Mobile Computing Lab 7: Design a simple to-do list using Android/other

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CODE:

XML Code:

(activity_main.xml)

```xml
<?xml version="1.0" encoding="utf-8"?>
<androidx.constraintlayout.widget.ConstraintLayout
xmlns:android="http://schemas.android.com/apk/res/and
roid"
    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">

    <EditText
        android:id="@+id/input"
        android:layout_width="307dp"
        android:layout_height="61dp"
        android:layout_marginStart="4dp"
        android:layout_marginTop="4dp"
        android:ems="10"
        android:inputType="textPersonName"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toTopOf="parent" />

    <Button
        android:id="@+id/add"
        android:layout_width="84dp"
```

```xml
        android:layout_height="43dp"
        android:layout_marginTop="16dp"
        android:layout_marginEnd="16dp"
        android:text="Add"
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintTop_toTopOf="parent" />

    <ListView
        android:id="@+id/todo"
        android:layout_width="match_parent"
        android:layout_height="650dp"
        android:layout_marginTop="72dp"
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintHorizontal_bias="1.0"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toTopOf="parent" />
</androidx.constraintlayout.widget.ConstraintLayout>
```

Java Code:

(MainActivity.java)

```java
package com.example.todo;

import androidx.appcompat.app.AppCompatActivity;

import android.os.Bundle;
import android.view.View;
import android.widget.AdapterView;
import android.widget.ArrayAdapter;
import android.widget.Button;
import android.widget.EditText;
import android.widget.ListView;

import java.util.ArrayList;
import java.util.List;

public class MainActivity extends AppCompatActivity {
```

```java
    EditText input;
    Button add;
    ListView todo;

    @Override
    protected void onCreate(Bundle
savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main);

        input = (EditText) findViewById(R.id.input);
        add = (Button) findViewById(R.id.add);
        todo = (ListView) findViewById(R.id.todo);

        List<String> arrayList = new
ArrayList<String>();
        ArrayAdapter<String> adapter = new
ArrayAdapter<String>(getApplicationContext(),
android.R.layout.simple_spinner_item, arrayList);
        todo.setAdapter(adapter);

        add.setOnClickListener(new
View.OnClickListener() {
            @Override
            public void onClick(View v) {

if(!((input.getText().toString()).equals("")))
                {

arrayList.add(input.getText().toString());
                    adapter.notifyDataSetChanged();
                    input.setText("");
                }
            }
        });

        todo.setOnItemLongClickListener(new
```

```
AdapterView.OnItemLongClickListener() {
            @Override
            public boolean
onItemLongClick(AdapterView<?> parent, View view, int
position, long id)      {
                arrayList.remove(position);
                adapter.notifyDataSetChanged();

                return true;
            }
        });
    }
}
```

OUTPUT: