# App JAVA Code

## AddPageActivity.js

package com.example.iot\_supplychainapp;  
  
import androidx.appcompat.app.AlertDialog;  
import androidx.appcompat.app.AppCompatActivity;  
  
import android.content.DialogInterface;  
import android.content.Intent;  
import android.os.Bundle;  
import android.view.View;  
import android.widget.Button;  
import android.widget.EditText;  
  
import java.sql.SQLException;  
  
public class AddPageActivity extends AppCompatActivity {  
  
 EditText add\_Code,add\_name,add\_Qty,add\_location;  
 Button upload;  
 boolean name = false,qty = false,lo = false;  
 ConnectionHelper connectionHelper = new ConnectionHelper();  
  
 @Override  
 protected void onCreate(Bundle savedInstanceState) {  
 super.onCreate(savedInstanceState);  
 setContentView(R.layout.*activity\_add\_page*);  
 add\_Code = findViewById(R.id.*addcode*);  
 add\_name = findViewById(R.id.*addname*);  
 add\_Qty = findViewById(R.id.*addqty*);  
 add\_location = findViewById(R.id.*addlocation*);  
 upload = findViewById(R.id.*add\_button*);  
  
 Intent intent = getIntent();  
 String text = intent.getStringExtra(HomePageActivity.*EXTRA\_CODE*);  
 add\_Code.setText(text);  
  
  
  
 upload.setOnClickListener(new View.OnClickListener() {  
 @Override  
 public void onClick(View view) {  
 if(add\_name.getText().toString().isEmpty() || add\_name.getText().toString().equals(" ")){  
 add\_name.setError("The name should not be empty");  
 name = false;  
 }else{  
 name=true;  
 }  
 if(add\_Qty.getText().toString().isEmpty() || add\_name.getText().toString().equals(" ")){  
 add\_Qty.setError("The Quantity should not be empty");  
 qty = false;  
 }else{  
 qty = true;  
 }  
 if(add\_location.getText().toString().isEmpty() || add\_name.getText().toString().equals(" ")){  
 add\_location.setError("Please choose a location");  
 lo = false;  
 }else{  
 lo = true;  
 }  
 //upload into database  
 if(name && qty && lo){  
 try {  
 String add = connectionHelper.AddItem(add\_Code.getText().toString(),add\_name.getText().toString(),add\_Qty.getText().toString(),add\_location.getText().toString());  
 if (add.equals("Successfull")){  
 UploadDialog("Upload","Successful!");  
 }else if(add.equals("dupli")){  
 UploadDialog("Upload","Fail! Item already register");  
 }  
 } catch (SQLException throwables) {  
 throwables.printStackTrace();  
 }  
 }  
 }  
 });  
 }  
  
 private void UploadDialog(String title,String message) {  
 AlertDialog dlg = new AlertDialog.Builder(AddPageActivity.this)  
 .setTitle(title).setMessage(message)  
 .setPositiveButton("Ok", new DialogInterface.OnClickListener() {  
 @Override  
 public void onClick(DialogInterface dialogInterface, int i) {  
 NewPage();  
 }  
 }).create();  
 dlg.show();  
 }  
  
 private void NewPage() {  
 Intent intent=new Intent(this,HomePageActivity.class);  
 startActivity(intent);  
 }  
}

## BoxfindActivity.js

package com.example.iot\_supplychainapp;  
  
import androidx.annotation.NonNull;  
import androidx.annotation.Nullable;  
import androidx.appcompat.app.AppCompatActivity;  
import androidx.recyclerview.widget.RecyclerView;  
  
import android.content.Context;  
import android.content.Intent;  
import android.os.Bundle;  
import android.view.LayoutInflater;  
import android.view.View;  
import android.view.ViewGroup;  
import android.widget.AdapterView;  
import android.widget.ArrayAdapter;  
import android.widget.ListView;  
import android.widget.TextView;  
import android.widget.Toast;  
  
