Groceries App

ITMD 455/555/855: Intelligence Device Applications – Final Project

**Team**

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**Introduction**

Everyone has to get groceries at some point in the week. One of the most difficult things to do is go to a groceries store while you’re hungry and only buy the things in your groceries list. How many times have you entered a store and left with more things than you were supposed to buy? The reason for this is that stores are designed to be a maze and make you see as many items as possible to incentivize you to buy. This app is designed to allow your phone to keep a set list of items and go through the list while you are shopping so you don’t buy any unnecessary items.

**Project Description**

This is an application that is used for generating a groceries list. Elements of the list are added with the users name so that the user sees only the items in his list only. Different list can be made with different names. Elements of the list can be updated, saved, and deleted.

**Project Plan**

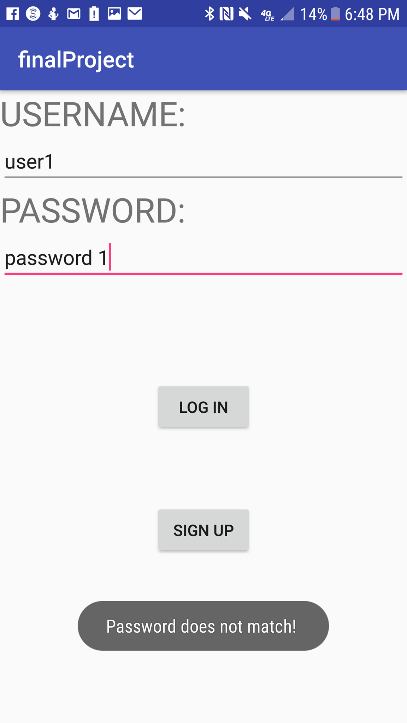
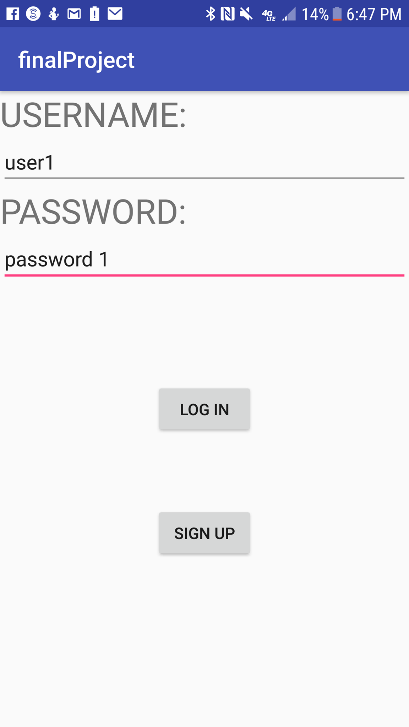
**Idea Description**: Build a Shopping list app that allows you to edit and update the list whenever. The list is dependent on a log in. The user can create an account or they can sign in if they already know their log in info. They can then update their list and sign out. A user will not be able to see the list of other users unless they know their log in information. If you have time implement a sorting list that allows Stores to sort the list based on the location of the items in each store and a grouping function that allows multiple users to see the same list.

**Division of work:**

* Log In Screen:
  + Username and Password
    - Need to check with database that a username and password exist.
  + Log in button and Sign up button
    - Once the log in button is clicked the application will look through the database and check if the username and password match with what is in the database.
    - Once the Log in button is clicked that application should check that both fields have information in them and prompt the user if something is wrong.
    - Once the Sign up button is clicked it should lead you to a new view that allows you to create a new account and add that to the database.
* Sign Up View:
  + Username
    - This field is used for the log in screen and will be check whenever the user wants to log in from the log in screen.
  + Name
    - This field will be based to the main app so that it can welcome the user with their name.
  + Password
    - This should have a confirm password section to make sure that the user knows what password they are applying.
  + Sign Up Button
    - Once the sign up button is clicked the information should be saved to a database and check to see that the password and the confirm password are the same. If the passwords are not the same the user should be prompted with a message.
* Groceries App View:
  + Add Item Button
    - This will add an Element to the list
  + View List Button
    - This will send you to the list of all Elements that are connected to your account. All the rest of the elements inputted in the app from other users will not be shown.
* Edit Elements:
  + Clicking on an element will allow you to edit that element
    - Deleting an element will remove that element from the database
    - Updated/saving will save the current text value to the list which allows you to change elements.
* Element Database:
  + Create a SQLite Database table. This table will have id, name, and user. This will allow the data to be stored in the database with a given user so that the app can query items from a user.

**Abstract**

In this project there were two apps created. The first is a log in app. This part of the app deals with the log in and sign up of a user on the app. The second app is the list app. This take in the arguments of the current user and the item that wants to be added to the database. The combination of the two app make the whole groceries app. The following shows the two apps functioning individually on a live phone.



Figures 1 and 2: New user trying to log in without signing up

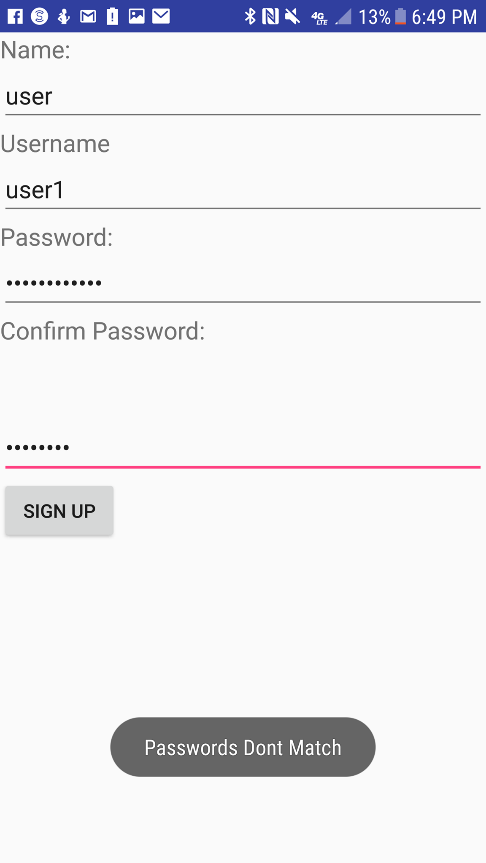
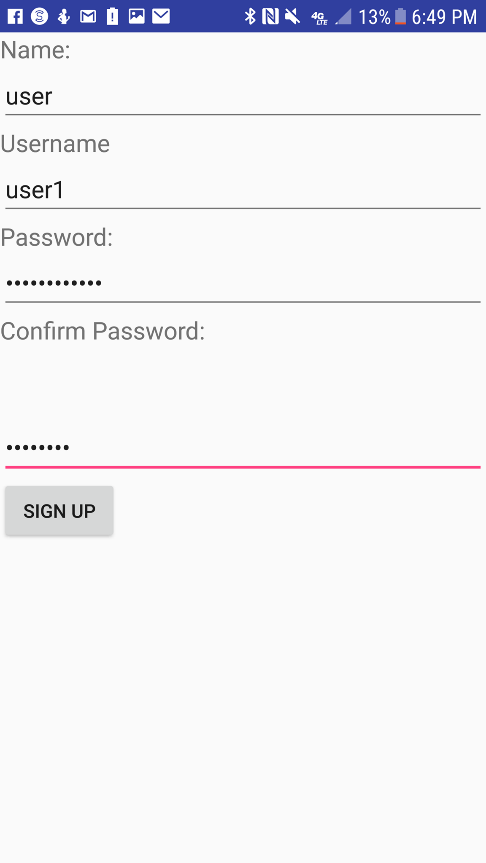


Figure 3 and 4: Signing up with nonmatching passwords

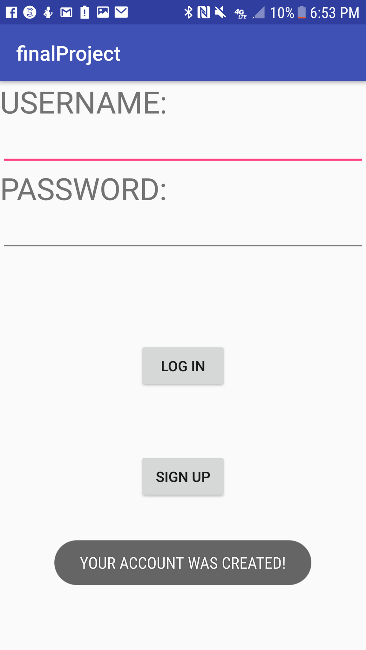


Figure 5: Succesfully creating a new user.

