| ST Contacto 2018-6331@itla.edu.do  2018-722@itla.edu.do  2018-6512@itla.edu.do  2018-5854@itla.edu.do  2018-6323@itla.edu.do | | SmartReader TeamLee todo a tu alrededor|Documentación profunda. | | --- |  Documentacion profunda.Lenguaje • Java Estimado profesor Freidy Nuñez. Con toda la información proporcionada a cerca de nuestro trabajo ya realizado, nos gustaría pedir disculpas por la tardanza de este mismo & pos los inconvenientes que llegamos a tener en la misma realización. Esperamos de corazón que sea un gusto & que sea una herramienta que puedan usar más adelante.  Atentamente,  SmartReader Team |
| --- | --- | --- |

**Base de datos de StreamReader.**

|  |
| --- |
| package com.example.itlavision.DataBase; |
|  |  |
|  | import android.content.Context; |
|  | import android.database.sqlite.SQLiteDatabase; |
|  | import android.database.sqlite.SQLiteOpenHelper; |
|  |  |
|  | import androidx.annotation.Nullable; |
|  |  |
|  | public class SQLiteConn extends SQLiteOpenHelper { |
|  | public SQLiteConn(@Nullable Context context, @Nullable String name, @Nullable SQLiteDatabase.CursorFactory factory, int version) { |
|  | super(context, name, factory, version); |
|  | } |
|  |  |
|  | @Override |
|  | public void onCreate(SQLiteDatabase db) { |
|  |  |
|  | } |
|  |  |
|  | @Override |
|  | public void onUpgrade(SQLiteDatabase db, int oldVersion, int newVersion) { |
|  |  |
|  | } |

Nuestra base de datos viene gracias al patrón Siglenton, el cual nos permite hacer instancias de una base de datos.

Dicha base de datos está contruida bajo su propia instancia más una clase que contiene los datos que complementarán los comandos de sql.

|  |
| --- |
| package com.example.itlavision.DataBase; |
|  |  |
|  | public class utilidades { |
|  | public static final String tabla\_objetos = "objetos"; |
|  | public static final String id = "id"; |
|  | public static final String nombre = "nombre"; |
|  | public static final String precio = "precio"; |
|  | public static final String fecha = "fecha\_creacion"; |
|  | public static final String descripcion = "descripcion"; |
|  | public static final String crear\_tabla = "CREATE TABLE objetos("+id+" INTEGER PRIMARY KEY, "+nombre+" TEXT DEFAULT 'Sin nombre', "+precio+" INTEGER NOT NULL DEFAULT 'O', "+fecha+" TEXT, "+descripcion+" TEXT DEFAULT 'Sin descripcion.')"; |
|  | public static final String drop = "DROP TABLE IF EXISTS objetos"; |
|  | } |

Por otra parte, el registrador de códigos de barras.

Nuestro editor de códigos de barra viene gracias a está clase, la cual se encarga de vigilar patrones en tiempo de respuesta real.