import java.sql.SQLException;  
import java.util.ArrayList;  
import java.util.List;  
  
public class BoxfindActivity extends AppCompatActivity {  
  
 public static final String *EXTRA\_ITEMLIST* = "com.example.iot\_supplychainapp.example.EXTRA\_ITEMLIST";  
 public static final String *EXTRA\_DisplayTitle* = "com.example.iot\_supplychainapp.example.EXTRA\_DisplayTitle";  
 public static final String *EXTRA\_ITEMBar* = "com.example.iot\_supplychainapp.example.EXTRA\_ITEMBar";  
 public static final String *EXTRA\_ITEMQ* = "com.example.iot\_supplychainapp.example.EXTRA\_ITEMQ";  
 ConnectionHelper connectionHelper = new ConnectionHelper();  
  
 ListView boxListview;  
 int x;  
  
  
  
 @Override  
 protected void onCreate(Bundle savedInstanceState) {  
 super.onCreate(savedInstanceState);  
 setContentView(R.layout.*activity\_boxfind*);  
  
 boxListview = findViewById(R.id.*seacrhlocationListView*);  
  
 try {  
 List<String[]> loname = connectionHelper.FindBox("Shelf A");  
 } catch (SQLException throwables) {  
 throwables.printStackTrace();  
 }  
  
 MyAdapter adapter = new MyAdapter(this,loname);  
 boxListview.setAdapter(adapter);  
  
 boxListview.setOnItemClickListener(new AdapterView.OnItemClickListener() {  
 @Override  
 public void onItemClick(AdapterView<?> adapterView, View view, int i, long l) {  
 if(i == 0){x = 0;}  
 if(i == 1){x = 1;}  
 if(i == 2){x = 2;}  
 if(i == 3){x = 3;}  
 Display();  
 }  
 });  
  
 }  
  
 private void Display() {  
 Intent intent=new Intent(this,ItemDisplayActivity.class);  
 intent.putExtra(*EXTRA\_DisplayTitle*,loname[x]);  
 intent.putExtra(*EXTRA\_ITEMLIST*,location.get(x));  
 intent.putExtra(*EXTRA\_ITEMBar*,barcode.get(x));  
 intent.putExtra(*EXTRA\_ITEMQ*,qtyyy.get(x));  
 startActivity(intent);  
 }  
  
 class MyAdapter extends ArrayAdapter<String>{  
 Context context;  
 String[] rTitlr, rcode;  
 MyAdapter(Context c, String[] title, String[] co){  
 super(c, R.layout.*row\_listview\_searchbox*, R.id.*lv\_searchlocation*,title);  
 this.context = c;  
 this.rTitlr = title;  
 this.rcode = co;  
 }  
  
 @NonNull  
 @Override  
 public View getView(int position, @Nullable View convertView, @NonNull ViewGroup parent) {  
 LayoutInflater layoutInflater = (LayoutInflater) getApplicationContext().getSystemService(Context.*LAYOUT\_INFLATER\_SERVICE*);  
 View row = layoutInflater.inflate(R.layout.*row\_listview\_searchbox*,parent,false);  
 TextView name = row.findViewById(R.id.*lv\_searchlocation*);  
 TextView codee = row.findViewById(R.id.*lv\_seachcode*);  
  
 name.setText(rTitlr[position]);  
 codee.setText(rcode[position]);  
  
 return row;  
 }  
 }  
  
  
}

## CaptureAct.js

package com.example.iot\_supplychainapp;  
  
import com.journeyapps.barcodescanner.CaptureActivity;  
  
public class CaptureAct extends CaptureActivity {  
}

## ConnectionHelper.js

package com.example.iot\_supplychainapp;  
  
import android.annotation.SuppressLint;  
import android.os.StrictMode;  
import android.util.Log;  
import java.sql.Connection;  
import java.sql.DriverManager;  
import java.sql.SQLException;  
import java.sql.\*;  
import java.util.ArrayList;  
import java.util.List;  
  
public class ConnectionHelper {  
  
 Connection con = null;  
 String uname,pass,ip,port,database;  
 String ConnectionURL;  
  
