HistoryList.java

package com.example.cashregister;  
  
import androidx.appcompat.app.AppCompatActivity;  
import androidx.recyclerview.widget.LinearLayoutManager;  
import androidx.recyclerview.widget.RecyclerView;  
  
import android.content.Intent;  
import android.os.Bundle;  
import android.view.View;  
import android.view.WindowManager;  
import android.widget.Toast;  
  
import java.util.ArrayList;  
  
public class HistoryList extends AppCompatActivity {  
 private ArrayList<SoldItem> soldItemList = new ArrayList<>();  
 private ArrayList<Item> itemList = new ArrayList<>();  
 RecyclerView recyclerList;  
 ItemRecyclerAdapter adapter;  
 @Override  
 protected void onCreate(Bundle savedInstanceState) {  
 super.onCreate(savedInstanceState);  
  
 getSupportActionBar().setDisplayHomeAsUpEnabled(true);  
 setContentView(R.layout.*activity\_history\_list*);  
  
 getSupportActionBar().hide(); //hide actionbar  
 getWindow().setFlags(WindowManager.LayoutParams.*FLAG\_FULLSCREEN*, WindowManager.LayoutParams.*FLAG\_FULLSCREEN*);  
 recyclerList = (RecyclerView) findViewById(R.id.*recyclerList*);  
 soldItemList = this.getIntent().getExtras().getParcelableArrayList("soldItemList");  
 itemList=this.getIntent().getExtras().getParcelableArrayList("itemList");  
 soldItemList.forEach(item -> {  
 System.*out*.println(item.getDateSold());  
 });  
// if(getIntent().hasExtra("bundle")) {  
  
// Bundle bundle = getIntent().getBundleExtra("bundle");  
// soldItemList = bundle.getParcelableArrayList("soldItemList");  
//  
// }  
  
 recyclerList.setLayoutManager(new LinearLayoutManager(this));  
 adapter = new ItemRecyclerAdapter(soldItemList, this, new ItemRecyclerAdapter.OnItemClickListener() {  
 @Override  
 public void onItemClicked(SoldItem item) {  
 goToSoldItemDetail(item);  
 }  
 });  
 recyclerList.setAdapter(adapter);  
 }  
  
 public void goToSoldItemDetail(SoldItem item) {  
 System.*out*.println(item.dateSold);  
 Intent myIntent = new Intent(this, SoldItemDetail.class);  
 Bundle bundle = new Bundle();  
 bundle.putParcelableArrayList("itemList", itemList);  
 bundle.putParcelableArrayList("soldItemList", soldItemList);  
 myIntent.putExtra("soldItemDetail", item);  
 myIntent.putExtras(bundle);  
 startActivity(myIntent);  
 }  
  
 public void backFunction(View v){  
 Intent myIntent = new Intent(this, ManagementPanel.class);  
 Bundle bundle = new Bundle();  
 bundle.putParcelableArrayList("itemList", itemList);  
 bundle.putParcelableArrayList("soldItemList", soldItemList);  
 myIntent.putExtras(bundle);  
 startActivity(myIntent);  
 }  
}

Item.java

package com.example.cashregister;  
  
import android.os.Parcel;  
import android.os.Parcelable;  
  
public class Item implements Parcelable {  
 private String name;  
 private int quantity;  
 private double unitPrice;  
  
 public Item(String name, int quantity, double price) {  
 this.name = name;  
 this.quantity = quantity;  
 this.unitPrice = price;  
 }  
  
 protected Item(Parcel in) {  
 name = in.readString();  
 unitPrice = in.readDouble();  
 quantity = in.readInt();  
 }  
  
 public static final Creator<Item> *CREATOR* = new Creator<Item>() {  
 @Override  
 public Item createFromParcel(Parcel in) {  
 return new Item(in);  
 }  
  
 @Override  
 public Item[] newArray(int size) {  
 return new Item[size];  
 }  
 };  
  
 public String getName() {  
 return name;  
 }  
  
 public void setName(String name) {  
 this.name = name;  
 }  
  
 public int getQuantity() {  
 return quantity;  
 }  
  
 public void setQuantity(int quantity) {  
 this.quantity = quantity;  
 }  
  
 public void sellAmount(int quantity){  
 this.quantity -= quantity;  
 }  
  
 public double getUnitPrice() {  
 return unitPrice;  
 }  
  
 public void setUnitPrice(double unitPrice) {  
 this.unitPrice = unitPrice;  
 }  
  
  
 @Override  
 public String toString() {  
 return "Item{" +  
 "name='" + name + '\'' +  
 ", quantity=" + quantity +  
 ", unitPrice=" + unitPrice +  
 '}';  
 }  
  
 @Override  
 public int describeContents() {  
 return 0;  
 }  
  
 @Override  
 public void writeToParcel(Parcel parcel, int flags) {  
 parcel.writeString(name);  
 parcel.writeDouble(unitPrice);  
 parcel.writeInt(quantity);  
 }  
}

ItemListAdapter.java

package com.example.cashregister;  
  
import android.content.Context;  
import android.view.LayoutInflater;  
import android.view.View;  
import android.view.ViewGroup;  
import android.widget.ArrayAdapter;  
import android.widget.TextView;  
  
import androidx.annotation.NonNull;  
  
import java.util.List;  
  
public class ItemListAdapter extends ArrayAdapter<Item> {  
 private Context mContext;  
 private int mResource;  
  
 public ItemListAdapter(Context context, int resource, List<Item> objects) {  
 super(context, resource, objects);  
 this.mContext = context;  
 this.mResource = resource;  
 }  
  
 @NonNull  
 @Override  
 public View getView(int position, View convertView, ViewGroup parent) {  
 String name = getItem(position).getName();  
 double unitPrice = getItem(position).getUnitPrice();  
 int quantity = getItem(position).getQuantity();  
  