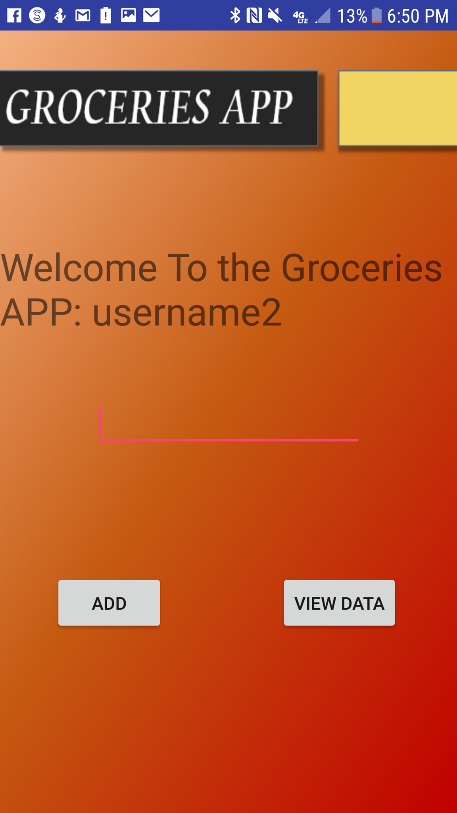
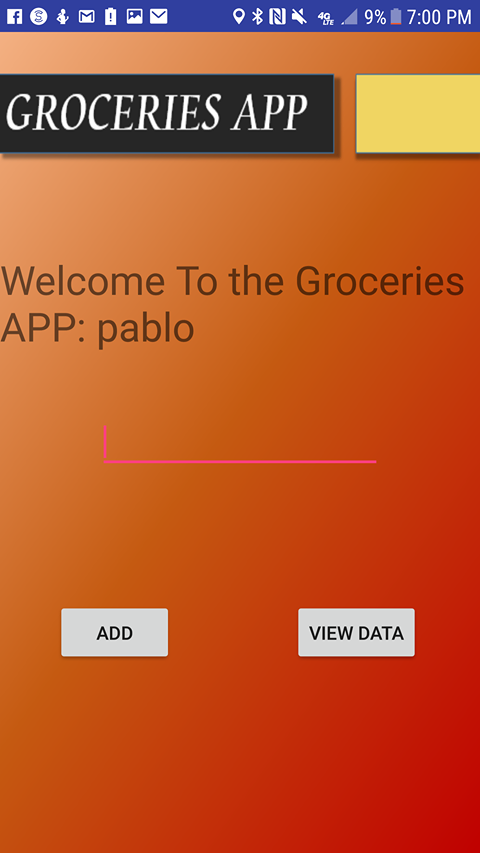
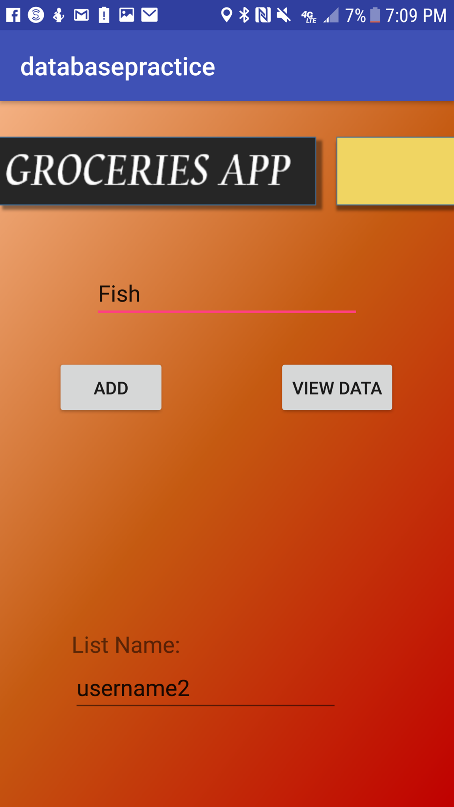
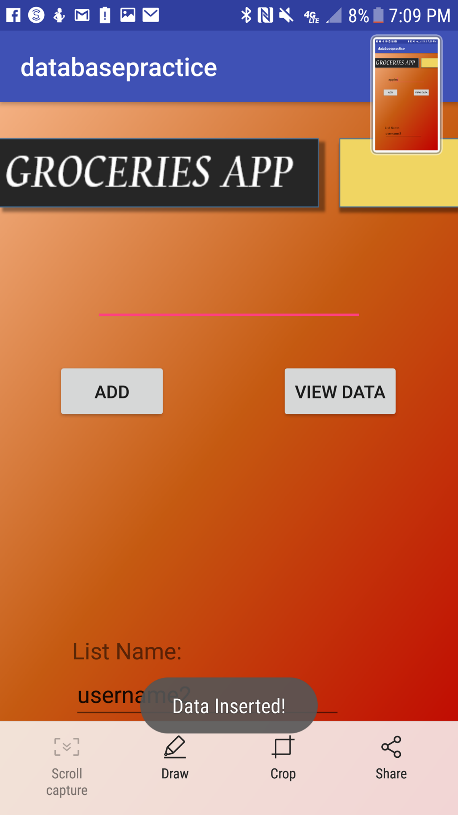
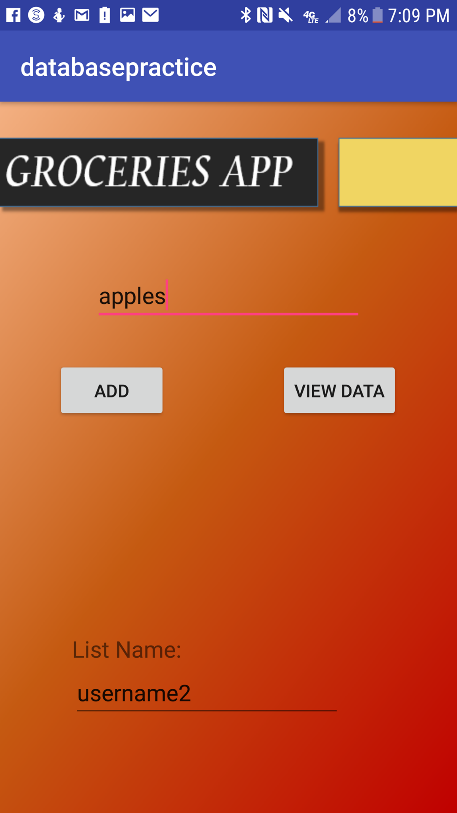
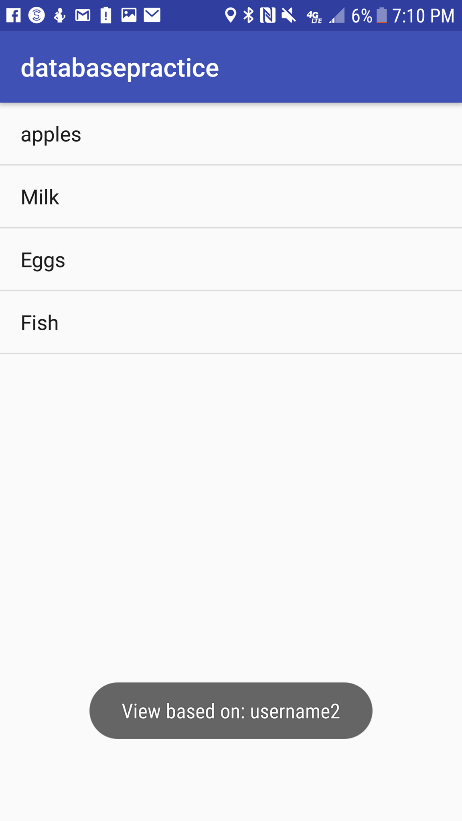
 