 @SuppressLint("NewApi")  
 public Connection connectionclass(){  
 database = System.*getProperty*("iot");  
 uname = System.*getProperty*("root");  
 pass= System.*getProperty*("");  
 ip = System.*getProperty*("supplychainmysql.cnb90d5aqnib.us-east-2.rds.amazonaws.com");  
 port= System.*getProperty*("3306");  
 ConnectionURL = "jdbc:mysql://"+ip+":"+port+"/"+database+"?user="+uname+"&password="+pass;  
 ConnectionURL = "jdbc:mysql://supplychainmysql.cnb90d5aqnib.us-east-2.rds.amazonaws.com:3306/supplychain?user=admin&password=admin123";  
  
 try {  
 System.*out*.println("Loading driver...");  
 Class.*forName*("com.mysql.jdbc.Driver");  
 System.*out*.println("Driver loaded!");  
 } catch (ClassNotFoundException e) {  
 throw new RuntimeException("Cannot find the driver in the classpath!", e);  
 }  
  
 Connection conn = null;  
 Statement setupStatement = null;  
 Statement readStatement = null;  
 ResultSet resultSet = null;  
 String results = "";  
 int numresults = 0;  
 String statement = null;  
  
 try {  
 System.*out*.println("Connecting ...");  
 conn = DriverManager.*getConnection*(ConnectionURL);  
  
 readStatement = conn.createStatement();  
 resultSet = readStatement.executeQuery("SELECT S\_ID FROM STAFF;");  
  
 resultSet.first();  
 results = resultSet.getString("Resource");  
 resultSet.next();  
 results += ", " + resultSet.getString("Resource");  
  
 resultSet.close();  
 readStatement.close();  
 conn.close();  
  
 } catch (SQLException ex) {  
 // Handle any errors  
 System.*out*.println("SQLException: " + ex.getMessage());  
 System.*out*.println("SQLState: " + ex.getSQLState());  
 System.*out*.println("VendorError: " + ex.getErrorCode());  
 }  
 return conn;  
 }  
  
 public String UserVali(String ID, String pass){  
 if(ID.equals("admin")){  
 if(pass.equals("admin123")){  
 return "Yess";  
 }else{  
 return "Wrong P";  
 }  
 }else{  
 return "Wrong U";  
 }  
 }  
  
 public String AddItem(String ID,String name,String qty,String location) throws SQLException {  
 Statement statement = connectionclass().createStatement();  
 if(ID.equals("")){  
 return "dupli";  
 }else{  
 String query = "INSERT INTO iot VALUE ('"+ID+"','"+name+"','"+qty+"','"+location+"')";  
 statement.executeUpdate(query);  
 return "Successfull";  
 }  
 }  
  
 public String EditItem(String ID, String name, String qty, String location) throws SQLException {  
 Statement statement = connectionclass().createStatement();  
 String query = "INSERT INTO iteminfo (itemName, qty,itemLocation) VALUES ('"+name+"','"+qty+"','"+location+"')WHERE == '"+ID+"'";  
 ResultSet rs = statement.executeQuery(query);  
  
 while(rs.next()){  
 String idd = rs.getString("itemId");  
 if (ID.equals(idd)){  
 return "Successful";  
 }else{  
 return "dupli";  
 }  
 }  
 return null;  
 }  
  
 public String FindItem(String ID) throws SQLException {  
 Statement statement = connectionclass().createStatement();  
 String query = "SELECT \* FROM iteminfo WHERE itemId == '"+ID+"'";  
 statement.executeUpdate(query);  
 return query;  
 }  
  
 public List<String[]> FindBox(String location) throws SQLException {  
 Statement statement = connectionclass().createStatement();  
 String query = "SELECT \* FROM iteminfo";  
 ResultSet rs = statement.executeQuery(query);  
 List<String[]> newe= new ArrayList<>();  
 String[] listi;  
  
 while(rs.next()){  
 if(location.equals(rs.getString("itemLocation"))){  
 String[] box1 ={rs.getString("itemId"),rs.getString("itemName"),rs.getString("qty"),rs.getString("itemLocation")};  
 newe.add(box1);  
 }  
 }  
 return newe;  
 }  
  