 Item item = new Item(name, quantity, unitPrice);  
  
 LayoutInflater inflater = LayoutInflater.*from*(mContext);  
 convertView = inflater.inflate(mResource, parent, false);  
  
 TextView tvName = (TextView) convertView.findViewById(R.id.*textView1*);  
 TextView tvQuantity = (TextView) convertView.findViewById(R.id.*textView3*);  
 TextView tvPrice = (TextView) convertView.findViewById(R.id.*textView2*);  
  
 tvName.setText(name);  
 tvQuantity.setText(String.*valueOf*(quantity));  
 tvPrice.setText(String.*valueOf*(unitPrice));  
 return convertView;  
 }  
}

ItemRecycleAdapter.java

package com.example.cashregister;  
  
import android.annotation.SuppressLint;  
import android.content.Context;  
import android.view.LayoutInflater;  
import android.view.View;  
import android.view.ViewGroup;  
import android.widget.TextView;  
  
import androidx.annotation.NonNull;  
import androidx.recyclerview.widget.RecyclerView;  
  
import java.util.ArrayList;  
  
public class ItemRecyclerAdapter extends RecyclerView.Adapter<ItemRecyclerAdapter.ViewHolder> {  
 ArrayList<SoldItem> soldItemList;  
 Context mContext;  
  
 public interface OnItemClickListener {  
 void onItemClicked(SoldItem item);  
 }  
  
 private final OnItemClickListener listener;  
  
 public ItemRecyclerAdapter(ArrayList<SoldItem> soldItemList, Context context, OnItemClickListener listener) {  
 this.soldItemList = soldItemList;  
 this.mContext = context;  
 this.listener = listener;  
 }  
  
 public static class ViewHolder extends RecyclerView.ViewHolder {  
 private TextView itemName;  
 private TextView itemPrice;  
 private TextView itemQuantity;  
  
 public ViewHolder(View view) {  
 super(view);  
 itemName = (TextView) view.findViewById(R.id.*textView4*);  
 itemQuantity = (TextView) view.findViewById(R.id.*textView5*);  
 itemPrice = (TextView) view.findViewById(R.id.*textView6*);  
 }  
  
 public TextView getItemName() {  
 return itemName;  
 }  
  
 public TextView getItemPrice() {  
 return itemPrice;  
 }  
  
 public TextView getItemQuantity() {  
 return itemQuantity;  
 }  
 }  
  
 @NonNull  
 @Override  
 public ItemRecyclerAdapter.ViewHolder onCreateViewHolder(@NonNull ViewGroup parent, int viewType) {  
  
 View view = LayoutInflater.*from*(mContext)  
 .inflate(R.layout.*sold\_item\_recycler\_list*, parent, false);  
  
 return new ViewHolder(view);  
 }  
  
 @Override  
 public void onBindViewHolder(@NonNull ItemRecyclerAdapter.ViewHolder holder, @SuppressLint("RecyclerView") int position) {  
 holder.getItemName().setText(soldItemList.get(position).getName());  
 holder.getItemPrice().setText(String.*format*("%.2f", soldItemList.get(position).getTotal()));  
 holder.getItemQuantity().setText(String.*valueOf*(soldItemList.get(position).getQuantity()));  
 holder.itemView.setOnClickListener(new View.OnClickListener() {  
 @Override  
 public void onClick(View view) {  
 listener.onItemClicked(soldItemList.get(position));  
 }  
 });  
 }  
  
 @Override  
 public int getItemCount() {  
 return soldItemList.size();  
 }  
}

MainActivity.java

package com.example.cashregister;  
  
import static java.lang.Double.*parseDouble*;  
import static java.lang.Integer.*parseInt*;  
  
import androidx.annotation.NonNull;  
import androidx.appcompat.app.AlertDialog;  
import androidx.appcompat.app.AppCompatActivity;  
  
import android.content.Intent;  
import android.os.Build;  
import android.os.Bundle;  
import android.view.Gravity;  
import android.view.View;  
import android.view.WindowManager;  
import android.widget.Button;  
import android.widget.ListView;  
import android.widget.TextView;  
  
import com.google.android.material.snackbar.Snackbar;  
  
import java.time.LocalDateTime;  
import java.time.format.DateTimeFormatter;  
import java.util.ArrayList;  
  
public class MainActivity extends AppCompatActivity {  
 private ArrayList<SoldItem> soldItemList = new ArrayList<>();  
 private ArrayList<Item> itemList = new ArrayList<>();  
  
 private boolean isReset = true;  
 private Utils utils = new Utils();  
 private AlertDialog.Builder builder;  
  
 @Override  
 protected void onCreate(Bundle savedInstanceState) {  
 super.onCreate(savedInstanceState);  
 getSupportActionBar().hide(); //hide actionbar  
 getWindow().setFlags(WindowManager.LayoutParams.*FLAG\_FULLSCREEN*, WindowManager.LayoutParams.*FLAG\_FULLSCREEN*); //hide status  
 setContentView(R.layout.*activity\_main*);  
  
 if (this.getIntent().getExtras() != null) {  
 soldItemList = this.getIntent().getExtras().getParcelableArrayList("soldItemList");  
 if (this.getIntent().getExtras().getParcelableArrayList("itemList") != null) {  
 itemList = this.getIntent().getExtras().getParcelableArrayList("itemList");  
 }  
 } else {  
 itemList = utils.createItemData();  
 }  
 if (savedInstanceState != null) {  
 getDataFromSavedPage(savedInstanceState);  
 }  
  