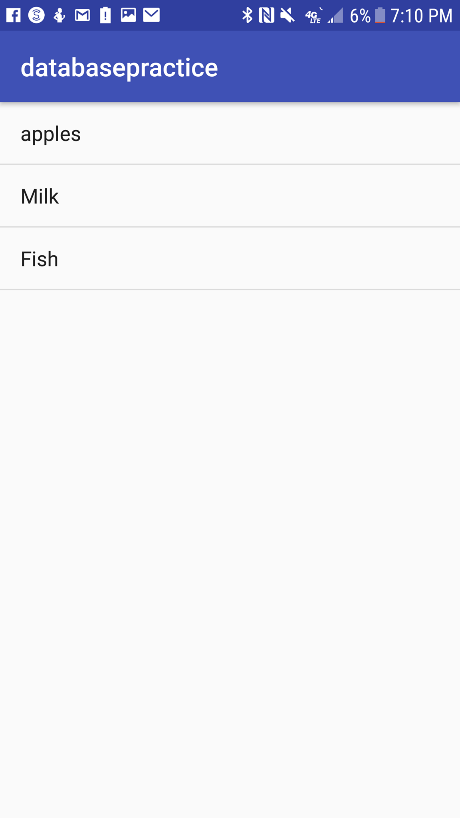
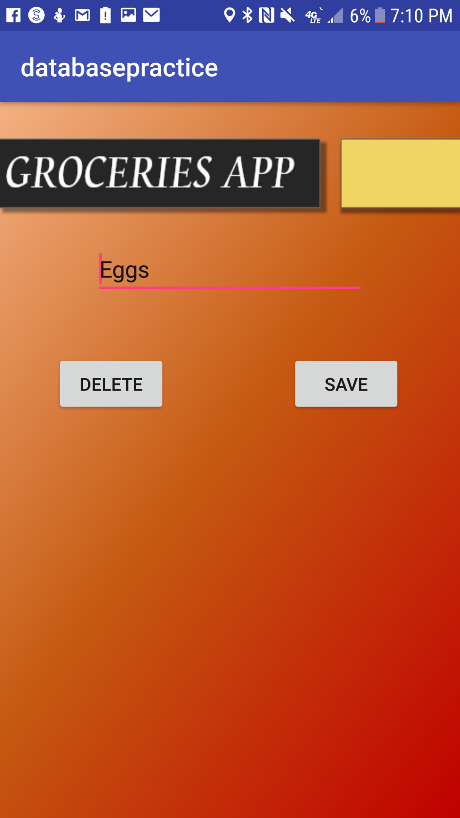
Figure 6 and 7: Show two different users accessing the app with different login.



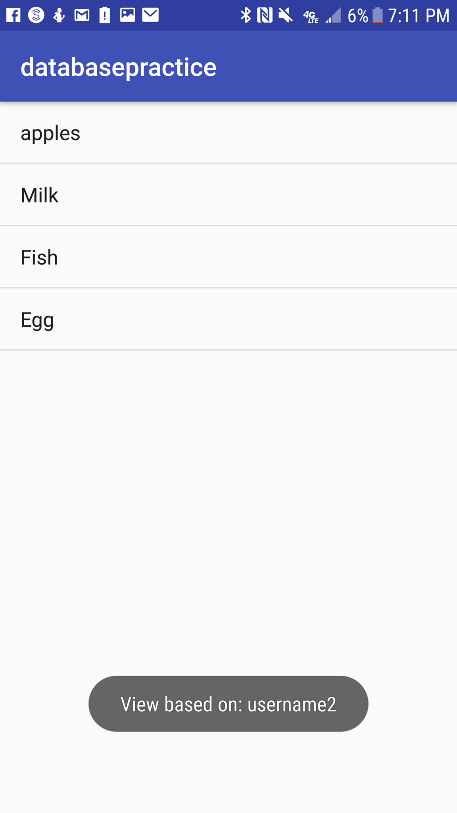
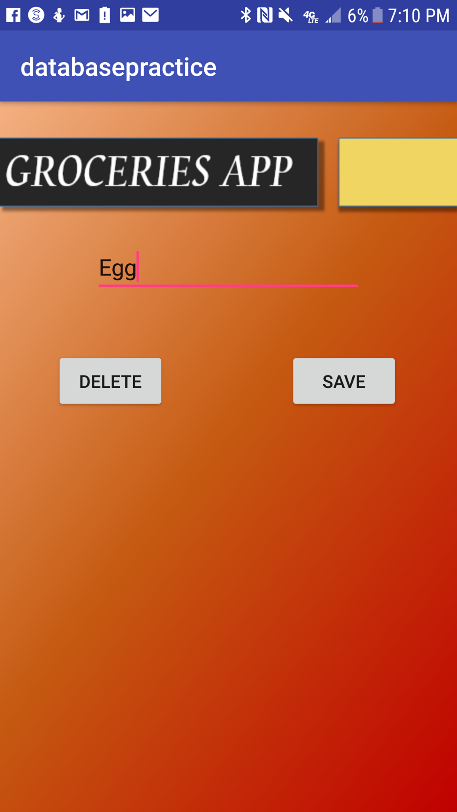
**Figure 8, 9 and 10: show the process of adding new items**



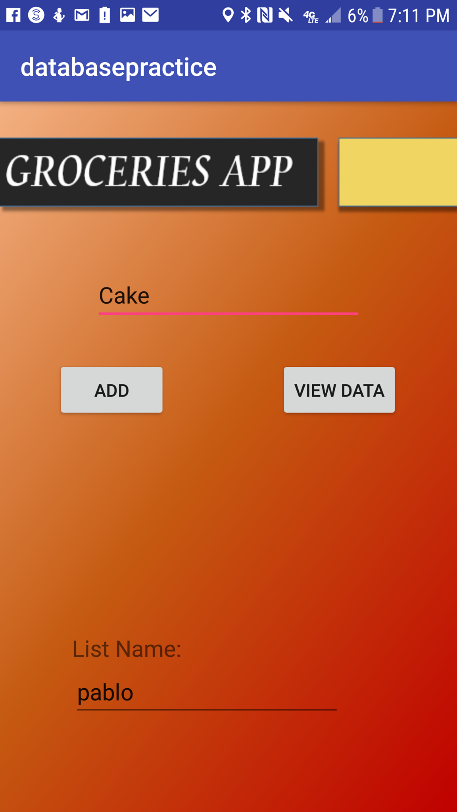
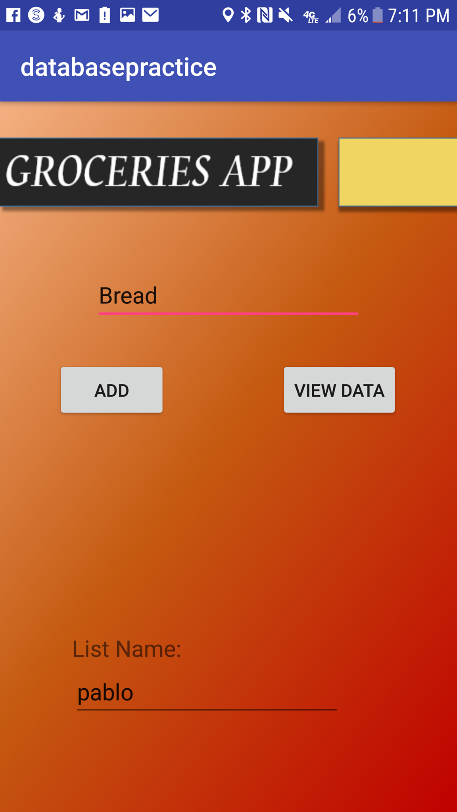
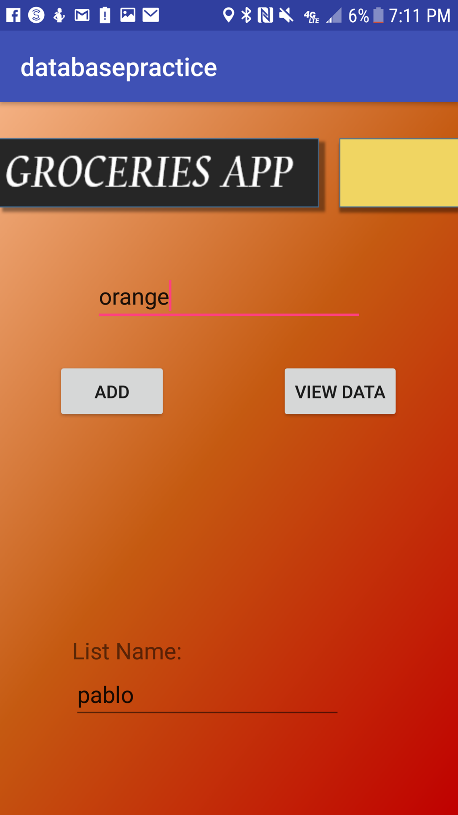
**Figure 11: Shows the List view all element from username2**