}

## EditPageActivity.js

package com.example.iot\_supplychainapp;  
  
import androidx.appcompat.app.AlertDialog;  
import androidx.appcompat.app.AppCompatActivity;  
import androidx.room.Update;  
  
import android.content.DialogInterface;  
import android.content.Intent;  
import android.os.Bundle;  
import android.view.View;  
import android.widget.Button;  
import android.widget.EditText;  
import android.widget.TextView;  
  
import java.sql.SQLException;  
  
public class EditPageActivity extends AppCompatActivity {  
  
 EditText edit\_Code,edit\_name,edit\_Qty,edit\_location;  
 Button update;  
 boolean name = false,qty = false,lo = false;  
 ConnectionHelper connectionHelper = new ConnectionHelper();  
  
 @Override  
 protected void onCreate(Bundle savedInstanceState) {  
 super.onCreate(savedInstanceState);  
 setContentView(R.layout.*activity\_edit\_page*);  
  
 edit\_Code = findViewById(R.id.*editcode*);  
 edit\_name = findViewById(R.id.*editname*);  
 edit\_Qty = findViewById(R.id.*editqty*);  
 edit\_location = findViewById(R.id.*editlocation*);  
 update = findViewById(R.id.*edit\_button*);  
  
 Intent intent = getIntent();  
 String text = intent.getStringExtra(HomePageActivity.*EXTRA\_CODE*);  
 edit\_Code.setText(text);  
  
 update.setOnClickListener(new View.OnClickListener() {  
 @Override  
 public void onClick(View view) {  
 if(edit\_name.getText().toString().isEmpty() || edit\_name.getText().toString().equals(" ")){  
 edit\_name.setError("The name should not be empty");  
 name =false;  
 }else{  
 name=true;  
 }  
 if(edit\_Qty.getText().toString().isEmpty() || edit\_Qty.getText().toString().equals(" ")){  
 edit\_Qty.setError("The Quantity should not be empty");  
 qty = false;  
 }else{  
 qty = true;  
 }  
 if(edit\_location.getText().toString().isEmpty() || edit\_location.getText().toString().equals(" ")){  
 edit\_location.setError("Please choose a location");  
 lo=false;  
 }else{  
 lo = true;  
 }  
 //save chg into database  
 if(name && qty && lo){  
 edit\_Code.getText().toString();  
 edit\_name.getText().toString();  
 edit\_Qty.getText().toString();  
 edit\_location.getText().toString();  
 UpdateDialog("Successfull");  
  
 try {  
 String add = connectionHelper.EditItem(edit\_Code.getText().toString(),edit\_name.getText().toString(),edit\_Qty.getText().toString(),edit\_location.getText().toString());  
 if (add.equals("Successful")){  
 UpdateDialog("Successful!");  
 }else if(add.equals("dupli")){  
 UpdateDialog("Fail!");  
 }  
 } catch (SQLException throwables) {  
 throwables.printStackTrace();  
 }  
  
 }  
 }  
  
 });  
 }  
  
 private void UpdateDialog(String message) {  
 AlertDialog dlg = new AlertDialog.Builder(EditPageActivity.this)  
 .setTitle("Update").setMessage(message)  
 .setPositiveButton("Ok", new DialogInterface.OnClickListener() {  
 @Override  
 public void onClick(DialogInterface dialogInterface, int i) {  
 NewPage();  
 }  
 }).create();  
 dlg.show();  
 }  
  
 private void NewPage() {  
 Intent intent=new Intent(this,HomePageActivity.class);  
 startActivity(intent);  
 }  
}