 fetchData();  
 }  
  
 @Override  
 protected void onSaveInstanceState(@NonNull Bundle outState) {  
  
 TextView productName = (TextView) findViewById(R.id.*productType*);  
 TextView quantity = (TextView) findViewById(R.id.*quantity*);  
 TextView totalPrice = (TextView) findViewById(R.id.*totalPrice*);  
  
 outState.putString("productName", productName.getText().toString());  
 outState.putString("quantity", quantity.getText().toString());  
 outState.putString("totalPrice", totalPrice.getText().toString());  
  
 outState.putParcelableArrayList("itemList", itemList);  
 outState.putParcelableArrayList("soldItemList", soldItemList);  
  
 super.onSaveInstanceState(outState);  
 }  
  
 public void fetchData() {  
 ListView mListView = (ListView) findViewById(R.id.*theList*);  
 ItemListAdapter adapter = new ItemListAdapter(this, R.layout.*adapter\_view\_layout*, itemList);  
 mListView.setAdapter(adapter);  
 }  
  
 public void getDataFromSavedPage(Bundle savedInstanceState) {  
 TextView productName = (TextView) findViewById(R.id.*productType*);  
 TextView quantity = (TextView) findViewById(R.id.*quantity*);  
 TextView totalPrice = (TextView) findViewById(R.id.*totalPrice*);  
 productName.setText(savedInstanceState.getString("productName"));  
 quantity.setText(savedInstanceState.getString("quantity"));  
 totalPrice.setText(savedInstanceState.getString("totalPrice"));  
  
 soldItemList = savedInstanceState.getParcelableArrayList("soldItemList");  
 itemList = savedInstanceState.getParcelableArrayList("itemList");  
 }  
  
 public void onCLick(View v) {  
 if (isReset) {  
 clearTextView();  
 isReset = false;  
 }  
 Button button = (Button) v;  
 String buttonText = button.getText().toString();  
 TextView resultView = (TextView) findViewById(R.id.*quantity*);  
 resultView.append(buttonText);  
 calculatePrice();  
 }  
  
 public void renderingProductType(View v) {  
 TextView itemName = (TextView) v.findViewById(R.id.*textView1*);  
 String buttonText = itemName.getText().toString();  
 TextView resultView = (TextView) findViewById(R.id.*productType*);  
 resultView.setText(buttonText);  
 calculatePrice();  
 }  
  
 public void goToManagementPanel(View v) {  
 Intent myIntent = new Intent(this, ManagementPanel.class);  
 Bundle bundle = new Bundle();  
 bundle.putParcelableArrayList("itemList", itemList);  
 bundle.putParcelableArrayList("soldItemList", soldItemList);  
 myIntent.putExtras(bundle);  
 startActivity(myIntent);  
 }  
  
 public void deleteButton(View v) {  
 TextView resultView = (TextView) findViewById(R.id.*quantity*);  
  
 String str = resultView.getText().toString();  
 if (str.equals("Quantity")) {  
 clearTextView();  
 resultView.setText("0");  
 } else {  
 if (str.length() > 0 && !str.equals("0")) {  
 resultView.setText(utils.popCharacter(str));  
 if (str.length() == 1) {  
 resultView.setText("0");  
 isReset = true;  
 }  
 }  
 }  
 calculatePrice();  
 }  
  
  
 public void clearTextView() {  
 TextView resultView = (TextView) findViewById(R.id.*quantity*);  
 resultView.setText("");  
 }  
  
 public void deleteEverything(View v) {  
 TextView quantity = (TextView) findViewById(R.id.*quantity*);  
 quantity.setText("Quantity");  
 TextView productType = (TextView) findViewById(R.id.*productType*);  
 productType.setText("Product Type");  
 TextView totalPrice = (TextView) findViewById(R.id.*totalPrice*);  
 totalPrice.setText("Total");  
 isReset = true;  
 }  
  
 public void buyButton(View v) {  
 boolean flagSnackBar = true;  
 TextView quantity = (TextView) findViewById(R.id.*quantity*);  
 TextView productType = (TextView) findViewById(R.id.*productType*);  
 TextView totalPrice = (TextView) findViewById(R.id.*totalPrice*);  
 Item product = findItem(productType.getText().toString());  
 String snackbarText = "";  
  
 if (quantity.getText().toString().equals("Quantity") || productType.getText().toString().equals("productType") || totalPrice.getText().toString().equals("Total") || quantity.getText().toString().equals("0") || product == null) {  
 snackbarText = "All field are required!!!";  
 flagSnackBar = false;  
 } else {  
 int number = Integer.*parseInt*(quantity.getText().toString());  
 if (Integer.*parseInt*(quantity.getText().toString()) > product.getQuantity()) {  
 snackbarText = "No Enough quantity in the stock!!!";  
 flagSnackBar = false;  
 }  
 }  
  
 if (!flagSnackBar) {  
 View contextView = (View) findViewById(R.id.*snackBar*);  
 contextView.getLayoutParams().height = 10;  
  
 Snackbar mSnackbar = Snackbar.*make*(contextView, snackbarText, Snackbar.*LENGTH\_LONG*);  
 View mView = mSnackbar.getView();  
  