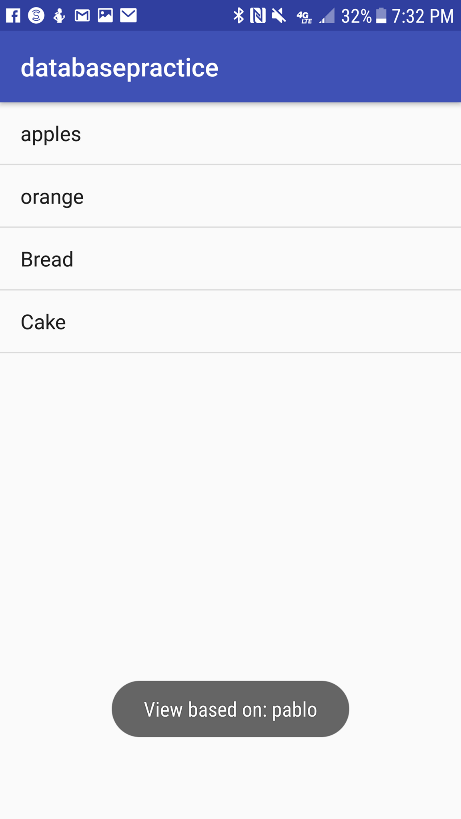
**Figures 12, 13, 14: Show after clicking on one of the items, you can delete them.**



**Figures 15, 16, and 17: Show after clicking on one of the elements you can update them.**



**Figures 18, 19, and 20: Show Pablo adding elements to his list**



**Figure 21: Pablo’s list of elements and not Username2 list**

**Code Documentation**

**List APP(databasepractice APP)**

**XML**

Activity\_main.xml

*<?***xml version="1.0" encoding="utf-8"***?>*<**RelativeLayout 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="org.example.databasepractice.MainActivity"  
 android:background="@drawable/backgroundfinal"** >  
  
 <**EditText  
 android:id="@+id/editText"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_alignParentTop="true"  
 android:layout\_centerHorizontal="true"  
 android:layout\_marginTop="130dp"  
 android:ems="10"  
 android:inputType="textPersonName"** />  
  
 <**Button  
 android:id="@+id/btndelete"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_alignParentLeft="true"  
 android:layout\_alignParentStart="true"  
 android:layout\_below="@+id/editText"  
 android:layout\_marginLeft="44dp"  
 android:layout\_marginStart="44dp"  
 android:layout\_marginTop="28dp"  
 android:text="Add"** />  
  
 <**Button  
 android:id="@+id/btnView"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_alignParentEnd="true"  
 android:layout\_alignParentRight="true"  
 android:layout\_alignTop="@+id/btndelete"  
 android:layout\_marginEnd="45dp"  
 android:layout\_marginRight="45dp"  
 android:text="View Data"** />  
  
 <**EditText  
 android:id="@+id/name"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_alignEnd="@+id/editText"  
 android:layout\_alignParentBottom="true"  
 android:layout\_alignRight="@+id/editText"  
 android:layout\_marginBottom="72dp"  
 android:layout\_marginEnd="17dp"  
 android:layout\_marginRight="17dp"  
 android:ems="10"  
 android:inputType="textPersonName"** />  
  
 <**TextView  
 android:id="@+id/textView"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_above="@+id/name"  
 android:layout\_alignLeft="@+id/name"  
 android:layout\_alignStart="@+id/name"  
 android:text="List Name:"  
 android:textSize="18sp"** />  
  
</**RelativeLayout**>

Edit\_data\_layout.xml

*<?***xml version="1.0" encoding="utf-8"***?>*<**RelativeLayout xmlns:android="http://schemas.android.com/apk/res/android"  
 android:layout\_width="match\_parent"  
 android:layout\_height="match\_parent"  
 android:background="@drawable/backgroundfinal"**>  
  
 <**EditText  
 android:id="@+id/editText"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_alignParentTop="true"  
 android:layout\_centerHorizontal="true"  
 android:layout\_marginTop="108dp"  
 android:ems="10"  
 android:inputType="textPersonName"** />  
  
 <**Button  
 android:id="@+id/btndelete"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_alignParentLeft="true"  
 android:layout\_alignParentStart="true"  
 android:layout\_below="@+id/editText"  
 android:layout\_marginLeft="43dp"  
 android:layout\_marginStart="43dp"  
 android:layout\_marginTop="43dp"  
 android:text="Delete"** />  
  
 <**Button  
 android:id="@+id/btnsave"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_alignParentEnd="true"  
 android:layout\_alignParentRight="true"  
 android:layout\_alignTop="@+id/btndelete"  
 android:layout\_marginEnd="45dp"  
 android:layout\_marginRight="45dp"  
 android:text="Save"** />  
  
</**RelativeLayout**>

List\_layout.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:layout\_width="match\_parent"  
 android:layout\_height="match\_parent"**>  
  
 <**ListView  
 android:id="@+id/listView"  
 android:layout\_width="match\_parent"  
 android:layout\_height="match\_parent"** />  
</**LinearLayout**>

**JAVA**

DatabaseHelper

**package** org.example.databasepractice;  
  
**import** android.content.ContentValues;  
**import** android.content.Context;  
**import** android.database.Cursor;  
**import** android.database.sqlite.SQLiteDatabase;  
**import** android.database.sqlite.SQLiteOpenHelper;  
**import** android.util.Log;  
  
*/\*\*  
 \* Created by GiancarloDesktop on 4/15/2018.  
 \*/***public class** DatabaseHelper **extends** SQLiteOpenHelper{  
  
 **private static final** String ***TAG***=**"DatabaseHelper"**;  
  
 *//Create fields for table* **private static final** String ***TABLE\_NAME***=**"people\_table"**;*//table name* **private static final** String ***COL1***=**"ID"**;  
 **private static final** String ***COL2***=**"name"**;  
 **private static final** String ***COL3***=**"user"**;  
  
 **public** DatabaseHelper(Context context){  
 **super**(context,***TABLE\_NAME***,**null** ,1);  
 }  
 @Override  
 **public void** onCreate(SQLiteDatabase sqLiteDatabase) {  
 String createTable=**"CREATE TABLE people\_table ( id INTEGER PRIMARY KEY AUTOINCREMENT, name TEXT, user TEXT )"**;  
 sqLiteDatabase.execSQL(createTable);  
 }  
  
 @Override  
 **public void** onUpgrade(SQLiteDatabase sqLiteDatabase, **int** i, **int** i1) {  
 String droptable=**"DROP IF TABLE EXISTS "**+***TABLE\_NAME***;  
 sqLiteDatabase.execSQL(droptable);  
 onCreate(sqLiteDatabase);  
 }  
  
 **public boolean** addData(String item){  
 SQLiteDatabase db=**this**.getWritableDatabase();  
 ContentValues contentValues=**new** ContentValues();  
 contentValues.put(***COL2***,item);  
 Log.*d*(***TAG***, **"addData: Adding "**+item+**" to "**+ ***TABLE\_NAME***);  
 **long** result=db.insert(***TABLE\_NAME***,**null**,contentValues);  
 **if**(result==-1){  
 **return false**;  
 }**else**{  
 **return true**;  
 }  
 }  
 **public boolean** addDatas(String item,String user){  
 SQLiteDatabase db=**this**.getWritableDatabase();  
 ContentValues contentValues=**new** ContentValues();  
 contentValues.put(***COL2***,item);  
 contentValues.put(***COL3***,user);  
 Log.*d*(***TAG***, **"addData: Adding "**+item+**" to "**+ ***TABLE\_NAME***);  
 **long** result=db.insert(***TABLE\_NAME***,**null**,contentValues);  
 **if**(result==-1){  
 **return false**;  
 }**else**{  
 **return true**;  
 }  
 }  
  
 **public** Cursor getData(){  
 SQLiteDatabase db=**this**.getWritableDatabase();  
 String query=**"SELECT \* FROM "**+***TABLE\_NAME***;  
 Cursor data=db.rawQuery(query,**null**);  
 **return** data;  
 }  
  
 **public** Cursor getDatas(String user){  
 SQLiteDatabase db=**this**.getWritableDatabase();  
 String query=**"SELECT \* FROM "**+***TABLE\_NAME***+**" WHERE "**+***COL3***+**" LIKE '"**+user+**"'"**;  
 Cursor data=db.rawQuery(query,**null**);  
 **return** data;  
 }  
  
 **public** Cursor getItemID(String name){  
 SQLiteDatabase db=**this**.getWritableDatabase();  
 String query=**"SELECT "**+***COL1***+**" FROM "**+***TABLE\_NAME***+**" WHERE "**+***COL2***+**" = '"**+name+**"'"**;  
 Cursor data=db.rawQuery(query,**null**);  
 **return** data;  
 }  
  