## HomePageActivity.js

package com.example.iot\_supplychainapp;  
  
import androidx.appcompat.app.AppCompatActivity;  
import androidx.cardview.widget.CardView;  
  
import android.content.Intent;  
import android.os.Bundle;  
import android.view.View;  
import android.widget.TextView;  
import android.widget.Toast;  
  
import com.google.zxing.integration.android.IntentIntegrator;  
import com.google.zxing.integration.android.IntentResult;  
  
import java.sql.Connection;  
  
public class HomePageActivity extends AppCompatActivity {  
  
  
 CardView newItem,findItem,editItem,findBox;  
 public static final String *EXTRA\_CODE* = "com.example.iot\_supplychainapp.example.EXTRA\_CODE";  
 int x =0;  
  
  
 @Override  
 protected void onCreate(Bundle savedInstanceState) {  
 super.onCreate(savedInstanceState);  
 setContentView(R.layout.*activity\_home\_page*);  
  
 newItem = findViewById(R.id.*add\_i*);  
 findItem = findViewById(R.id.*find\_i*);  
 editItem = findViewById(R.id.*edit\_i*);  
 findBox = findViewById(R.id.*find\_b*);  
  
 newItem.setOnClickListener(new View.OnClickListener() {  
 @Override  
 public void onClick(View view) {  
 NewPage();  
 x = 1;  
 }  
 });  
  
  
 findItem.setOnClickListener(new View.OnClickListener() {  
 @Override  
 public void onClick(View view) {  
 NewPage();  
 x = 2;  
 }  
 });  
  
 editItem.setOnClickListener(new View.OnClickListener() {  
 @Override  
 public void onClick(View view) {  
 NewPage();  
 x = 3;  
 }  
 });  
  
 findBox.setOnClickListener(new View.OnClickListener() {  
 @Override  
 public void onClick(View view) {  
 findBoxPage();  
 }  
 });  
 }  
 private void NewPage() {  
 IntentIntegrator integrator = new IntentIntegrator(this);  
 integrator.setCaptureActivity(CaptureAct.class);  
 integrator.setOrientationLocked(false);  
 integrator.setDesiredBarcodeFormats(IntentIntegrator.*ALL\_CODE\_TYPES*);  
 integrator.initiateScan();  
 }  
  
 private void findBoxPage() {  
 Intent intent=new Intent(this,BoxfindActivity.class);  
 startActivity(intent);  
 }  
  
 @Override  
 protected void onActivityResult(int requestCode, int resultCode, Intent data) {  
 IntentResult result = IntentIntegrator.*parseActivityResult*(requestCode, resultCode, data);  
 if (result != null) {  
 if (result.getContents() != null) {  
 if(x==1){  
 Intent intent = new Intent(this, AddPageActivity.class);  
 intent.putExtra(*EXTRA\_CODE*,result.getContents());  
 startActivity(intent);  
 }else if (x==2){  
 Intent intent = new Intent(this, ItemfindActivity.class);  
 intent.putExtra(*EXTRA\_CODE*,result.getContents());  
 startActivity(intent);  
 }else if(x==3){  
 Intent intent = new Intent(this, EditPageActivity.class);  
 intent.putExtra(*EXTRA\_CODE*,result.getContents());  
 startActivity(intent);  
 }  
 } else {  
 Toast.*makeText*(this, "No Result", Toast.*LENGTH\_LONG*).show();  
 }  
 }else{  
 super.onActivityResult(requestCode,resultCode,data);  
 }  
 }  
  
  
}

## ItemDetailActivity.js

package com.example.iot\_supplychainapp;  
  
import androidx.appcompat.app.AppCompatActivity;  
  
import android.content.Intent;  
import android.os.Bundle;  
import android.widget.TextView;  
  
public class ItemDetailActivity extends AppCompatActivity {  
  
 TextView DisName,code,qty,location;  
 @Override  
 protected void onCreate(Bundle savedInstanceState) {  
 super.onCreate(savedInstanceState);  
 setContentView(R.layout.*activity\_item\_detail*);  
  
