

Table Layout

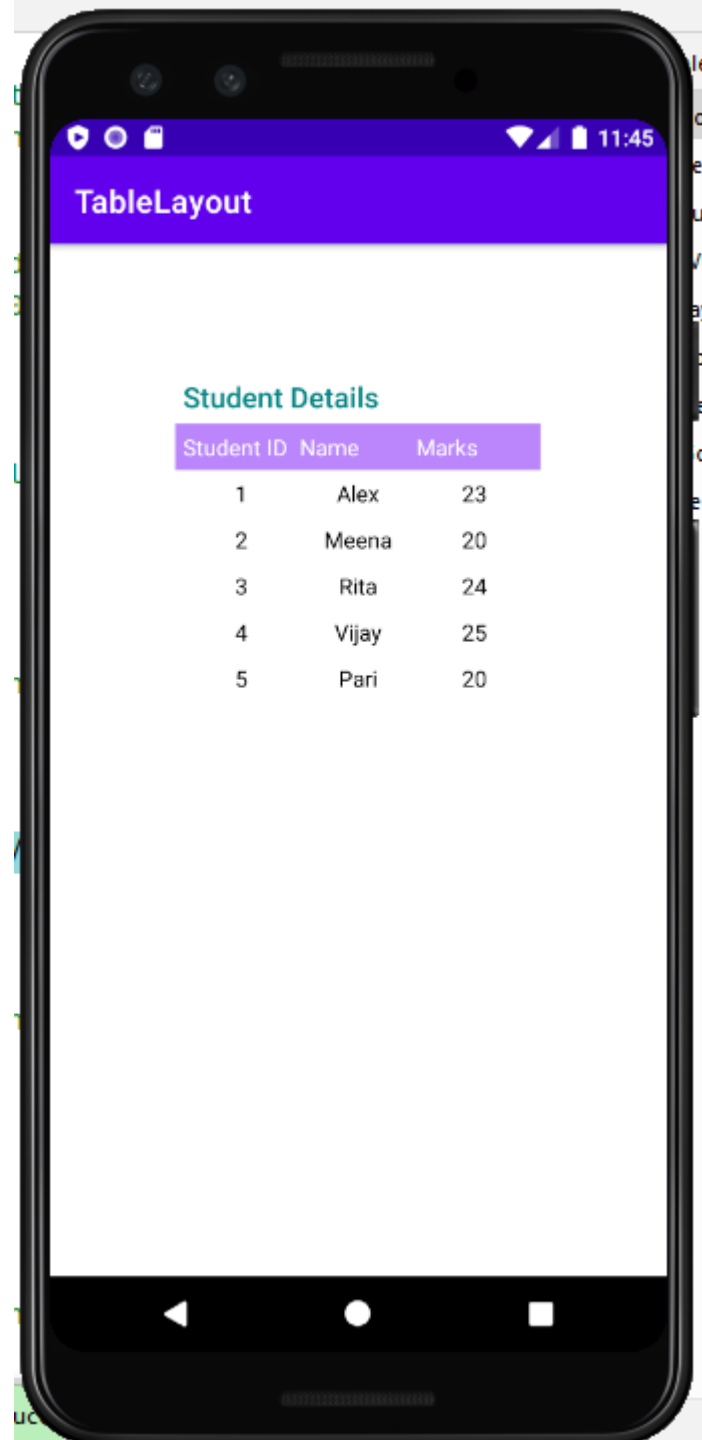
In android, `TableLayout` is a `ViewGroup` subclass that is used to display the child `View` elements in rows and columns.



Pictorial representation of table layout in android applications

Attributes	Where it is used	Why it is used
<code>android:stretchColumns</code>	TableLayout	When a column width is less and you need to expand(or stretch) it, you use this attribute.
<code>android:shrinkColumns</code>	TableLayout	When you do not need the extra space in a column, you can use this attribute to shrink and remove the space.
<code>android:collapseColumns</code>	TableLayout	It hides the column of the given index in the TableLayout.
<code>android:layout_span</code>	Any View inside the TableRow	If a view takes only one column width but when you want your view to take more than one column space, then you can use this attribute.
<code>android:layout_column</code>	Any view inside the TableRow	When you want your view present in the first TableRow to appear below the other TableRow's view, you can use this attribute.