 **public void** updateName(String newName,**int** id,String oldName){  
 SQLiteDatabase db=**this**.getWritableDatabase();  
 String query = **"UPDATE "** + ***TABLE\_NAME*** + **" SET "** + ***COL2*** +  
 **" = '"** + newName + **"' WHERE "** + ***COL1*** + **" = '"** + id + **"'"** +  
 **" AND "** + ***COL2*** + **" = '"** + oldName + **"'"**;  
 Log.*d*(***TAG***,**"updateName: query: "**+query);  
 Log.*d*(***TAG***,**"updateName: setting name to "**+newName);  
 db.execSQL(query);  
 }  
  
 **public void** deleteName(**int** id, String name){  
 SQLiteDatabase db = **this**.getWritableDatabase();  
 String query = **"DELETE FROM "** + ***TABLE\_NAME*** + **" WHERE "** + ***COL1*** + **" = '"** + id + **"'"** +  
 **" AND "** + ***COL2*** + **" = '"** + name + **"'"**;  
 Log.*d*(***TAG***, **"deleteName: query: "** + query);  
 Log.*d*(***TAG***, **"deleteName: Deleting "** + name + **" from database."**);  
 db.execSQL(query);  
 }  
}

EditDataActivity

**package** org.example.databasepractice;  
  
**import** android.content.Intent;  
**import** android.os.Bundle;  
**import** android.support.annotation.Nullable;  
**import** android.support.v7.app.AppCompatActivity;  
**import** android.view.View;  
**import** android.widget.Button;  
**import** android.widget.EditText;  
**import** android.widget.Toast;  
  
*/\*\*  
 \* Created by GiancarloDesktop on 4/18/2018.  
 \*/***public class** EditDataActivity **extends** AppCompatActivity{  
 **private static final** String ***TAG***=**"EditDataActivity"**;  
 **private** EditText **editable\_item**;  
 **private** Button **btnSave**,**btnDelete**;  
 DatabaseHelper **mDataBaseHelper**;  
  
 **private** String **selectedName**;  
 **private int selectedID**;  
  
 @Override  
 **protected void** onCreate(@Nullable Bundle savedInstanceState){  
 **super**.onCreate(savedInstanceState);  
 setContentView(R.layout.***edit\_data\_layout***);  
 **btnSave**=(Button)findViewById(R.id.***btnsave***);  
 **btnDelete**=(Button)findViewById(R.id.***btndelete***);  
 **editable\_item**=(EditText) findViewById(R.id.***editText***);  
 **mDataBaseHelper**=**new** DatabaseHelper(**this**);  
  
 Intent reciveIntent=getIntent();  
 **selectedID**=reciveIntent.getIntExtra(**"id"**,-1);  
 **selectedName**=reciveIntent.getStringExtra(**"name"**);  
  
 **editable\_item**.setText(**selectedName**);  
 **final** Intent intent=**new** Intent(EditDataActivity.**this**,ListDataActivity.**class**);  
  
 **btnSave**.setOnClickListener(**new** View.OnClickListener() {  
 @Override  
 **public void** onClick(View view) {  
 String item=**editable\_item**.getText().toString();  
 **if**(!item.equals(**""**)){  
 **mDataBaseHelper**.updateName(item,**selectedID**,**selectedName**);  
 startActivity(intent);  
 toastMessage(**"Data was updated"**);  
 }**else**{  
 toastMessage(**"You must enter something"**);  
 }  
 }  
 });  
  
 **btnDelete**.setOnClickListener(**new** View.OnClickListener() {  
 @Override  
 **public void** onClick(View view) {  
 **mDataBaseHelper**.deleteName(**selectedID**,**selectedName**);  
 **editable\_item**.setText(**""**);  
 startActivity(intent);  
 toastMessage(**"removed from database"**);  
  
 }  
 });  
  
 }  
  
 **private void** toastMessage(String message){  
 Toast.*makeText*(**this**,message,Toast.***LENGTH\_SHORT***).show();  
 }  
}

ListDataActivity

**package** org.example.databasepractice;  
  
**import** android.content.Intent;  
**import** android.database.Cursor;  
**import** android.os.Bundle;  
**import** android.support.annotation.Nullable;  
**import** android.support.v7.app.AppCompatActivity;  
**import** android.util.Log;  
**import** android.view.View;  
**import** android.widget.AdapterView;  
**import** android.widget.ArrayAdapter;  
**import** android.widget.ListAdapter;  
**import** android.widget.ListView;  
**import** android.widget.Toast;  
  
**import** java.util.ArrayList;  
  
*/\*\*  
 \* Created by GiancarloDesktop on 4/16/2018.  
 \*/***public class** ListDataActivity **extends** AppCompatActivity{  
  
 **private static final** String ***TAG***=**"ListDataActivity"**;  
 DatabaseHelper **mDatabaseHelper**;  
 **private** ListView **mListView**;  
  
  
 @Override  
 **protected void** onCreate(@Nullable Bundle saveInstanceState){  
 **super**.onCreate(saveInstanceState);  
 setContentView(R.layout.***list\_layout***);  
 **mListView**=(ListView) findViewById(R.id.***listView***);  
 **mDatabaseHelper**=**new** DatabaseHelper(**this**);  
   
 populateListView();  
 }  
  
 **private void** populateListView() {  
 Log.*d*(***TAG***,**"populateListView: Display data in the ListView"**);  
 String user=getIntent().getStringExtra(**"username"**);  
 Cursor data=**mDatabaseHelper**.getDatas(user);  
 ArrayList<String> listData=**new** ArrayList<>();  
 **while**(data.moveToNext()){  
 listData.add(data.getString(1));  
 }  
 ListAdapter adapter= **new** ArrayAdapter<>(**this**,android.R.layout.***simple\_list\_item\_1***,listData);  
 **mListView**.setAdapter(adapter);  
  
 **mListView**.setOnItemClickListener(**new** AdapterView.OnItemClickListener() {  
 @Override  
 **public void** onItemClick(AdapterView<?> adapterView, View view, **int** i, **long** l) {  
 String name=adapterView.getItemAtPosition(i).toString();  
 Log.*d*(***TAG***,**"onItemClick: You clicked on "**+name);  
  
 Cursor data=**mDatabaseHelper**.getItemID(name);  
 **int** itemID=-1;  
 **while**(data.moveToNext()){  
 itemID=data.getInt(0);  
 }  
 **if**(itemID>=1){  
 Log.*d*(***TAG***,**"onItemClick: The id is : "**+itemID);  
 Intent editScreenIntent=**new** Intent(ListDataActivity.**this**,EditDataActivity.**class**);  
 editScreenIntent.putExtra(**"id"**,itemID);  
 editScreenIntent.putExtra(**"name"**,name);  
 startActivity(editScreenIntent);  
 }**else** {  
 toastMessage(**"No ID associated with that name"**);  
 }  
 }  
 });  
 }  
  
 **private void** toastMessage(String message){  
 Toast.*makeText*(**this**,message,Toast.***LENGTH\_SHORT***).show();  
 }  
}

MainActivity

**package** org.example.databasepractice;  
  
**import** android.content.Intent;  
**import** android.support.v7.app.AppCompatActivity;  
**import** android.os.Bundle;  
**import** android.view.View;  
**import** android.widget.Button;  
**import** android.widget.EditText;  
**import** android.widget.Toast;  
  
**public class** MainActivity **extends** AppCompatActivity {  
  
 **private static final** String ***TAG***=**"MainActivity"**;  
  
 DatabaseHelper **mDatabaseHelper**;  
 **private** Button **btnAdd**, **btnViewData**;  
 **private** EditText **editText**;  
  
 **private** EditText **userText**;  
  
 @Override  
 **protected void** onCreate(Bundle savedInstanceState) {  
 **super**.onCreate(savedInstanceState);  
 setContentView(R.layout.***activity\_main***);  
 **editText**=(EditText)findViewById(R.id.***editText***);  
 **btnAdd**=(Button) findViewById(R.id.***btndelete***);  
 **btnViewData**=(Button) findViewById(R.id.***btnView***);  
 **mDatabaseHelper**=**new** DatabaseHelper(**this**);  
  
 **userText**=(EditText) findViewById(R.id.***name***);  
  
  
 **btnAdd**.setOnClickListener(**new** View.OnClickListener() {  
 @Override  
 **public void** onClick(View view) {  
 String user=**userText**.getText().toString();  
 String newEntry= **editText**.getText().toString();  
 **if**(newEntry.length()!=0&&user.length()!=0){  
 addData(newEntry,user);  
 **editText**.setText(**""**);*//reset text* }**else**{  
 toastMessage(**"You need ot put something into the text fields"**);  
 }  
 }  
 });  
  