|  |
| --- |
| Package com.example.itlavision; |
|  |  |
|  | import androidx.annotation.Nullable; |
|  | import androidx.appcompat.app.AppCompatActivity; |
|  |  |
|  | import android.content.Intent; |
|  | import android.database.Cursor; |
|  | import android.database.sqlite.SQLiteDatabase; |
|  | import android.os.Bundle; |
|  | import android.view.View; |
|  | import android.widget.Button; |
|  | import android.widget.TextView; |
|  | import android.widget.Toast; |
|  |  |
|  | import com.example.itlavision.DataBase.SQLiteConn; |
|  | import com.example.itlavision.DataBase.utilidades; |
|  | import com.google.zxing.integration.android.IntentIntegrator; |
|  | import com.google.zxing.integration.android.IntentResult; |
|  |  |
|  | public class BarScannerMain extends AppCompatActivity { |
|  |  |
|  |  |
|  | TextView scannerView; |
|  | Button scannerButton; |
|  | Button registroButton; |
|  | @Override |
|  | protected void onCreate(Bundle savedInstanceState) { |
|  | super.onCreate(savedInstanceState); |
|  | setContentView(R.layout.activity\_bar\_scanner\_main); |
|  | SQLiteConn conn = new SQLiteConn(this, "object\_DataBase", null, 1); |
|  | scannerView = (TextView) findViewById(R.id.scannerView); |
|  | scannerButton = (Button) findViewById(R.id.scannerButton); |
|  | registroButton = (Button) findViewById(R.id.registroButton); |
|  | scannerButton.setOnClickListener(new View.OnClickListener() { |
|  | @Override |
|  | public void onClick(View v) { |
|  | BarScanner(); |
|  | } |
|  | }); |
|  | registroButton.setOnClickListener(new View.OnClickListener() { |
|  | @Override |
|  | public void onClick(View v) { |
|  | verRegistro(); |
|  | } |
|  | }); |
|  | } |
|  |  |
|  |  |
|  | public void BarScanner() { |
|  | IntentIntegrator intent = new IntentIntegrator(this); |
|  | intent.setDesiredBarcodeFormats(IntentIntegrator.PRODUCT\_CODE\_TYPES); |
|  | intent.setPrompt("Escaneando código..."); |
|  | intent.setCameraId(0); |
|  | intent.setBeepEnabled(true); |
|  | intent.setBarcodeImageEnabled(false); |
|  | intent.initiateScan(); |
|  | } |
|  |  |
|  | @Override |
|  | protected void onActivityResult(int requestCode, int resultCode, @Nullable Intent data) { |
|  | IntentResult result = IntentIntegrator.parseActivityResult(requestCode, resultCode,data); |
|  | if (result != null){ |
|  | if (result.getContents() == null){ |
|  | Toast.makeText(this, "Acción cancelada.", Toast.LENGTH\_SHORT).show(); |
|  | }else{ |
|  | SQLiteConn conn = new SQLiteConn(this, "object\_DataBase", null, 1); |
|  | SQLiteDatabase db = conn.getReadableDatabase(); |
|  | String[] parametros = {result.getContents().toString()}; |
|  | try{ |
|  | Cursor cursor = db.rawQuery("SELECT "+ utilidades.id+" FROM "+utilidades.tabla\_objetos+" WHERE "+utilidades.id+" =?", parametros); |
|  | cursor.moveToFirst(); |
|  | String codigo = cursor.getString(0); |
|  |  |
|  | if (result.getContents().toString() != codigo){ |
|  | Toast.makeText(this, "Se encontró un codigo nuevo", Toast.LENGTH\_SHORT).show(); |
|  | resultado(result.getContents().toString()); |
|  | }else{ |
|  | Toast.makeText(this, "Este código ya existía", Toast.LENGTH\_SHORT).show(); |
|  | } |
|  | }catch(Exception e){ |
|  | Toast.makeText(this, "Nuevo objeto detectado.", Toast.LENGTH\_SHORT).show(); |
|  | registroView(result.getContents().toString()); |
|  | } |
|  | } |
|  |  |
|  | }else{ |
|  | super.onActivityResult(requestCode, resultCode, data); |
|  | } |
|  | } |
|  |  |
|  | private void resultado(String ID) { |
|  | Intent intent = new Intent(this, Resultado.class); |
|  | intent.putExtra("ID", ID); |
|  | startActivity(intent); |
|  | } |
|  |  |
|  | private void registroView(String ID) { |
|  | Intent intent = new Intent(this, Registro.class); |
|  | intent.putExtra("ID", ID); |
|  | startActivity(intent); |
|  | } |
|  | private void verRegistro() { |
|  | Intent intent = new Intent(this, ObjetosEscaneados.class); |
|  | startActivity(intent); |
|  | } |
|  | } |

Nuestro lector de códigos QR se basa en esta arquitectura.