 DisName = findViewById(R.id.*DisName*);  
 code = findViewById(R.id.*detailcode*);  
 qty = findViewById(R.id.*detailqty*);  
 location = findViewById(R.id.*detaillocation*);  
  
 Intent intent = getIntent();  
 String title = intent.getStringExtra(ItemDisplayActivity.*EXTRA\_DISPLAYNAME*);  
 String codee = intent.getStringExtra(ItemDisplayActivity.*EXTRA\_DISPLAYCode*);  
 String qty2 = intent.getStringExtra(ItemDisplayActivity.*EXTRA\_DISPLAYQty*);  
 String loca = intent.getStringExtra(ItemDisplayActivity.*EXTRA\_DISPLAYlo*);  
 DisName.setText(title);  
 code.setText(codee);  
 qty.setText(qty2);  
 location.setText(loca);  
  
 }  
}

## ItemDisplayActivity.js

package com.example.iot\_supplychainapp;  
  
import androidx.annotation.NonNull;  
import androidx.annotation.Nullable;  
import androidx.appcompat.app.AppCompatActivity;  
  
import android.content.Context;  
import android.content.Intent;  
import android.os.Bundle;  
import android.view.LayoutInflater;  
import android.view.View;  
import android.view.ViewGroup;  
import android.widget.AdapterView;  
import android.widget.ArrayAdapter;  
import android.widget.ListView;  
import android.widget.TextView;  
  
public class ItemDisplayActivity extends AppCompatActivity {  
  
  
 public static final String *EXTRA\_DISPLAYNAME* = "com.example.iot\_supplychainapp.example.EXTRA\_DISPLAYNAME";  
 public static final String *EXTRA\_DISPLAYCode* = "com.example.iot\_supplychainapp.example.EXTRA\_DISPLAYCode";  
 public static final String *EXTRA\_DISPLAYQty* = "com.example.iot\_supplychainapp.example.EXTRA\_DISPLAYQty";  
 public static final String *EXTRA\_DISPLAYlo* = "com.example.iot\_supplychainapp.example.EXTRA\_DISPLAYlo";  
  
 ListView itemListview;  
 TextView ItemList;  
 String[] array,Ilo,Ibar,IQ;  
 String title;  
 int x;  
  
 @Override  
 protected void onCreate(Bundle savedInstanceState) {  
 super.onCreate(savedInstanceState);  
 setContentView(R.layout.*activity\_item\_display*);  
  
 itemListview = findViewById(R.id.*ItemListListView*);  
 ItemList = findViewById(R.id.*ItemList*);  
  
 Intent intent = getIntent();  
 array = intent.getStringArrayExtra(BoxfindActivity.*EXTRA\_ITEMLIST*);  
 title = intent.getStringExtra(BoxfindActivity.*EXTRA\_DisplayTitle*);  
 Ilo = intent.getStringArrayExtra(BoxfindActivity.*EXTRA\_ITEMLIST*);  
 IQ = intent.getStringArrayExtra(BoxfindActivity.*EXTRA\_ITEMQ*);  
 Ibar = intent.getStringArrayExtra(BoxfindActivity.*EXTRA\_ITEMBar*);  
 ItemList.setText(title);  
  
 ItemDisplayActivity.MyAdapter adapter = new MyAdapter(this,array,Ibar);  
 itemListview.setAdapter(adapter);  
  
 itemListview.setOnItemClickListener(new AdapterView.OnItemClickListener() {  
 @Override  
 public void onItemClick(AdapterView<?> adapterView, View view, int i, long l) {  
 Display();  
 }  
 });  
  
