginTop="16dp"

android:text="@string/txt\_loading"

android:textColor="@color/white"

android:textSize="18sp"

android:fontFamily="sans-serif-medium" />

</LinearLayout>

**m001\_act\_splash.xml**

<?xml version="1.0" encoding="utf-8"?>

<FrameLayout xmlns:android="http://schemas.android.com/apk/res/android"

android:layout\_width="match\_parent"

android:layout\_height="match\_parent">

<LinearLayout

android:id="@+id/ln\_splash"

android:layout\_width="match\_parent"

android:layout\_height="match\_parent"

android:gravity="center"

android:orientation="vertical"

android:background="@color/design\_default\_color\_primary\_dark">

<ImageView

android:id="@+id/iv\_animal"

android:layout\_width="128dp"

android:layout\_height="128dp"

android:src="@drawable/ic\_penguin"

android:contentDescription="@string/app\_name" />

<TextView

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:text="@string/app\_name"

android:textColor="@color/white"

android:textSize="24sp"

android:layout\_marginTop="10dp" />

</LinearLayout>

<!-- include loading -->

<include layout="@layout/item\_loading" />

</FrameLayout>

**strings.xml**

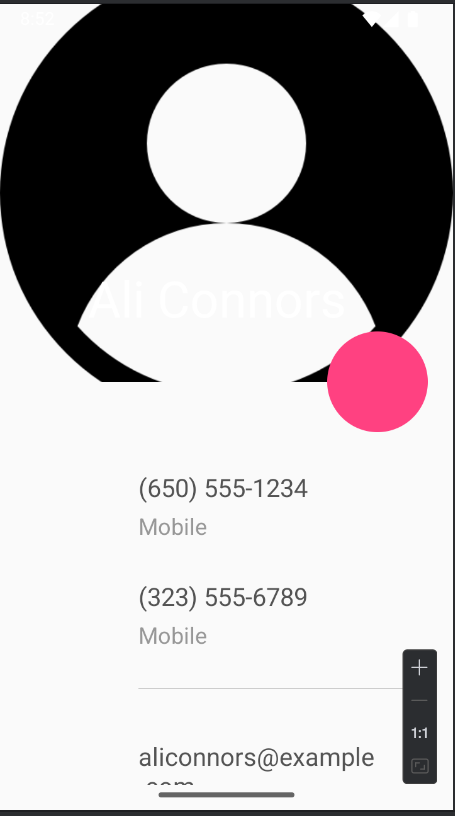
<resources>

<string name="app\_name">Animal Sound</string>

<string name="txt\_loading">Loading...</string>

</resources>

Bài tập 3: Lập trình để khi bấm vào icon thì chuyển về cuộc gọi, sử dụng Intent.



M001ActProfile.java

package com.example.lab8;  
  
import android.content.Intent;  
import android.net.Uri;  
import android.os.Bundle;  
import android.view.View;  
import android.widget.ImageView;  
import android.widget.TableRow;  
import android.widget.TextView;  
  
import androidx.appcompat.app.AppCompatActivity;  
  
public class M001ActProfile extends AppCompatActivity {  
  
 private void openDialer(String phone) {  
 Intent intent = new Intent(Intent.*ACTION\_DIAL*, Uri.*parse*("tel:" + phone));  
 startActivity(intent);  
 }  
  
 @Override  
 protected void onCreate(Bundle savedInstanceState) {  
 super.onCreate(savedInstanceState);  
 setContentView(R.layout.*m001\_act\_profile*); // layout profile bạn vừa gửi  
  
 ImageView ivPhone = findViewById(R.id.*iv\_phone*);  
 TextView tvPhone1 = findViewById(R.id.*tv\_phone1*);  
 TextView tvPhone2 = findViewById(R.id.*tv\_phone2*);  
 TableRow rowPhone = findViewById(R.id.*row\_phone*);  
  
 // lấy số trực tiếp từ TextView (hoặc từ strings.xml)  
 ivPhone.setOnClickListener(v -> openDialer(tvPhone1.getText().toString().trim()));  
 tvPhone1.setOnClickListener(v -> openDialer(tvPhone1.getText().toString().trim()));  
 tvPhone2.setOnClickListener(v -> openDialer(tvPhone2.getText().toString().trim()));  
  
 // Nếu muốn bấm cả hàng gọi số thứ nhất:  
 rowPhone.setOnClickListener(v -> openDialer(tvPhone1.getText().toString().trim()));  
 }  
}

m001\_act\_profile.xml

<?xml version="1.0" encoding="utf-8"?>  
<LinearLayout 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/layout\_profile\_root"  
 android:layout\_width="match\_parent"  
 android:layout\_height="match\_parent"  
 android:background="@color/gray\_light"  
 android:orientation="vertical">  
  
 <FrameLayout  
 android:layout\_width="match\_parent"  
 android:layout\_height="350dp">  
  