 **btnViewData**.setOnClickListener(**new** View.OnClickListener() {  
 @Override  
 **public void** onClick(View view) {  
 String user=**userText**.getText().toString();  
 Intent intent=**new** Intent(MainActivity.**this**,ListDataActivity.**class**);  
 intent.putExtra(**"username"**,user);  
 toastMessage(**"View based on: "**+user);  
 startActivity(intent);  
 }  
 });  
  
  
 }  
 **public void** addData(String newEntry,String user){  
 **boolean** insertData=**mDatabaseHelper**.addDatas(newEntry,user);  
  
 **if**(insertData){  
 toastMessage(**"Data Inserted!"**);  
 }**else**{  
 toastMessage(**"Something went wrong"**);  
 }  
 }  
  
  
 **private void** toastMessage(String message){  
 Toast.*makeText*(**this**,message,Toast.***LENGTH\_SHORT***).show();  
 }  
}

Manifest.XML

*<?***xml version="1.0" encoding="utf-8"***?>*<**manifest xmlns:android="http://schemas.android.com/apk/res/android"  
 package="org.example.databasepractice"**>  
  
 <**application  
 android:allowBackup="true"  
 android:icon="@mipmap/ic\_launcher"  
 android:label="@string/app\_name"  
 android:roundIcon="@mipmap/ic\_launcher\_round"  
 android:supportsRtl="true"  
 android:theme="@style/AppTheme"**>  
 <**activity android:name=".MainActivity"**>  
 <**intent-filter**>  
 <**action android:name="android.intent.action.MAIN"** />  
  
 <**category android:name="android.intent.category.LAUNCHER"** />  
 </**intent-filter**>  
 </**activity**>  
 <**activity android:name=".ListDataActivity"**></**activity**>  
 <**activity android:name=".EditDataActivity"**></**activity**>  
 </**application**>  
  
</**manifest**>

**Log in/Sign UP APP**

**XML**

Activity\_main.XML

*<?***xml version="1.0" encoding="utf-8"***?>*<**RelativeLayout 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="org.example.finalproject.MainActivity"**>  
  
 <**Button  
 android:id="@+id/btnlogin"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_centerHorizontal="true"  
 android:layout\_centerVertical="true"  
 android:onClick="onButtonClick"  
 android:text="LOG IN"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toTopOf="parent"** />  
  
 <**TextView  
 android:id="@+id/textView3"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_alignParentLeft="true"  
 android:layout\_alignParentStart="true"  
 android:layout\_alignParentTop="true"  
 android:text="USERNAME:"  
 android:textSize="30sp"** />  
  
 <**EditText  
 android:id="@+id/username"  
 android:layout\_width="match\_parent"  
 android:layout\_height="wrap\_content"  
 android:layout\_alignParentLeft="true"  
 android:layout\_alignParentStart="true"  
 android:layout\_below="@+id/textView3"  
 android:ems="10"  
 android:inputType="textPersonName"** />  
  
 <**TextView  
 android:id="@+id/textView4"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_alignParentLeft="true"  
 android:layout\_alignParentStart="true"  
 android:layout\_below="@+id/username"  
 android:text="PASSWORD:"  
 android:textSize="30sp"** />  
  
 <**EditText  
 android:id="@+id/password"  
 android:layout\_width="match\_parent"  
 android:layout\_height="wrap\_content"  
 android:layout\_alignEnd="@+id/username"  
 android:layout\_alignRight="@+id/username"  
 android:layout\_below="@+id/textView4"  
 android:ems="10"  
 android:inputType="textPersonName"** />  
  
 <**Button  
 android:id="@+id/btnsignup"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_alignLeft="@+id/btnlogin"  
 android:layout\_alignStart="@+id/btnlogin"  
 android:layout\_below="@+id/btnlogin"  
 android:layout\_marginTop="61dp"  
 android:onClick="onButtonClick"  
 android:text="SIGN UP"** />  
  
</**RelativeLayout**>

Display.XML

*<?***xml version="1.0" encoding="utf-8"***?>*<**RelativeLayout xmlns:android="http://schemas.android.com/apk/res/android"  
 android:layout\_width="match\_parent"  
 android:layout\_height="match\_parent"  
 android:background="@drawable/backgroundfinal"** >  
  
 <**TextView  
 android:id="@+id/welcome"  
 android:layout\_width="match\_parent"  
 android:layout\_height="wrap\_content"  
 android:layout\_above="@+id/btndelete"  
 android:layout\_alignParentLeft="true"  
 android:layout\_alignParentStart="true"  
 android:layout\_marginBottom="90dp"  
 android:text="DEFAULT"  
 android:textSize="30sp"** />  
  
 <**EditText  
 android:id="@+id/editText"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_centerHorizontal="true"  
 android:layout\_centerVertical="true"  
 android:ems="10"  
 android:inputType="textPersonName"** />  
  
 <**Button  
 android:id="@+id/btndelete"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_alignParentLeft="true"  
 android:layout\_alignParentStart="true"  
 android:layout\_below="@+id/editText"  
 android:layout\_marginLeft="42dp"  
 android:layout\_marginStart="42dp"  
 android:layout\_marginTop="96dp"  
 android:text="Add"** />  
  
 <**Button  
 android:id="@+id/btnView"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_alignParentEnd="true"  
 android:layout\_alignParentRight="true"  
 android:layout\_alignTop="@+id/btndelete"  
 android:layout\_marginEnd="45dp"  
 android:layout\_marginRight="45dp"  
 android:text="View Data"** />  
</**RelativeLayout**>

Signup.XML

*<?***xml version="1.0" encoding="utf-8"***?>*<**RelativeLayout xmlns:android="http://schemas.android.com/apk/res/android"  
 android:layout\_width="match\_parent"  
 android:layout\_height="match\_parent"**>  
  
 <**TextView  
 android:id="@+id/textviewname"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_alignParentLeft="true"  
 android:layout\_alignParentStart="true"  
 android:layout\_alignParentTop="true"  
 android:text="Name:"  
 android:textSize="18sp"** />  
  
 <**EditText  
 android:id="@+id/name"  
 android:layout\_width="match\_parent"  
 android:layout\_height="wrap\_content"  
 android:layout\_alignParentLeft="true"  
 android:layout\_alignParentStart="true"  
 android:layout\_below="@+id/textviewname"  
 android:ems="10"  
 android:inputType="textPersonName"** />  
  
 <**TextView  
 android:id="@+id/textviewuser"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_alignParentLeft="true"  
 android:layout\_alignParentStart="true"  
 android:layout\_below="@+id/name"  
 android:text="Username"  
 android:textSize="18sp"** />  
  
 <**EditText  
 android:id="@+id/username"  
 android:layout\_width="match\_parent"  
 android:layout\_height="wrap\_content"  
 android:layout\_alignParentLeft="true"  
 android:layout\_alignParentStart="true"  
 android:layout\_below="@+id/textviewuser"  
 android:ems="10"  
 android:inputType="textPersonName"** />  
  
 <**TextView  
 android:id="@+id/textView6"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_alignParentLeft="true"  
 android:layout\_alignParentStart="true"  
 android:layout\_below="@+id/username"  
 android:text="Password:"  
 android:textSize="18sp"** />  
  
 <**EditText  
 android:id="@+id/password"  
 android:layout\_width="match\_parent"  
 android:layout\_height="wrap\_content"  
 android:layout\_alignParentLeft="true"  
 android:layout\_alignParentStart="true"  
 android:layout\_below="@+id/textView6"  
 android:ems="10"  
 android:inputType="textPassword"** />  
  
 <**TextView  
 android:id="@+id/textView7"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_alignParentLeft="true"  
 android:layout\_alignParentStart="true"  
 android:layout\_below="@+id/password"  
 android:text="Confirm Password:"  
 android:textSize="18sp"** />  
  
 <**EditText  
 android:id="@+id/confirmpass"  
 android:layout\_width="match\_parent"  
 android:layout\_height="wrap\_content"  
 android:layout\_alignParentLeft="true"  
 android:layout\_alignParentStart="true"  
 android:layout\_centerVertical="true"  
 android:ems="10"  
 android:inputType="textPassword"** />  
  
 <**Button  
 android:id="@+id/btnaccount"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_alignParentLeft="true"  
 android:layout\_alignParentStart="true"  
 android:layout\_below="@+id/confirmpass"  
 android:onClick="onSignUpClick"  
 android:text="Sign Up"** />  
  
</**RelativeLayout**>

List\_layout.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:layout\_width="match\_parent"  
 android:layout\_height="match\_parent"**>  
  