 }  
  
 private void Display() {  
 Intent intent=new Intent(this,ItemDetailActivity.class);  
 intent.putExtra(*EXTRA\_DISPLAYNAME*,array[x]);  
 intent.putExtra(*EXTRA\_DISPLAYlo*,title);  
 intent.putExtra(*EXTRA\_DISPLAYQty*,IQ[x]);  
 intent.putExtra(*EXTRA\_DISPLAYCode*,Ibar[x]);  
 startActivity(intent);  
 }  
  
 class MyAdapter extends ArrayAdapter<String> {  
 Context context;  
 String rTitlr[],rbar[];  
 MyAdapter(Context c, String title[],String bar[]){  
 super(c, R.layout.*row\_listview\_searchbox*, R.id.*lv\_searchlocation*,title);  
 this.context = c;  
 this.rTitlr = title;  
 this.rbar = bar;  
 }  
  
 @NonNull  
 @Override  
 public View getView(int position, @Nullable View convertView, @NonNull ViewGroup parent) {  
 LayoutInflater layoutInflater = (LayoutInflater) getApplicationContext().getSystemService(Context.*LAYOUT\_INFLATER\_SERVICE*);  
 View row = layoutInflater.inflate(R.layout.*row\_listview\_searchbox*,parent,false);  
 TextView name = row.findViewById(R.id.*lv\_searchlocation*);  
 TextView code = row.findViewById(R.id.*lv\_seachcode*);  
  
 name.setText(rTitlr[position]);  
 code.setText(rbar[position]);  
  
 return row;  
 }  
 }  
}

## ItemfindActivity.js

package com.example.iot\_supplychainapp;  
  
import androidx.appcompat.app.AlertDialog;  
import androidx.appcompat.app.AppCompatActivity;  
  
import android.content.DialogInterface;  
import android.content.Intent;  
import android.os.Bundle;  
import android.widget.EditText;  
import android.widget.TextView;  
  
import java.sql.SQLException;  
  
public class ItemfindActivity extends AppCompatActivity {  
  
 TextView itembar,itemname,itemqty,itemlo;  
 ConnectionHelper connectionHelper = new ConnectionHelper();  
  
 @Override  
 protected void onCreate(Bundle savedInstanceState) {  
 super.onCreate(savedInstanceState);  
 setContentView(R.layout.*activity\_itemfind*);  
  
 itembar = findViewById(R.id.*searchcode*);  
 itemname= findViewById(R.id.*searchname*);  
 itemqty= findViewById(R.id.*searchqty*);  
 itemlo= findViewById(R.id.*searchlocation*);  
  
 Intent intent = getIntent();  
 String text = intent.getStringExtra(HomePageActivity.*EXTRA\_CODE*);  
 itembar.setText(text);  
  
 try {  
 String item = connectionHelper.FindItem(text);  
 itembar.setText(item);  
 itemname.setText(item);  
 itemqty.setText(item);  
 itemlo.setText(item);  
 } catch (SQLException throwables) {  
 throwables.printStackTrace();  
 Notfound("Invalid ID","Fail to find Item!");  
 }  
  
  
 }  
  
 private void Notfound(String title,String message) {  
 AlertDialog dlg = new AlertDialog.Builder(ItemfindActivity.this)  
 .setTitle(title).setMessage(message)  
 .setPositiveButton("Ok", new DialogInterface.OnClickListener() {  
 @Override  
 public void onClick(DialogInterface dialogInterface, int i) {  
 NewPage();  
 }  
 }).create();  
 dlg.show();  
 }  
  
 private void NewPage() {  
 Intent intent=new Intent(this,HomePageActivity.class);  
 startActivity(intent);  
 }  
  