 TextView mTextView = (TextView) mView.findViewById(R.id.*snackbar\_text*);  
 if (Build.VERSION.*SDK\_INT* >= Build.VERSION\_CODES.*JELLY\_BEAN\_MR1*)  
 mTextView.setTextAlignment(View.*TEXT\_ALIGNMENT\_CENTER*);  
 else  
 mTextView.setGravity(Gravity.*CENTER\_HORIZONTAL*);  
 mSnackbar.setBackgroundTint(getColor(R.color.*backgroundSnackBar*)).setTextColor(getColor(R.color.*black*));  
  
 mSnackbar.show();  
 } else {  
 product.sellAmount(Integer.*parseInt*(quantity.getText().toString()));  
 builder = new AlertDialog.Builder(this);  
 builder.setTitle("Thank You for your purchase").setMessage("Your purchase is " + quantity.getText().toString() + " " + productType.getText().toString() + " for " + totalPrice.getText().toString());  
 builder.show();  
 LocalDateTime localDateTime = LocalDateTime.*now*();  
 DateTimeFormatter formatter = DateTimeFormatter.*ofPattern*("yyyy-MM-dd HH:mm:ss");  
 String formatDateTime = localDateTime.format(formatter);  
 SoldItem soldItem = new SoldItem(productType.getText().toString(), *parseInt*(quantity.getText().toString()), *parseDouble*(totalPrice.getText().toString()), formatDateTime);  
 soldItemList.add(soldItem);  
 fetchData();  
 deleteEverything(v);  
 }  
 }  
  
 public Item findItem(String name) {  
 for (Item item : itemList) {  
 if (item.getName().equals(name)) {  
 return item;  
 }  
 }  
 return null;  
 }  
  
 public void calculatePrice() {  
 TextView productName = (TextView) findViewById(R.id.*productType*);  
 Item product = findItem(productName.getText().toString());  
  
 TextView quantity = (TextView) findViewById(R.id.*quantity*);  
 if (product != null && isNumberic(quantity.getText().toString())) {  
 TextView totalPrice = (TextView) findViewById(R.id.*totalPrice*);  
 double price = Integer.*parseInt*(quantity.getText().toString()) \* product.getUnitPrice();  
 String priceString = String.*format*("%.2f", price);  
 totalPrice.setText(priceString);  
 }  
 }  
  
 public boolean isNumberic(String str) {  
 return str.matches("-?\\d+(\\.\\d+)?");  
 }  
}

ManagementPanel.java

package com.example.cashregister;  
  
import androidx.activity.result.ActivityResultLauncher;  
import androidx.appcompat.app.AppCompatActivity;  
  
import android.content.Intent;  
import android.os.Bundle;  
import android.view.View;  
import android.view.WindowManager;  
  
import java.util.ArrayList;  
  
public class ManagementPanel extends AppCompatActivity {  
 private ArrayList<SoldItem> soldItemList = new ArrayList<SoldItem>();  
 private ArrayList<Item> itemList = new ArrayList<>();  
 public ActivityResultLauncher<Intent> newLauncher;  
  
 @Override  
 protected void onCreate(Bundle savedInstanceState) {  
 super.onCreate(savedInstanceState);  
 setContentView(R.layout.*activity\_management\_panel*);  
 getSupportActionBar().hide(); //hide actionbar  
 getWindow().setFlags(WindowManager.LayoutParams.*FLAG\_FULLSCREEN*, WindowManager.LayoutParams.*FLAG\_FULLSCREEN*); //hide status  
 soldItemList = this.getIntent().getExtras().getParcelableArrayList("soldItemList");  
 itemList = this.getIntent().getExtras().getParcelableArrayList("itemList");  
 }  
  
 public void goToHistoryList(View v) {  
 soldItemList.forEach(item -> {  
 item.getDateSold();  
 });  
 Intent myIntent = new Intent(this, HistoryList.class);  
 Bundle bundle = new Bundle();  
 bundle.putParcelableArrayList("itemList", itemList);  
 bundle.putParcelableArrayList("soldItemList", soldItemList);  
 myIntent.putExtras(bundle);  
  
 startActivity(myIntent);  
 }  
  
 public void backFunction(View v) {  
 Intent myIntent = new Intent(this, MainActivity.class);  
 Bundle bundle = new Bundle();  
 bundle.putParcelableArrayList("itemList", itemList);  
 bundle.putParcelableArrayList("soldItemList", soldItemList);  
 myIntent.putExtras(bundle);  
 startActivity(myIntent);  
 }  
}

SoldItem.java

package com.example.cashregister;  
  
import android.os.Parcel;  
import android.os.Parcelable;  
  
import java.time.LocalDateTime;  
import java.util.Date;  
  
public class SoldItem implements Parcelable {  
 private String name;  
 private double total;  
 private int quantity;  
 public String dateSold;  
  
 public SoldItem(String name, int quantity, double total, String dateSold) {  
 this.name = name;  
 this.quantity = quantity;  
 this.total = total;  
 this.dateSold = dateSold;  
 }  
  
  
 protected SoldItem(Parcel in) {  
 name = in.readString();  
 total = in.readDouble();  
 quantity = in.readInt();  
 dateSold = in.readString();  
 }  
  
 public static final Creator<SoldItem> *CREATOR* = new Creator<SoldItem>() {  
 @Override  
 public SoldItem createFromParcel(Parcel in) {  
 return new SoldItem(in);  
 }  
  
 @Override  
 public SoldItem[] newArray(int size) {  
 return new SoldItem[size];  
 }  
 };  
  
 @Override  
 public int describeContents() {  
 return 0;  
 }  
  
 @Override  
 public void writeToParcel(Parcel parcel, int i) {  
 parcel.writeString(name);  
 parcel.writeDouble(total);  
 parcel.writeInt(quantity);  
 parcel.writeString(dateSold);  
 }  
  
 public String getName() { return this.name;};  
 public int getQuantity() { return this.quantity;};  
 public double getTotal() { return this.total;};  
 public String getDateSold() { return "Purchased day: "+ this.dateSold;};  
}

SoldItemDetail.java

package com.example.cashregister;  
  
import androidx.appcompat.app.AppCompatActivity;  
  
import android.content.Intent;  
import android.os.Bundle;  
import android.view.View;  
import android.view.WindowManager;  
import android.widget.TextView;  
  
import org.w3c.dom.Text;  
  
import java.util.ArrayList;  
  
public class SoldItemDetail extends AppCompatActivity {  
 SoldItem soldItem;  
 ArrayList<SoldItem> soldItemList = new ArrayList<>();  
 private ArrayList<Item> itemList = new ArrayList<>();  
  
