

# Android Drop Down List (Spinner) Tutorial

## 1) Main Activity XML File

- **Task:** Set up the Spinner view in the layout and give it an ID. Make sure the ID does not conflict with predefined Android variables like spinner.

### XML

<Spinner

android:id="@+id/mySpinner" <!-- Use a unique ID, not just "spinner" -->

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"/>

## 2) String XML

- **Task:** Create an array in strings.xml to hold the items that will populate the Spinner.

### XML

<resources>

<string-array name="names">

<item>Item 1</item>

<item>Item 2</item>

<item>Item 3</item>

<item>Item 4</item>

</string-array>

</resources>

This array defines the list of items (Item 1, Item 2, etc.) that will be displayed in the Spinner.

## 3) Main Activity Java File

- **Task:** Define the Spinner and set up the adapter to load the data from the strings.xml file.

### JAVA

// Step 1: Find the Spinner in the layout by its ID

Spinner spin = findViewById(R.id.mySpinner); // ID should match the one in the XML

// Step 2: Create an ArrayAdapter to load the array from the strings.xml into the Spinner

ArrayAdapter<String> myAdapter = new ArrayAdapter<>(  
 MainActivity.this, // Context (this activity)

android.R.layout.simple\_list\_item\_1, // Layout for the Spinner items

getResources().getStringArray(R.array.names) // String array from strings.xml

```

);

// Step 3: Set the layout resource for the dropdown view
myAdapter.setDropDownViewResource(android.R.layout.simple_spinner_dropdown_item);

// Step 4: Attach the adapter to the Spinner
spin.setAdapter(myAdapter);
}
}

```

### **Explanation:**

#### **1. Finding the Spinner:**

- `Spinner spin = findViewById(R.id.mySpinner);`
  - This line links the Java code to the Spinner defined in the XML file using the ID `mySpinner`.

#### **2. Creating the Adapter:**

- `ArrayAdapter<String> myAdapter = new ArrayAdapter<>(MainActivity.this, android.R.layout.simple_list_item_1, getResources().getStringArray(R.array.names));`
  - **Context:** `MainActivity.this` specifies that the current activity is used as the context.
  - **Layout:** `android.R.layout.simple_list_item_1` is the predefined layout for displaying individual items in the Spinner.
  - **Data Source:** `getResources().getStringArray(R.array.names)` gets the array of strings (`names`) from the `strings.xml` file.

#### **3. Setting the Dropdown View Resource:**

- `myAdapter.setDropDownViewResource(android.R.layout.simple_spinner_dropdown_item);`
  - This sets the layout for the dropdown view when the Spinner is clicked. The `android.R.layout.simple_spinner_dropdown_item` is a predefined layout for dropdown items.

#### **4. Setting the Adapter to the Spinner:**

- `spin.setAdapter(myAdapter);`
  - This connects the adapter (`myAdapter`) to the Spinner, so the data (the list of items) will be displayed in the dropdown menu when the user clicks on the Spinner.