}

## MainActivity.js

package com.example.iot\_supplychainapp;  
  
import androidx.appcompat.app.AppCompatActivity;  
  
import android.annotation.SuppressLint;  
import android.content.Intent;  
import android.os.Bundle;  
import android.os.StrictMode;  
import android.text.TextUtils;  
import android.util.Log;  
import android.view.View;  
import android.widget.Button;  
import android.widget.EditText;  
import android.widget.TextView;  
  
import java.sql.Connection;  
import java.sql.DriverManager;  
import java.sql.ResultSet;  
import java.sql.SQLException;  
import java.sql.Statement;  
import java.util.ArrayList;  
import java.sql.Connection;  
import java.sql.DriverManager;  
import java.sql.SQLException;  
import java.sql.\*;  
  
public class MainActivity extends AppCompatActivity {  
  
 EditText username,password;  
 Button loginButton;  
 ArrayList<ArrayList<String>> userList;  
 Connection connect;  
 String ConnectionResult="";  
 ConnectionHelper connectionHelper = new ConnectionHelper();  
  
 Connection con = null;  
 String uname,pass,ip,port,database;  
 String ConnectionURL;  
  
 @Override  
 protected void onCreate(Bundle savedInstanceState) {  
 super.onCreate(savedInstanceState);  
 setContentView(R.layout.*activity\_main*);  
  
 username = findViewById(R.id.*Userid*);  
 password = findViewById(R.id.*Userpass*);  
 loginButton = findViewById(R.id.*login\_button*);  
  
  
 loginButton.setOnClickListener(new View.OnClickListener() {  
 @Override  
 public void onClick(View view) {  
 if(TextUtils.*isEmpty*(username.getText().toString())){  
 username.setError("The user name cant be empty");  
 return;  
 }  
 if(TextUtils.*isEmpty*(password.getText().toString())){  
 password.setError("Please Enter the your password");  
 return;  
 }  
  
 if(!(TextUtils.*isEmpty*(username.getText().toString())) && !(TextUtils.*isEmpty*(password.getText().toString()))){  
 if(!username.getText().toString().equals(" ") && !username.getText().toString().equals(" ")){  
 String vali = connectionHelper.UserVali(username.getText().toString(),password.getText().toString());  
 if(vali.equals("Yess")){  
 goToHomePage();  
 }else if(vali.equals("Wrong P")){  
 password.setError("Wrong Password");  
 }else if(vali.equals("Wrong U")){  
 username.setError("Wrong Username");  
 }  
 }  
 return;  
 }  
 }  
 });  
  
 }  
  
 private void goToHomePage() {  
 Intent intent=new Intent(this,HomePageActivity.class);  
 startActivity(intent);  
 }  
  
 @SuppressLint("NewApi")  
 public void GetText(){  
 TextView tx1 = findViewById(R.id.*login\_title*);  
 ConnectionURL = "jdbc:mysql://supplychainmysql.cnb90d5aqnib.us-east-2.rds.amazonaws.com:3306/supplychain?user=admin&password=admin123";  
  
 try {  
 System.*out*.println("Loading driver...");  
 Class.*forName*("com.mysql.cj.jdbc.Driver");  
 System.*out*.println("Driver loaded!");  
 } catch (ClassNotFoundException e) {  
 throw new RuntimeException("Cannot find the driver in the classpath!", e);  
 }  
  
 Connection conn = null;  
 Statement setupStatement = null;  
 Statement readStatement = null;  
 ResultSet resultSet = null;  
 String results = "";  
 int numresults = 0;  
 String statement = null;  
  
 try {  
 System.*out*.println("Connecting ...");  
 conn = DriverManager.*getConnection*(ConnectionURL);  
 System.*out*.println("Connected");  
 readStatement = conn.createStatement();  
 resultSet = readStatement.executeQuery("SELECT S\_ID FROM STAFF;");  
  
 //resultSet.first();  
 //results = resultSet.getString("Resource");  
 //resultSet.next();  
 //results += ", " + resultSet.getString("Resource");  
  
 //resultSet.close();  
 //readStatement.close();  
 conn.close();  
  
 } catch (SQLException ex) {  
 // Handle any errors  
 System.*out*.println("SQLException: " + ex.getMessage());  
 System.*out*.println("SQLState: " + ex.getSQLState());  
 System.*out*.println("VendorError: " + ex.getErrorCode());  
 System.*out*.println("StackTrace: " + ex.getStackTrace());  
 }  
 }  
}