 @Override  
 protected void onCreate(Bundle savedInstanceState) {  
 super.onCreate(savedInstanceState);  
  
 getSupportActionBar().setDisplayHomeAsUpEnabled(true);  
 setContentView(R.layout.*activity\_sold\_item\_detail*);  
 getSupportActionBar().hide(); //hide actionbar  
 getWindow().setFlags(WindowManager.LayoutParams.*FLAG\_FULLSCREEN*, WindowManager.LayoutParams.*FLAG\_FULLSCREEN*);  
 Bundle data = getIntent().getExtras();  
 soldItem = (SoldItem) data.getParcelable("soldItemDetail");  
 TextView itemName = (TextView) findViewById(R.id.*textView4*);  
 TextView itemPrice = (TextView) findViewById(R.id.*textView5*);  
 TextView itemDate = (TextView) findViewById(R.id.*textView6*);  
 itemName.setText("Product: " + soldItem.getName());  
 itemPrice.setText("Price: $" + soldItem.getTotal());  
 itemDate.setText(soldItem.getDateSold());  
 soldItemList = this.getIntent().getExtras().getParcelableArrayList("soldItemList");  
 itemList=this.getIntent().getExtras().getParcelableArrayList("itemList");  
 }  
  
 public void backFunction(View v) {  
 Intent myIntent = new Intent(this, HistoryList.class);  
 Bundle bundle = new Bundle();  
 bundle.putParcelableArrayList("itemList", itemList);  
 bundle.putParcelableArrayList("soldItemList", soldItemList);  
 myIntent.putExtras(bundle);  
 startActivity(myIntent);  
 }  
}

Util.java

package com.example.cashregister;  
  
import java.util.ArrayList;  
  
public class Utils {  
 public ArrayList<Item> createItemData() {  
 ArrayList<Item> itemList = new ArrayList<Item>();  
  
 Item pante = new Item("Pante", 10, 20.44);  
  
 Item shoes = new Item("Shoes", 100, 10.44);  
  
 Item hats = new Item("Hats", 30, 5.9);  
  
 itemList.add(pante);  
 itemList.add(shoes);  
 itemList.add(hats);  
  
 return itemList;  
 }  
  
 public String popCharacter(String str) {  
 return str.substring(0, str.length() - 1);  
 }  
}

activity\_history\_list.xml

<?xml version="1.0" encoding="utf-8"?>  
<androidx.constraintlayout.widget.ConstraintLayout  
 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:layout\_width="match\_parent"  
 android:layout\_height="match\_parent"  
 tools:context=".HistoryList">  
  
 <LinearLayout  
 android:id="@+id/header"  
 android:layout\_width="0dp"  
 android:layout\_height="wrap\_content"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toTopOf="parent">  
  
 <ImageButton  
 android:id="@+id/imageButton"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="match\_parent"  
 android:backgroundTint="#00FFE1"  
 android:onClick="backFunction"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:srcCompat="@drawable/ic\_baseline\_arrow\_back\_24"  
 tools:layout\_editor\_absoluteY="91dp" />  
  
 <TextView  
 android:id="@+id/title"  
 android:layout\_width="match\_parent"  
 android:layout\_height="40dp"  
 android:background="#00FFE1"  
 android:gravity="center|left"  
 android:paddingLeft="10dp"  
 android:text="Assignment 2"  
 android:textSize="18dp"  
 android:textStyle="bold"  
 tools:ignore="MissingConstraints"  
 tools:layout\_editor\_absoluteY="165dp" />  
 </LinearLayout>  
  
 <androidx.recyclerview.widget.RecyclerView  
 android:id="@+id/recyclerList"  
 android:layout\_width="match\_parent"  
 android:layout\_height="wrap\_content"  
 android:padding="10dp"  
 app:layout\_constraintBottom\_toBottomOf="parent"  
  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintHorizontal\_bias="0.0"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toBottomOf="@+id/header"  
 app:layout\_constraintVertical\_bias="0.0" />  
  
  
</androidx.constraintlayout.widget.ConstraintLayout>

Activity\_main.xml

<?xml version="1.0" encoding="utf-8"?>  
<androidx.constraintlayout.widget.ConstraintLayout 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:layout\_width="match\_parent"  
 android:layout\_height="match\_parent"  
 tools:context=".MainActivity">  
  
 <TextView  
 android:id="@+id/snackBar"  
 android:layout\_width="0dp"  
 android:layout\_height="0dp"  
 tools:ignore="MissingConstraints"  
 />  
  
 <TextView  
 android:id="@+id/title"  
 android:layout\_width="match\_parent"  
 android:layout\_height="40dp"  
 android:background="#00FFE1"  
 android:gravity="center|left"  
 android:paddingLeft="10dp"  
 android:text="Assignment 2"  
 android:textSize="18dp"  
 android:textStyle="bold"  
 tools:ignore="MissingConstraints" />  
  
 <TextView  
 android:id="@+id/productType"  
 android:layout\_width="0dp"  
 android:layout\_height="125dp"  
 android:gravity="center"  
 android:text="Product Type"  
 app:layout\_constraintEnd\_toStartOf="@+id/guidelineDivide"  
 app:layout\_constraintStart\_toStartOf="@+id/guidelineStart"  
 app:layout\_constraintTop\_toBottomOf="@+id/title" />  
  