|  |
| --- |
| package com.example.itlavision; |
|  |  |
|  | import androidx.appcompat.app.AppCompatActivity; |
|  |  |
|  | import android.content.Intent; |
|  | import android.net.Uri; |
|  | import android.os.Bundle; |
|  |  |
|  | import com.google.zxing.Result; |
|  |  |
|  | import me.dm7.barcodescanner.zxing.ZXingScannerView; |
|  | public class ScannerQR extends AppCompatActivity implements ZXingScannerView.ResultHandler { |
|  | private ZXingScannerView escanerZXing; |
|  |  |
|  | @Override |
|  | protected void onCreate(Bundle savedInstanceState) { |
|  | super.onCreate(savedInstanceState); |
|  | escanerZXing = new ZXingScannerView(this); |
|  | //hacer que el contenido de la actividad sea el escaner |
|  | setContentView(escanerZXing); |
|  | } |
|  |  |
|  | @Override |
|  | public void onResume(){ |
|  | super.onResume(); |
|  | //El manejador de los resultados es la clase misma |
|  | escanerZXing.setResultHandler(this); |
|  | escanerZXing.startCamera(); //Comenzar la camara al reanudar la app |
|  | } |
|  |  |
|  | @Override |
|  | public void onPause(){ |
|  | super.onPause(); |
|  | escanerZXing.stopCamera(); //pausar en onPause |
|  | } |
|  |  |
|  |  |
|  |  |
|  | @Override |
|  | public void handleResult(Result result) { |
|  | setContentView(R.layout.activity\_scanner\_q\_r); |
|  |  |
|  | String contQr = result.getText(); |
|  |  |
|  | EjecQr(contQr); |
|  |  |
|  | escanerZXing.resumeCameraPreview(this); |
|  | } |
|  |  |
|  | private void EjecQr(String dato){ |
|  |  |
|  | if (dato != null){ |
|  |  |
|  | if(dato.contains("TEL")){ |
|  | String tel = dato.replace("TEL:", "tel:+"); |
|  | Intent callIntent = new Intent(Intent.ACTION\_DIAL, Uri.parse(tel)); |
|  | startActivity(callIntent); |
|  | } |
|  | else { |
|  |  |
|  | Intent callIntent = new Intent(Intent.ACTION\_VIEW, Uri.parse(dato)); |
|  | startActivity(callIntent); |
|  | } |
|  |  |
|  | } |
|  |  |
|  | } |
|  | } |

Nuestro Traductor se basa en esta estructura.

|  |
| --- |
| package com.example.itlavision; |
|  |  |
|  | import androidx.appcompat.app.AppCompatActivity; |
|  |  |
|  | import android.content.Intent; |
|  | import android.net.Uri; |
|  | import android.os.Bundle; |
|  |  |
|  | import com.google.zxing.Result; |
|  |  |
|  | import me.dm7.barcodescanner.zxing.ZXingScannerView; |
|  | public class ScannerQR extends AppCompatActivity implements ZXingScannerView.ResultHandler { |
|  | private ZXingScannerView escanerZXing; |
|  |  |
|  | @Override |
|  | protected void onCreate(Bundle savedInstanceState) { |
|  | super.onCreate(savedInstanceState); |
|  | escanerZXing = new ZXingScannerView(this); |
|  | //hacer que el contenido de la actividad sea el escaner |
|  | setContentView(escanerZXing); |
|  | } |
|  |  |
|  | @Override |
|  | public void onResume(){ |
|  | super.onResume(); |
|  | //El manejador de los resultados es la clase misma |
|  | escanerZXing.setResultHandler(this); |
|  | escanerZXing.startCamera(); //Comenzar la camara al reanudar la app |
|  | } |
|  |  |
|  | @Override |
|  | public void onPause(){ |
|  | super.onPause(); |
|  | escanerZXing.stopCamera(); //pausar en onPause |
|  | } |
|  |  |
|  |  |
|  |  |
|  | @Override |
|  | public void handleResult(Result result) { |
|  | setContentView(R.layout.activity\_scanner\_q\_r); |
|  |  |
|  | String contQr = result.getText(); |
|  |  |
|  | EjecQr(contQr); |
|  |  |
|  | escanerZXing.resumeCameraPreview(this); |
|  | } |
|  |  |
|  | private void EjecQr(String dato){ |
|  |  |
|  | if (dato != null){ |
|  |  |
|  | if(dato.contains("TEL")){ |
|  | String tel = dato.replace("TEL:", "tel:+"); |
|  | Intent callIntent = new Intent(Intent.ACTION\_DIAL, Uri.parse(tel)); |
|  | startActivity(callIntent); |
|  | } |
|  | else { |
|  |  |
|  | Intent callIntent = new Intent(Intent.ACTION\_VIEW, Uri.parse(dato)); |
|  | startActivity(callIntent); |
|  | } |
|  |  |
|  | } |
|  |  |
|  | } |
|  | } |