 <**ListView  
 android:id="@+id/listView"  
 android:layout\_width="match\_parent"  
 android:layout\_height="match\_parent"** />  
</**LinearLayout**>

Edit\_data\_layout.xml

*<?***xml version="1.0" encoding="utf-8"***?>*<**RelativeLayout xmlns:android="http://schemas.android.com/apk/res/android"  
 android:layout\_width="match\_parent"  
 android:layout\_height="match\_parent"**>  
  
 <**EditText  
 android:id="@+id/editText"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_alignParentTop="true"  
 android:layout\_centerHorizontal="true"  
 android:layout\_marginTop="108dp"  
 android:ems="10"  
 android:inputType="textPersonName"** />  
  
 <**Button  
 android:id="@+id/btndelete"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_alignParentLeft="true"  
 android:layout\_alignParentStart="true"  
 android:layout\_below="@+id/editText"  
 android:layout\_marginLeft="43dp"  
 android:layout\_marginStart="43dp"  
 android:layout\_marginTop="43dp"  
 android:text="Delete"** />  
  
 <**Button  
 android:id="@+id/btnsave"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_alignParentEnd="true"  
 android:layout\_alignParentRight="true"  
 android:layout\_alignTop="@+id/btndelete"  
 android:layout\_marginEnd="45dp"  
 android:layout\_marginRight="45dp"  
 android:text="Save"** />  
  
</**RelativeLayout**>

**JAVA**

Contact.java

**package** org.example.finalproject;  
  
*/\*\*  
 \* Created by GiancarloDesktop on 4/20/2018.  
 \*/***public class** contact {  
 String **name**, **username**, **password**, **item**;  
  
  
 **public** String getName() {  
 **return name**;  
 }  
  
 **public void** setName(String name) {  
 **this**.**name** = name;  
 }  
  
 **public** String getUsername() {  
 **return username**;  
 }  
  
 **public void** setUsername(String username) {  
 **this**.**username** = username;  
 }  
  
 **public** String getPassword() {  
 **return password**;  
 }  
  
 **public void** setPassword(String password) {  
 **this**.**password** = password;  
 }  
  
 **public** String getItem() {  
 **return item**;  
 }  
  
 **public void** setItem(String item) {  
 **this**.**item** = item;  
 }  
}

DatabaseHelper

**package** org.example.finalproject;  
  
**import** android.content.ContentValues;  
**import** android.content.Context;  
**import** android.database.Cursor;  
**import** android.database.sqlite.SQLiteDatabase;  
**import** android.database.sqlite.SQLiteOpenHelper;  
  
*/\*\*  
 \* Created by GiancarloDesktop on 4/20/2018.  
 \*/***public class** DatabaseHelper **extends** SQLiteOpenHelper{  
  
 **private static final** String ***TABLE\_NAME***=**"contacts"**;  
 **private static final** String ***COLUMN\_ID***=**"id"**;  
 **private static final** String ***COLUMN\_NAME***=**"name"**;  
 **private static final** String ***COLUMN\_USERNAME***=**"user"**;  
 **private static final** String ***COLUMN\_PASSWORD***=**"pass"**;  
 **private static final** String ***COLUMN\_ITEM***=**"item"**;  
 SQLiteDatabase **db**;  
  
 **private static final** String ***TABLE\_CREATE***=**"CREATE TABLE contacts (id INTEGER AUTO\_INCREMENT , "**+  
 **"name TEXT NOT NULL , user TEXT NOT NULL , pass TEXT NOT NULL);"**;  
 **public** DatabaseHelper(Context context){  
 **super**(context,***TABLE\_NAME***,**null** ,1);  
 }  
  
 @Override  
 **public void** onCreate(SQLiteDatabase db) {  
 db.execSQL(***TABLE\_CREATE***);  
 **this**.**db**=db;  
 }  
  
 @Override  
 **public void** onUpgrade(SQLiteDatabase db, **int** i, **int** i1) {  
 String query=**"DROP TABLE IF EXIST "**+***TABLE\_NAME***;  
 db.execSQL(query);  
 **this**.onCreate(db);  
 }  
  
 **public void** insertContact(contact c){  
 **db**=**this**.getWritableDatabase();  
 ContentValues values=**new** ContentValues();  
 values.put(***COLUMN\_NAME***,c.getName());  
 values.put(***COLUMN\_USERNAME***,c.getUsername());  
 values.put(***COLUMN\_PASSWORD***,c.getPassword());  
 **db**.insert(***TABLE\_NAME***,**null**,values);  
 }  
  
 **public** String searchPass(String str){  
 **db**=**this**.getReadableDatabase();  
 String query=**"SELECT name,pass FROM "**+***TABLE\_NAME***;  
 Cursor cursor=**db**.rawQuery(query,**null**);  
 String username,password;  
 password=**"not found"**;  
 **if**(cursor.moveToFirst())  
 {  
 **do**{  
 username=cursor.getString(0);  
 password=cursor.getString(1);  
 **if**(username.equals(str))  
 {  
 password=cursor.getString(1);  
 **break**;  
 }  
 }  
 **while** (cursor.moveToNext());  
 }  
 **return** password;  
 }  
}

Display

**package** org.example.finalproject;  
  
**import** android.app.Activity;  
**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** android.widget.Toast;  
  
*/\*\*  
 \* Created by GiancarloDesktop on 4/23/2018.  
 \*/***public class** display **extends** Activity{  
  
 DatabaseHelper2 **mDataBaseHelper**;  
  
 **private** Button **btnAdd**, **btnViewData**;  
 **private** EditText **editText**;  
  
 **private** EditText **userText**;  
  
 @Override  
 **protected void** onCreate(Bundle savedInstanceState) {  
 **super**.onCreate(savedInstanceState);  
 setContentView(R.layout.***display***);  
 **editText**=(EditText)findViewById(R.id.***editText***);  
 **btnAdd**=(Button) findViewById(R.id.***btndelete***);  
 **btnViewData**=(Button) findViewById(R.id.***btnView***);  
 **mDataBaseHelper**=**new** DatabaseHelper2(**this**);  
 **userText**=(EditText) findViewById(R.id.***name***);  
  
 String username=getIntent().getStringExtra(**"Username"**);  
 TextView welcomemessage=(TextView)findViewById(R.id.***welcome***);  
 welcomemessage.setText(**"Welcome To the Groceries APP: "**+username);  
  
 **btnAdd**.setOnClickListener(**new** View.OnClickListener() {  
 @Override  
 **public void** onClick(View view) {  
 String username=getIntent().getStringExtra(**"Username"**);  
 String user=**userText**.getText().toString();  
 String newEntry= **editText**.getText().toString();  
 **if**(newEntry.length()!=0){  
 addData(newEntry,username);  
 **editText**.setText(**""**);*//reset text* }**else**{  
 toastMessage(**"You need ot put something into the text field"**);  
 }  
 }  
 });  
  
  
  
 }  
  
 **public void** addData(String newEntry,String user){  
 **boolean** insertData=**mDataBaseHelper**.addDatas(newEntry,user);  
  
 **if**(insertData){  
 toastMessage(**"Data Inserted!"**);  
 }**else**{  
 toastMessage(**"Something went wrong"**);  
 }  
 }  
  
  
 **private void** toastMessage(String message){  
 Toast.*makeText*(**this**,message,Toast.***LENGTH\_SHORT***).show();  
 }  
}

MainActivity

**package** org.example.finalproject;  
  
**import** android.content.Intent;  
**import** android.support.v7.app.AppCompatActivity;  
**import** android.os.Bundle;  
**import** android.view.View;  
**import** android.widget.EditText;  
**import** android.widget.Toast;  
  
**public class** MainActivity **extends** AppCompatActivity {  
  
 DatabaseHelper **helper**=**new** DatabaseHelper(**this**);  
 @Override  
 **protected void** onCreate(Bundle savedInstanceState) {  
 **super**.onCreate(savedInstanceState);  
 setContentView(R.layout.***activity\_main***);  
 }  
  
 **public void** onButtonClick(View view){  
 **if**(view.getId()==R.id.***btnlogin***)  
 {  
 EditText name=(EditText)findViewById(R.id.***username***);  
 String getNameText=name.getText().toString();  
 EditText pass=(EditText)findViewById(R.id.***password***);  
 String getPasswordText=pass.getText().toString();  
  
 *//CHECK USER* String password = **helper**.searchPass(getNameText);  
 **if**(getPasswordText.equals(password)){  
 Intent intent=**new** Intent(MainActivity.**this**,display.**class**);  
 intent.putExtra(**"Username"**,getNameText);  
 startActivity(intent);  
 }  
 **else**{  
 toastMessage(**"Password does not match! "**);  
 }  
  