 <Button  
 android:id="@+id/button"  
 android:layout\_width="127dp"  
 android:layout\_height="71dp"  
 android:layout\_marginBottom="28dp"  
 android:backgroundTint="#00FFE1"  
 android:onClick="goToManagementPanel"  
 android:text="Manager"  
 app:layout\_constraintBottom\_toBottomOf="@+id/productType"  
 app:layout\_constraintEnd\_toStartOf="@+id/guidelineEnd"  
 app:layout\_constraintHorizontal\_bias="1.0"  
 app:layout\_constraintStart\_toStartOf="@+id/guidelineDivide" />  
  
 <TextView  
 android:id="@+id/totalPrice"  
 android:layout\_width="129dp"  
 android:layout\_height="31dp"  
 android:gravity="center|bottom"  
 android:paddingBottom="10dp"  
 android:text="Total"  
 app:layout\_constraintEnd\_toStartOf="@+id/guideline3"  
 app:layout\_constraintStart\_toEndOf="@+id/tableLayout"  
 app:layout\_constraintTop\_toTopOf="@+id/guideline3"  
 app:layout\_constraintVertical\_bias="1.0" />  
  
 <TableLayout  
 android:id="@+id/tableLayout"  
 android:layout\_width="0dp"  
 android:layout\_height="0dp"  
 app:layout\_constraintBottom\_toTopOf="@+id/guideline2"  
 app:layout\_constraintEnd\_toStartOf="@+id/guidelineDivide"  
 app:layout\_constraintStart\_toStartOf="@+id/guidelineStart"  
 app:layout\_constraintTop\_toBottomOf="@+id/productType">  
  
 <TableRow  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_marginStart="5dp"  
 android:layout\_marginEnd="5dp"  
 android:layout\_weight="1">  
 <Button  
 android:layout\_width="0dp"  
 android:layout\_height="match\_parent"  
 android:layout\_weight=".33"  
 android:backgroundTint="#00FFE1"  
 android:onClick="onCLick"  
 android:text="1"  
 android:textColor="@color/black" />  
  
 <Button  
 android:layout\_width="0dp"  
 android:layout\_height="match\_parent"  
 android:layout\_weight=".33"  
 android:backgroundTint="#00FFE1"  
 android:onClick="onCLick"  
 android:text="2"  
 android:textColor="@color/black" />  
  
 <Button  
 android:layout\_width="0dp"  
 android:layout\_height="match\_parent"  
 android:layout\_weight=".33"  
 android:backgroundTint="#00FFE1"  
 android:onClick="onCLick"  
 android:text="3"  
 android:textColor="@color/black" />  
  
 </TableRow>  
  
 <TableRow  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_marginStart="5dp"  
 android:layout\_marginEnd="5dp"  
 android:layout\_weight="1">  
  
 <Button  
 android:layout\_width="0dp"  
 android:layout\_height="match\_parent"  
 android:layout\_weight=".33"  
 android:backgroundTint="#00FFE1"  
 android:onClick="onCLick"  
 android:text="4"  
 android:textColor="@color/black" />  
  
 <Button  
 android:layout\_width="0dp"  
 android:layout\_height="match\_parent"  
 android:layout\_weight=".33"  
 android:backgroundTint="#00FFE1"  
 android:onClick="onCLick"  
 android:text="5"  
 android:textColor="@color/black" />  
  
 <Button  
 android:layout\_width="0dp"  
 android:layout\_height="match\_parent"  
 android:layout\_weight=".33"  
 android:backgroundTint="#00FFE1"  
 android:onClick="onCLick"  
 android:text="6"  
 android:textColor="@color/black" />  
  
 </TableRow>  
  
 <TableRow  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_marginStart="5dp"  
 android:layout\_marginEnd="5dp"  
 android:layout\_weight="1">  
  
 <Button  
 android:layout\_width="0dp"  
 android:layout\_height="match\_parent"  
 android:layout\_weight=".33"  
 android:backgroundTint="#00FFE1"  
 android:onClick="onCLick"  
 android:text="7"  
 android:textColor="@color/black" />  
  
 <Button  
 android:layout\_width="0dp"  
 android:layout\_height="match\_parent"  
 android:layout\_weight=".33"  
 android:backgroundTint="#00FFE1"  
 android:onClick="onCLick"  
 android:text="8"  
 android:textColor="@color/black" />  
  
 <Button  
 android:layout\_width="0dp"  
 android:layout\_height="match\_parent"  
 android:layout\_weight=".33"  
 android:backgroundTint="#00FFE1"  
 android:onClick="onCLick"  
 android:text="9"  
 android:textColor="@color/black" />  
  
 </TableRow>  
  
 <TableRow  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_marginStart="5dp"  
 android:layout\_marginEnd="5dp"  
 android:layout\_weight="1">  
  
 <Button  
 android:layout\_width="0dp"  
 android:layout\_height="match\_parent"  
 android:layout\_weight=".33"  
 android:backgroundTint="#00FFE1"  
 android:onClick="deleteEverything"  
 android:text="C"  
 android:textColor="@color/black" />  
  
 <Button  
 android:layout\_width="0dp"  
 android:layout\_height="match\_parent"  
 android:layout\_weight=".33"  
 android:backgroundTint="#00FFE1"  
 android:onClick="onCLick"  
 android:text="0"  
 android:textColor="@color/black" />  
  
 <Button  
 android:layout\_width="0dp"  
 android:layout\_height="match\_parent"  
 android:layout\_weight=".33"  
 android:backgroundTint="#00FFE1"  
 android:onClick="deleteButton"  
 android:text="Del"  
 android:textColor="@color/black" />  
 </TableRow>  
  
 </TableLayout>  
  
 <TableLayout  
 android:layout\_width="0dp"  
 android:layout\_height="0dp"  
 app:layout\_constraintBottom\_toBottomOf="@+id/tableLayout"  
 app:layout\_constraintEnd\_toStartOf="@+id/guidelineEnd"  
 app:layout\_constraintStart\_toEndOf="@+id/tableLayout"  
 app:layout\_constraintTop\_toBottomOf="@+id/totalPrice">  
  