 <ImageView  
 android:id="@+id/iv\_avatar\_bg"  
 android:layout\_width="match\_parent"  
 android:layout\_height="300dp"  
 android:scaleType="centerCrop"  
 android:src="@drawable/bg\_avatar"  
 tools:ignore="ContentDescription" />  
  
 <TextView  
 android:id="@+id/tv\_name"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_gravity="bottom"  
 android:layout\_marginStart="70dp"  
 android:layout\_marginBottom="90dp"  
 android:fontFamily="sans-serif"  
 android:text="@string/txt\_name"  
 android:textColor="@color/white"  
 android:textSize="40sp" />  
  
 <ImageView  
 android:id="@+id/iv\_star"  
 android:layout\_width="80dp"  
 android:layout\_height="80dp"  
 android:layout\_gravity="end|bottom"  
 android:layout\_marginEnd="20dp"  
 android:layout\_marginBottom="10dp"  
 android:background="@drawable/bg\_oval"  
 android:padding="20dp"  
 android:src="@drawable/ic\_star"  
 app:tint="@color/white"  
 tools:ignore="ContentDescription" />  
 </FrameLayout>  
  
 <!-- ROW: PHONE -->  
 <TableRow  
 android:id="@+id/row\_phone"  
 android:layout\_width="match\_parent"  
 android:layout\_height="wrap\_content"  
 android:padding="20dp">  
  
 <ImageView  
 android:id="@+id/iv\_phone"  
 android:layout\_width="60dp"  
 android:layout\_height="60dp"  
 android:padding="10dp"  
 android:src="@drawable/ic\_phone"  
 android:clickable="true"  
 android:focusable="true"  
 app:tint="@color/indigo"  
 tools:ignore="ContentDescription" />  
  
 <LinearLayout  
 android:layout\_width="match\_parent"  
 android:layout\_height="wrap\_content"  
 android:layout\_marginStart="30dp"  
 android:orientation="vertical">  
  
 <TextView  
 android:id="@+id/tv\_phone1"  
 android:layout\_width="match\_parent"  
 android:layout\_height="wrap\_content"  
 android:text="@string/txt\_phone1"  
 android:textColor="@color/gray\_dark"  
 android:textSize="20sp"  
 android:clickable="true"  
 android:focusable="true" />  
  
 <TextView  
 android:layout\_width="match\_parent"  
 android:layout\_height="wrap\_content"  
 android:layout\_marginTop="5dp"  
 android:text="@string/txt\_title\_mobile"  
 android:textColor="@color/gray\_mid"  
 android:textSize="18sp" />  
  
 <TextView  
 android:id="@+id/tv\_phone2"  
 android:layout\_width="match\_parent"  
 android:layout\_height="wrap\_content"  
 android:layout\_marginTop="30dp"  
 android:text="@string/txt\_phone2"  
 android:textColor="@color/gray\_dark"  
 android:textSize="20sp"  
 android:clickable="true"  
 android:focusable="true" />  
  
 <TextView  
 android:layout\_width="match\_parent"  
 android:layout\_height="wrap\_content"  
 android:layout\_marginTop="5dp"  
 android:text="@string/txt\_title\_mobile"  
 android:textColor="@color/gray\_mid"  
 android:textSize="18sp" />  
  
 <View  
 android:layout\_width="match\_parent"  
 android:layout\_height="0.5dp"  
 android:layout\_marginTop="30dp"  
 android:background="@color/gray\_mid" />  
 </LinearLayout>  
 </TableRow>  
  
 <!-- ROW: EMAIL -->  
 <TableRow  
 android:id="@+id/row\_email"  
 android:layout\_width="match\_parent"  
 android:layout\_height="wrap\_content"  
 android:padding="20dp">  
  
 <ImageView  
 android:id="@+id/iv\_email"  
 android:layout\_width="60dp"  
 android:layout\_height="60dp"  
 android:padding="10dp"  
 android:src="@drawable/ic\_email"  
 android:clickable="true"  
 android:focusable="true"  
 app:tint="@color/indigo"  
 tools:ignore="ContentDescription" />  
  
 <LinearLayout  
 android:layout\_width="match\_parent"  
 android:layout\_height="match\_parent"  
 android:layout\_marginStart="30dp"  
 android:orientation="vertical">  
  
 <TextView  
 android:id="@+id/tv\_email"  
 android:layout\_width="match\_parent"  
 android:layout\_height="wrap\_content"  
 android:text="@string/txt\_email"  
 android:textColor="@color/gray\_dark"  
 android:textSize="20sp"  
 android:clickable="true"  
 android:focusable="true" />  
  
 <TextView  
 android:layout\_width="match\_parent"  
 android:layout\_height="wrap\_content"  
 android:layout\_marginTop="5dp"  
 android:text="@string/txt\_title\_mobile"  
 android:textColor="@color/gray\_mid"  
 android:textSize="18sp" />  
 </LinearLayout>  
 </TableRow>  
</LinearLayout>

Bài tập 4: Tạo màn hình chính MainActivity để chuyển qua và chuyển về giữa các màn hình

ở các phần luyện tập.