Por último, lo utilizado en nuestra clase para el inicio (loading) y nuestro menú.

**Loading**

package com.example.itlavision.Menu;  
  
import androidx.appcompat.app.AppCompatActivity;  
  
import android.content.Intent;  
import android.os.Bundle;  
import android.os.Handler;  
import android.view.WindowManager;  
  
import com.example.itlavision.R;  
  
public class Loading extends AppCompatActivity {  
  
 @Override  
 protected void onCreate(Bundle savedInstanceState) {  
 super.onCreate(savedInstanceState);  
 getWindow().setFlags(WindowManager.LayoutParams.*FLAG\_FULLSCREEN*, WindowManager.LayoutParams.*FLAG\_FULLSCREEN*);  
 setContentView(R.layout.*activity\_loading*);  
  
 new Handler().postDelayed(new Runnable() {  
 @Override  
 public void run() {  
 Intent i = new Intent(Loading.this, Menu.class);  
 startActivity(i);  
 finish();  
 }  
 }, 5000);  
  
 }  
}

**Menu**

package com.example.itlavision.Menu;  
  
import androidx.appcompat.app.AppCompatActivity;  
  
import android.content.Intent;  
import android.os.Bundle;  
import android.view.View;  
import android.widget.ImageView;  
import android.widget.Toast;  
  
import com.example.itlavision.BarScann.BarScannerMain;  
import com.example.itlavision.R;  
import com.example.itlavision.ScannerQR.ScannerMainActivity;  
import com.example.itlavision.Traductor.TraductorMain;  
  
public class Menu extends AppCompatActivity implements View.OnClickListener {  
  
 ImageView btncodbarra, btntraductor, btnQR;  
  
 @Override  
 protected void onCreate(Bundle savedInstanceState) {  
 super.onCreate(savedInstanceState);  
 setContentView(R.layout.*activity\_app*);  
  
 btncodbarra = findViewById(R.id.*btnCodBarra*);  
 btnQR = findViewById(R.id.*btnQR*);  
 btntraductor = findViewById(R.id.*btnTrans*);  
  
 btncodbarra.setClickable(true);  
 btntraductor.setClickable(true);  
 btnQR.setClickable(true);  
  
  
 btncodbarra.setOnClickListener(this);  
 btntraductor.setOnClickListener(this);  
 btnQR.setOnClickListener(this);  
  
 }  
  
 @Override  
 public void onClick(View v) {  
 if (v.getId() == R.id.*btnCodBarra*) {  
 Toast.*makeText*(this, "Toast CodB", Toast.*LENGTH\_SHORT*).show();  
 Intent i = new Intent(getApplicationContext(), BarScannerMain.class);  
 startActivity(i);  
 }  
  
 if (v.getId() == R.id.*btnTrans*) {  
 Toast.*makeText*(this, "Toast Transla", Toast.*LENGTH\_SHORT*).show();  
 Intent i = new Intent(getApplicationContext(), TraductorMain.class);  
 startActivity(i);  
 }  
  
 if (v.getId() == R.id.*btnQR*) {  
 Toast.*makeText*(this, "Toast QR", Toast.*LENGTH\_SHORT*).show();  
 Intent i = new Intent(getApplicationContext(), ScannerMainActivity.class);  
 startActivity(i);}  
 }  
 }

(Cabe mencionar que no todo el código fue publicado acá por motivo de protección hacia el mismo)

**Manual de uso de caso (UML)**