Chức năng màn hình 1:

MainActivities

**package** com.example.hidden.editimage;  
  
**import** android.content.Intent;  
**import** android.net.Uri;  
**import** android.os.Bundle;  
**import** android.support.v7.app.AppCompatActivity;  
**import** android.view.View;  
**import** android.widget.Button;  
  
**import** com.google.android.gms.appindexing.Action;  
**import** com.google.android.gms.appindexing.AppIndex;  
**import** com.google.android.gms.appindexing.Thing;  
**import** com.google.android.gms.common.api.GoogleApiClient;  
  
**public class** MainActivity **extends** AppCompatActivity {  
  
 Button **btnbright**, **btnContrast**;  
  
 **private** GoogleApiClient **client**;  
  
 @Override  
 **protected void** onCreate(Bundle savedInstanceState) {  
 **super**.onCreate(savedInstanceState);  
 setContentView(R.layout.***activity\_main***);  
  
 **btnContrast** = (Button) findViewById(R.id.***btnContrast***);  
 **btnContrast**.setOnClickListener(**new** View.OnClickListener() {  
  
 **public void** onClick(View v) {  
 Intent mh3 = **new** Intent(MainActivity.**this**, manhinh3.**class**);  
 startActivity(mh3);  
 }  
 });  
  
  
 **btnbright** = (Button) findViewById(R.id.***btnbright***);  
 **btnbright**.setOnClickListener(**new** View.OnClickListener() {  
 **public void** onClick(View v) {  
  
 Intent mh2 = **new** Intent(MainActivity.**this**, ManHinh2.**class**);  
 startActivity(mh2);  
 }  
  
 ;  
 });  
  
  
 **client** = **new** GoogleApiClient.Builder(**this**).addApi(AppIndex.***API***).build();  
 }  
  
  
  
  
 **public** Action getIndexApiAction() {  
 Thing object = **new** Thing.Builder()  
 .setName(**"Main Page"**) *//* ***TODO: Define a title for the content shown.*** *//* ***TODO: Make sure this auto-generated URL is correct.*** .setUrl(Uri.*parse*(**"http://[ENTER-YOUR-URL-HERE]"**))  
 .build();  
 **return new** Action.Builder(Action.***TYPE\_VIEW***)  
 .setObject(object)  
 .setActionStatus(Action.***STATUS\_TYPE\_COMPLETED***)  
 .build();  
 }  
  
 @Override  
 **public void** onStart() {  
 **super**.onStart();  
  
 **client**.connect();  
 AppIndex.***AppIndexApi***.start(**client**, getIndexApiAction());  
 }  
  
 @Override  
 **public void** onStop() {  
 **super**.onStop();  
  
  
 AppIndex.***AppIndexApi***.end(**client**, getIndexApiAction());  
 **client**.disconnect();  
 }  
  
  
  
  
}

chức năng màn hình 2:

ManHinh2

**package** com.example.hidden.editimage;  
  
**import** android.content.Intent;  
**import** android.graphics.Bitmap;  
**import** android.graphics.BitmapFactory;  
**import** android.graphics.Canvas;  
**import** android.graphics.ColorMatrix;  
**import** android.graphics.ColorMatrixColorFilter;  
**import** android.graphics.Paint;  
**import** android.os.Bundle;  
**import** android.support.v7.app.AppCompatActivity;  
**import** android.view.View;  
**import** android.widget.Button;  
**import** android.widget.ImageView;  
**import** android.widget.SeekBar;  
  
**public class** ManHinh2 **extends** AppCompatActivity {  
 Button **btnBack1**;  
 @Override  
 **protected void** onCreate(Bundle savedInstanceState) {  
 **super**.onCreate(savedInstanceState);  
 setContentView(R.layout.***activity\_man\_hinh2***);  
  
 **btnBack1** = (Button) findViewById(R.id.***btnBack1***);  
 **btnBack1**.setOnClickListener(**new** View.OnClickListener() {  
  
 **public void** onClick(View v) {  
 Intent mh = **new** Intent(ManHinh2.**this**, MainActivity.**class**);  
 startActivity(mh);  
 }  
 });  
  
  
 SeekBar seekBar = (SeekBar)findViewById(R.id.***seekBar***);  
 seekBar.setProgress(-100);  
 seekBar.setMax(100);  
 seekBar.setOnSeekBarChangeListener(**new** SeekBar.OnSeekBarChangeListener(){  
  