 }  
 **if**(view.getId()==R.id.***btnsignup***){  
 Intent intent=**new** Intent(MainActivity.**this**,signup.**class**);  
 startActivity(intent);  
 }  
 }  
 **private void** toastMessage(String message){  
 Toast.*makeText*(**this**,message,Toast.***LENGTH\_SHORT***).show();  
 }  
}

Signup

**package** org.example.finalproject;  
  
**import** android.app.Activity;  
**import** android.content.Context;  
**import** android.content.Intent;  
**import** android.os.Bundle;  
**import** android.view.View;  
**import** android.widget.EditText;  
**import** android.widget.Toast;  
  
*/\*\*  
 \* Created by GiancarloDesktop on 4/20/2018.  
 \*/***public class** signup **extends** Activity{  
 DatabaseHelper **helper**=**new** DatabaseHelper(**this**);  
  
 **protected void** onCreate(Bundle savedInstanceState) {  
 **super**.onCreate(savedInstanceState);  
 setContentView(R.layout.***signup***);  
 }  
  
 **public void** onSignUpClick(View v){  
 **if**(v.getId()==R.id.***btnaccount***)  
 {  
 EditText name=(EditText)findViewById(R.id.***name***);  
 EditText user=(EditText)findViewById(R.id.***username***);  
 EditText pass=(EditText)findViewById(R.id.***password***);  
 EditText confirmpass=(EditText)findViewById(R.id.***confirmpass***);  
  
 String strname=name.getText().toString();  
 String struser=user.getText().toString();  
 String strpass=pass.getText().toString();  
 String strconfirmpass=confirmpass.getText().toString();  
  
 **if**(!strpass.equals(strconfirmpass))  
 {  
 toastMessage(**"Passwords Dont Match"**);  
 }  
 **else**{  
 contact c=**new** contact();  
 c.setName(strname);  
 c.setUsername(struser);  
 c.setPassword(strpass);  
 **helper**.insertContact(c);  
 toastMessage(**"YOUR ACCOUNT WAS CREATED!"**);  
 Intent intent=**new** Intent(signup.**this**,MainActivity.**class**);  
 startActivity(intent);  
  
 }  
 }  
 }  
 **private void** toastMessage(String message){  
 Toast.*makeText*(**this**,message,Toast.***LENGTH\_SHORT***).show();  
 }  
}

DatabaseHelper2

**package** org.example.finalproject;  
  
**import** android.content.ContentValues;  
**import** android.content.Context;  
**import** android.database.Cursor;  
**import** android.database.sqlite.SQLiteDatabase;  
**import** android.database.sqlite.SQLiteOpenHelper;  
**import** android.util.Log;  
  
*/\*\*  
 \* Created by GiancarloDesktop on 4/21/2018.  
 \*/***public class** DatabaseHelper2 **extends** SQLiteOpenHelper{  
  
 **private static final** String ***TAG***=**"DatabaseHelper"**;  
  
 *//Create fields for table* **private static final** String ***TABLE\_NAME***=**"people\_table"**;*//table name* **private static final** String ***COL1***=**"ID"**;  
 **private static final** String ***COL2***=**"name"**;  
 **private static final** String ***COL3***=**"user"**;  
  
 **public** DatabaseHelper2(Context context){  
 **super**(context,***TABLE\_NAME***,**null** ,1);  
 }  
 @Override  
 **public void** onCreate(SQLiteDatabase sqLiteDatabase) {  
 String createTable=**"CREATE TABLE people\_table ( id INTEGER PRIMARY KEY AUTOINCREMENT, name TEXT, user TEXT )"**;  
 sqLiteDatabase.execSQL(createTable);  
 }  
  
 @Override  
 **public void** onUpgrade(SQLiteDatabase sqLiteDatabase, **int** i, **int** i1) {  
 String droptable=**"DROP IF TABLE EXISTS "**+***TABLE\_NAME***;  
 sqLiteDatabase.execSQL(droptable);  
 onCreate(sqLiteDatabase);  
 }  
  
 **public boolean** addData(String item){  
 SQLiteDatabase db=**this**.getWritableDatabase();  
 ContentValues contentValues=**new** ContentValues();  
 contentValues.put(***COL2***,item);  
 Log.*d*(***TAG***, **"addData: Adding "**+item+**" to "**+ ***TABLE\_NAME***);  
 **long** result=db.insert(***TABLE\_NAME***,**null**,contentValues);  
 **if**(result==-1){  
 **return false**;  
 }**else**{  
 **return true**;  
 }  
 }  
 **public boolean** addDatas(String item,String user){  
 SQLiteDatabase db=**this**.getWritableDatabase();  
 ContentValues contentValues=**new** ContentValues();  
 contentValues.put(***COL2***,item);  
 contentValues.put(***COL3***,user);  
 Log.*d*(***TAG***, **"addData: Adding "**+item+**" to "**+ ***TABLE\_NAME***);  
 **long** result=db.insert(***TABLE\_NAME***,**null**,contentValues);  
 **if**(result==-1){  
 **return false**;  
 }**else**{  
 **return true**;  
 }  
 }  
  
 **public** Cursor getData(){  
 SQLiteDatabase db=**this**.getWritableDatabase();  
 String query=**"SELECT \* FROM "**+***TABLE\_NAME***;  
 Cursor data=db.rawQuery(query,**null**);  
 **return** data;  
 }  
  
 **public** Cursor getDatas(String user){  
 SQLiteDatabase db=**this**.getWritableDatabase();  
 String query=**"SELECT \* FROM "**+***TABLE\_NAME***+**" WHERE "**+***COL3***+**" LIKE '"**+user+**"'"**;  
 Cursor data=db.rawQuery(query,**null**);  
 **return** data;  
 }  
  
 **public** Cursor getItemID(String name){  
 SQLiteDatabase db=**this**.getWritableDatabase();  
 String query=**"SELECT "**+***COL1***+**" FROM "**+***TABLE\_NAME***+**" WHERE "**+***COL2***+**" = '"**+name+**"'"**;  
 Cursor data=db.rawQuery(query,**null**);  
 **return** data;  
 }  
  
 **public void** updateName(String newName,**int** id,String oldName){  
 SQLiteDatabase db=**this**.getWritableDatabase();  
 String query = **"UPDATE "** + ***TABLE\_NAME*** + **" SET "** + ***COL2*** +  
 **" = '"** + newName + **"' WHERE "** + ***COL1*** + **" = '"** + id + **"'"** +  
 **" AND "** + ***COL2*** + **" = '"** + oldName + **"'"**;  
 Log.*d*(***TAG***,**"updateName: query: "**+query);  
 Log.*d*(***TAG***,**"updateName: setting name to "**+newName);  
 db.execSQL(query);  
 }  
  
 **public void** deleteName(**int** id, String name){  
 SQLiteDatabase db = **this**.getWritableDatabase();  
 String query = **"DELETE FROM "** + ***TABLE\_NAME*** + **" WHERE "** + ***COL1*** + **" = '"** + id + **"'"** +  
 **" AND "** + ***COL2*** + **" = '"** + name + **"'"**;  
 Log.*d*(***TAG***, **"deleteName: query: "** + query);  
 Log.*d*(***TAG***, **"deleteName: Deleting "** + name + **" from database."**);  
 db.execSQL(query);  
 }  
}

Testing:

Testing was conducted in different parts of the project. It will be broken down into two parts. The first part is the log in app and the second is the list part of the application.

In the log in app. Different combinations of the username and password were tested to make sure that the database was acting correcting. When signing up testing the logic of the passwords was conducted and returned proper results.

The second part of the app was tested by trying different usernames and creating list based on the different users to see if the list was accurate. The list results are accurate the biggest error that occurred was the combination of the two together. Testing different users from the login screen to the list app caused failures and Null pointers to occur.

Conclusion:

Individually the apps function properly. Both app due what they were designed to accomplice. The only problem is that the two apps do not work together. Testing the combination of the two would cause the application to crash. Proving concepts is what this project was able to accomplish.

For future work on the project, getting the two to run without crashing is defiantly the number one goal. Other features such as sorting the list based on which supermarket you go to will also be added by adding extra fields in the database and selecting a query where the aisle match the fields. Adding a group function in the database helper can be accomplished by adding two extra columns in the table, one for if the item is in a group and one for the group name. This can then be called to a query and displayed when a group is created so that two users can log into the same list.