 <Button  
 android:layout\_width="118dp"  
 android:layout\_height="226dp"  
 android:layout\_marginStart="5dp"  
 android:layout\_marginEnd="5dp"  
 android:layout\_weight="1"  
 android:backgroundTint="#00FFE1"  
 android:onClick="buyButton"  
 android:text="Buy"  
 android:textColor="@color/black"  
 app:cornerRadius="10dp" />  
 </TableLayout>  
  
 <TextView  
 android:id="@+id/quantity"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="0dp"  
 android:layout\_marginTop="20dp"  
 android:text="Quantity"  
 android:textSize="20dp"  
 app:layout\_constraintEnd\_toStartOf="@+id/guidelineDivide"  
 app:layout\_constraintHorizontal\_bias="0.255"  
 app:layout\_constraintStart\_toStartOf="@+id/guidelineStart"  
 app:layout\_constraintTop\_toBottomOf="@+id/tableLayout" />  
  
 <ScrollView  
 android:layout\_width="0dp"  
 android:layout\_height="0dp"  
 android:layout\_marginTop="25dp"  
 android:layout\_marginBottom="10dp"  
 android:fillViewport="true"  
 app:layout\_constraintBottom\_toBottomOf="parent"  
 app:layout\_constraintEnd\_toStartOf="@+id/guidelineEnd"  
 app:layout\_constraintStart\_toStartOf="@+id/guidelineStart"  
 app:layout\_constraintTop\_toBottomOf="@+id/quantity">  
  
 <RelativeLayout  
 android:id="@+id/parentRelative"  
 android:layout\_width="match\_parent"  
 android:layout\_height="match\_parent"  
 tools:context="com.seneca.cashapp.MainActivity">  
  
 <ListView  
 android:id="@+id/theList"  
 android:layout\_width="match\_parent"  
 android:layout\_height="match\_parent"  
 android:layout\_alignParentStart="true"  
 android:layout\_alignParentTop="true" />  
 </RelativeLayout>  
  
 </ScrollView>  
  
  
  
 <androidx.constraintlayout.widget.Guideline  
 android:id="@+id/guidelineStart"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:orientation="vertical"  
 app:layout\_constraintGuide\_percent="0.05" />  
  
 <androidx.constraintlayout.widget.Guideline  
 android:id="@+id/guidelineEnd"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:orientation="vertical"  
 app:layout\_constraintGuide\_percent="0.96" />  
  
 <androidx.constraintlayout.widget.Guideline  
 android:id="@+id/guidelineDivide"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:orientation="vertical"  
 app:layout\_constraintGuide\_percent="0.65" />  
  
 <androidx.constraintlayout.widget.Guideline  
 android:id="@+id/guideline2"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:orientation="horizontal"  
 app:layout\_constraintGuide\_percent="0.55" />  
 <androidx.constraintlayout.widget.Guideline  
 android:id="@+id/guideline3"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:orientation="horizontal"  
 app:layout\_constraintGuide\_percent="0.22" />  
  
  
  
  
</androidx.constraintlayout.widget.ConstraintLayout>

Activity\_management\_panel.xml

<?xml version="1.0" encoding="utf-8"?>  
<androidx.constraintlayout.widget.ConstraintLayout 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:layout\_width="match\_parent"  
 android:layout\_height="match\_parent"  
 tools:context=".ManagementPanel">  
  
 <LinearLayout  
 android:id="@+id/header"  
 android:layout\_width="0dp"  
 android:layout\_height="wrap\_content"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toTopOf="parent">  
  
 <ImageButton  
 android:id="@+id/imageButton"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="match\_parent"  
 android:backgroundTint="#00FFE1"  
 android:onClick="backFunction"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:srcCompat="@drawable/ic\_baseline\_arrow\_back\_24"  
 tools:layout\_editor\_absoluteY="91dp" />  
  
 <TextView  
 android:id="@+id/title"  
 android:layout\_width="match\_parent"  
 android:layout\_height="40dp"  
 android:background="#00FFE1"  
 android:gravity="center|left"  
 android:paddingLeft="10dp"  
 android:text="Assignment 2"  
 android:textSize="18dp"  
 android:textStyle="bold"  
 tools:ignore="MissingConstraints"  
 tools:layout\_editor\_absoluteY="165dp" />  
 </LinearLayout>  
  
 <LinearLayout  
 android:layout\_width="match\_parent"  
 android:layout\_height="match\_parent"  
 android:layout\_marginTop="40dp"  
 android:gravity="center\_vertical|center\_horizontal"  
 android:orientation="vertical"  
 app:layout\_constraintTop\_toBottomOf="@+id/header"  
 tools:layout\_editor\_absoluteX="-49dp">  
  
 <Button  
 android:layout\_width="100dp"  
 android:layout\_height="60dp"  
 android:backgroundTint="#00FFE1"  
 android:onClick="goToHistoryList"  
 android:text="History" />  
  
  
 </LinearLayout>  
  
  
</androidx.constraintlayout.widget.ConstraintLayout>

Activity\_sold\_item\_detail.xml

<?xml version="1.0" encoding="utf-8"?>  
<androidx.constraintlayout.widget.ConstraintLayout xmlns:android="http://schemas.android.com/apk/res/android"  
android:layout\_width="match\_parent"  
android:layout\_height="match\_parent"  
xmlns:app="http://schemas.android.com/apk/res-auto"  
xmlns:tools="http://schemas.android.com/tools">  
  
 <LinearLayout  
 android:id="@+id/header"  
 android:layout\_width="0dp"  
 android:layout\_height="wrap\_content"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toTopOf="parent">  
  