 @Override  
 **public void** onProgressChanged(SeekBar seekBar, **int** progress, **boolean** fromUser) {  
 Bitmap bitmapData = BitmapFactory.*decodeResource*(getResources(), R.mipmap.***img\_vietnamese***);  
 Bitmap newBitMapData = *changeBitmapContrastBrightness*(bitmapData, progress);  
 ImageView view = (ImageView)findViewById(R.id.***imageView***);  
 view.setImageBitmap(newBitMapData);  
 }  
  
 @Override  
 **public void** onStartTrackingTouch(SeekBar seekBar) {  
  
 }  
  
 @Override  
 **public void** onStopTrackingTouch(SeekBar seekBar) {  
  
 }  
 });  
 }  
  
 **public static** Bitmap changeBitmapContrastBrightness(Bitmap bmp, **float** brightness)  
 {  
 ColorMatrix cm = **new** ColorMatrix(**new float**[]  
 {  
 1, 0, 0, 0, brightness,  
 0, 1, 0, 0, brightness,  
 0, 0, 1, 0, brightness,  
 0, 0, 0,1, 0,  
 });  
  
 Bitmap ret = Bitmap.*createBitmap*(bmp.getWidth(), bmp.getHeight(), bmp.getConfig());  
  
 Canvas canvas = **new** Canvas(ret);  
  
 Paint paint = **new** Paint();  
 paint.setColorFilter(**new** ColorMatrixColorFilter(cm));  
 canvas.drawBitmap(bmp, 0, 0, paint);  
  
 **return** ret;  
 }  
}

chức năng màn hinh 3:

manhinh3

**package** com.example.hidden.editimage;  
  
**import** android.content.Intent;  
**import** android.graphics.Bitmap;  
**import** android.graphics.BitmapFactory;  
**import** android.graphics.Canvas;  
**import** android.graphics.ColorMatrix;  
**import** android.graphics.ColorMatrixColorFilter;  
**import** android.graphics.Paint;  
**import** android.os.Bundle;  
**import** android.support.v7.app.AppCompatActivity;  
**import** android.view.View;  
**import** android.widget.Button;  
**import** android.widget.ImageView;  
**import** android.widget.SeekBar;  
  
**public class** manhinh3 **extends** AppCompatActivity {  
 Button **btnBack2**;  
 @Override  
 **protected void** onCreate(Bundle savedInstanceState) {  
 **super**.onCreate(savedInstanceState);  
 setContentView(R.layout.***activity\_manhinh3***);  
  
 **btnBack2** = (Button) findViewById(R.id.***btnBack2***);  
 **btnBack2**.setOnClickListener(**new** View.OnClickListener() {  
  
 **public void** onClick(View v) {  
 Intent mh = **new** Intent(manhinh3.**this**, MainActivity.**class**);  
 startActivity(mh);  
 }  
 });  
  
 SeekBar seekBar = (SeekBar)findViewById(R.id.***seekBar***);  
 seekBar.setProgress(-10);  
 seekBar.setMax(10);  
 seekBar.setOnSeekBarChangeListener(**new** SeekBar.OnSeekBarChangeListener(){  
  
 @Override  
 **public void** onProgressChanged(SeekBar seekBar1, **int** progress, **boolean** fromUser) {  
 Bitmap bitmapData = BitmapFactory.*decodeResource*(getResources(), R.mipmap.***img\_vietnamese***);  
 Bitmap newBitMapData = *changeBitmapContrast*(bitmapData, progress, progress);  
 ImageView view = (ImageView)findViewById(R.id.***imageView4***);  
 view.setImageBitmap(newBitMapData);  
 }  
  
 @Override  
 **public void** onStartTrackingTouch(SeekBar seekBar1) {  
  
 }  
  
 @Override  
 **public void** onStopTrackingTouch(SeekBar seekBar1) {  
  
 }  
 });  
 }  
  
 **public static** Bitmap changeBitmapContrast(Bitmap bmp, **float** contrast, **float** brightness)  
 {  
 ColorMatrix cm = **new** ColorMatrix(**new float**[]  
 {  
 contrast, 0, 0, 0,0,  
 0, contrast, 0, 0,0,  
 0, 0, contrast, 0,0,  
 0, 0, 0,contrast, 0,  
 0, 0, 0,1, 0  
 });  
  
 Bitmap ret = Bitmap.*createBitmap*(bmp.getWidth(), bmp.getHeight(), bmp.getConfig());  
  
 Canvas canvas = **new** Canvas(ret);  
  
 Paint paint = **new** Paint();  
 paint.setColorFilter(**new** ColorMatrixColorFilter(cm));  
 canvas.drawBitmap(bmp, 0, 0, paint);  
  
 **return** ret;  
 }  
  
}