 <ImageButton  
 android:id="@+id/imageButton"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="match\_parent"  
 android:backgroundTint="#00FFE1"  
 android:onClick="backFunction"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:srcCompat="@drawable/ic\_baseline\_arrow\_back\_24"  
 tools:layout\_editor\_absoluteY="91dp" />  
  
 <TextView  
 android:id="@+id/title"  
 android:layout\_width="match\_parent"  
 android:layout\_height="40dp"  
 android:background="#00FFE1"  
 android:gravity="center|left"  
 android:paddingLeft="10dp"  
 android:text="Assignment 2"  
 android:textSize="18dp"  
 android:textStyle="bold"  
 tools:ignore="MissingConstraints"  
 tools:layout\_editor\_absoluteY="165dp" />  
 </LinearLayout>  
  
  
 <LinearLayout  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_marginTop="92dp"  
 android:gravity="center"  
 android:orientation="vertical"  
 app:layout\_constraintBottom\_toTopOf="@+id/guidelineEnd"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintHorizontal\_bias="0.498"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toBottomOf="@+id/header"  
 app:layout\_constraintVertical\_bias="0.0">  
  
 <TextView  
 android:id="@+id/textView4"  
 android:layout\_width="match\_parent"  
 android:layout\_height="wrap\_content"  
 android:text="TextView2"  
 android:textAlignment="center"  
 android:textColor="#000000"  
 android:textSize="20sp"  
 tools:layout\_editor\_absoluteX="-16dp" />  
  
 <TextView  
  
 android:id="@+id/textView5"  
 android:layout\_width="match\_parent"  
 android:layout\_height="wrap\_content"  
 android:layout\_below="@+id/textView4"  
 android:text="TextView2"  
 android:textAlignment="center"  
 android:textColor="#000000"  
 android:textSize="20sp"  
 tools:layout\_editor\_absoluteX="0dp" />  
  
 <TextView  
 android:id="@+id/textView6"  
 android:layout\_width="match\_parent"  
 android:layout\_height="wrap\_content"  
 android:layout\_below="@+id/textView5"  
 android:text="TextView2"  
 android:textAlignment="center"  
 android:textColor="#000000"  
 android:textSize="20sp"  
 tools:layout\_editor\_absoluteX="41dp" />  
 </LinearLayout>  
  
 <androidx.constraintlayout.widget.Guideline  
 android:id="@+id/guidelineEnd"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:orientation="horizontal"  
 app:layout\_constraintGuide\_percent="1" />  
  
</androidx.constraintlayout.widget.ConstraintLayout>

Adapter\_view\_layout.xml

<?xml version="1.0" encoding="utf-8"?>  
<LinearLayout xmlns:android="http://schemas.android.com/apk/res/android"  
 android:orientation="horizontal"  
 android:layout\_width="match\_parent"  
 android:layout\_height="wrap\_content"  
 android:weightSum="100">  
  
  
 <LinearLayout  
 android:orientation="vertical"  
 android:layout\_width="match\_parent"  
 android:layout\_height="wrap\_content"  
 android:layout\_weight="33.3"  
 android:paddingLeft="30dp"  
 android:onClick="renderingProductType"  
 >  
  
 <TextView  
 android:id="@+id/textView1"  
 android:gravity="left"  
 android:text="TextView1"  
 android:layout\_width="match\_parent"  
 android:layout\_height="wrap\_content"  
 android:textSize="20sp"  
 android:textStyle="bold"  
 android:layout\_marginBottom="10dp" />  
  
 <TextView  
 android:gravity="left"  
 android:text="TextView2"  
 android:layout\_width="match\_parent"  
 android:layout\_height="wrap\_content"  
 android:textSize="20sp"  
 android:id="@+id/textView2"  
 android:textColor="#000000"  
 android:layout\_below="@+id/textView1"/>  
 </LinearLayout>  
 <TextView  
 android:textAlignment="center"  
 android:text="TextView3"  
 android:layout\_width="match\_parent"  
 android:layout\_height="wrap\_content"  
 android:id="@+id/textView3"  
 android:textSize="20sp"  
 android:layout\_weight="66.6"  
 android:textColor="#000000"/>  
</LinearLayout>

Sold\_item\_recycler\_list.xml

<?xml version="1.0" encoding="utf-8"?>  
<LinearLayout xmlns:android="http://schemas.android.com/apk/res/android"  
 android:orientation="horizontal"  
 android:layout\_width="match\_parent"  
 android:layout\_height="wrap\_content"  
 android:weightSum="100">  
  
  
 <LinearLayout  
 android:orientation="vertical"  
 android:layout\_width="match\_parent"  
 android:layout\_height="wrap\_content"  
 android:layout\_weight="33.3"  
 android:paddingLeft="30dp"  
 >  
  
 <TextView  
 android:id="@+id/textView4"  
 android:gravity="left"  
 android:text="TextView4"  
 android:layout\_width="match\_parent"  
 android:layout\_height="wrap\_content"  
 android:textSize="20sp"  
 android:textStyle="bold"  
 android:layout\_marginBottom="10dp" />  
  
 <TextView  
 android:gravity="left"  
 android:text="TextView5"  
 android:layout\_width="match\_parent"  
 android:layout\_height="wrap\_content"  
 android:textSize="20sp"  
 android:id="@+id/textView5"  
 android:textColor="#000000"  
 android:layout\_below="@+id/textView1"/>  
 </LinearLayout>  
 <TextView  
 android:textAlignment="center"  
 android:text="TextView6"  
 android:layout\_width="match\_parent"  
 android:layout\_height="wrap\_content"  
 android:id="@+id/textView6"  
 android:textSize="20sp"  
 android:layout\_weight="66.6"  
 android:textColor="#000000"/>  
</LinearLayout>