Design the following screen



```
<?xml version="1.0" encoding="utf-8"?>
  <TableLayout 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="wrap_content"
    android:layout_margin="80dp"
    tools:context=".MainActivity">

    <TableRow android:padding="5dp" >

      <TextView
        android:id="@+id/textView3"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="@string/text"
        android:textSize="18dp"
        android:fontFamily="sans-serif-medium"
        android:textColor="@color/teal_700" />

    </TableRow>
```

```

<TableRow
    android:background="@color/purple_200"
    android:padding="5dp" >

    <TextView
        android:id="@+id/textView4"
        android:layout_width="0dp"
        android:layout_height="wrap_content"
        android:textSize="14dp"
        android:layout_weight="1"
        android:text="Student ID"
        android:textColor="@color/white" />
    <TextView
        android:id="@+id/textView5"
        android:layout_width="0dp"
        android:layout_height="wrap_content"
        android:textColor="@color/white"
        android:layout_weight="1"
        android:text="Name" />
    <TextView
        android:id="@+id/textView6"
        android:layout_width="0dp"
        android:layout_height="wrap_content"
        android:textColor="@color/white"
        android:layout_weight="1"
        android:text="Marks" />

</TableRow>

```

```

<TableRow android:padding="5dp" >

    <TextView
        android:id="@+id/textView7"
        android:layout_width="0dp"
        android:layout_height="wrap_content"
        android:textSize="14dp"
        android:layout_weight="1"
        android:text="1"
        android:gravity="center"
        android:textColor="@color/black" />
    <TextView
        android:id="@+id/textView8"
        android:layout_width="0dp"
        android:layout_height="wrap_content"
        android:textColor="@color/black"
        android:layout_weight="1"
        android:gravity="center"
        android:text="Alex" />
    <TextView
        android:id="@+id/textView9"
        android:layout_width="0dp"
        android:layout_height="wrap_content"
        android:textColor="@color/black"
        android:layout_weight="1"
        android:gravity="center"
        android:text="23" />

</TableRow>

```

```
<TableRow android:padding="5dp" >
```

```
    <TextView
        android:id="@+id/textView10"
        android:layout_width="0dp"
        android:layout_height="wrap_content"
        android:textSize="14dp"
        android:layout_weight="1"
        android:text="2"
        android:gravity="center"
        android:textColor="@color/black" />
    <TextView
        android:id="@+id/textView11"
        android:layout_width="0dp"
        android:layout_height="wrap_content"
        android:textColor="@color/black"
        android:layout_weight="1"
        android:gravity="center"
        android:text="Meena" />
    <TextView
        android:id="@+id/textView12"
        android:layout_width="0dp"

        android:layout_height="wrap_content"
        android:textColor="@color/black"
        android:layout_weight="1"
        android:gravity="center"
        android:text="20" />
```

```
</TableRow>
```

```
<TableRow android:padding="5dp" >
```

```
    <TextView
        android:id="@+id/textView13"
        android:layout_width="0dp"
        android:layout_height="wrap_content"
        android:textSize="14dp"
        android:layout_weight="1"
        android:text="3"
        android:gravity="center"
        android:textColor="@color/black" />
    <TextView
        android:id="@+id/textView14"
        android:layout_width="0dp"
        android:layout_height="wrap_content"
        android:textColor="@color/black"
        android:layout_weight="1"
        android:gravity="center"
        android:text="Rita" />
    <TextView
        android:id="@+id/textView15"
        android:layout_width="0dp"
        android:layout_height="wrap_content"
        android:textColor="@color/black"
        android:layout_weight="1"
        android:gravity="center"
        android:text="24" />
```

```
</TableRow>
```

```
<TableRow android:padding="5dp" >
```

```
<TextView
```

```
    android:id="@+id/textView16"  
    android:layout_width="0dp"  
    android:layout_height="wrap_content"  
    android:textSize="14dp"  
    android:layout_weight="1"  
    android:text="4"  
    android:gravity="center"  
    android:textColor="@color/black" />
```

```
<TextView
```

```
    android:id="@+id/textView17"  
    android:layout_width="0dp"  
    android:layout_height="wrap_content"  
    android:textColor="@color/black"  
    android:layout_weight="1"  
    android:gravity="center"  
    android:text="Vijay" />
```

```
<TextView
```

```
    android:id="@+id/textView18"  
    android:layout_width="0dp"  
    android:layout_height="wrap_content"  
    android:textColor="@color/black"  
    android:layout_weight="1"  
    android:gravity="center"  
    android:text="25" />
```

```
</TableRow>
```

```
<TableRow android:padding="5dp" >
```

```
<TextView
```

```
    android:id="@+id/textView1"  
    android:layout_width="0dp"  
    android:layout_height="wrap_content"  
    android:textSize="14dp"  
    android:layout_weight="1"  
    android:text="5"  
    android:gravity="center"  
    android:textColor="@color/black" />
```

```
<TextView
```

```
    android:id="@+id/textView2"  
    android:layout_width="0dp"  
    android:layout_height="wrap_content"  
    android:textColor="@color/black"  
    android:layout_weight="1"  
    android:gravity="center"  
    android:text="Pari" />
```

```
<TextView
```

```
    android:id="@+id/textView19"  
    android:layout_width="0dp"  
    android:layout_height="wrap_content"  
    android:textColor="@color/black"  
    android:layout_weight="1"  
    android:gravity="center"  
    android:text="20" />
```

```
</TableRow>
```

```
</TableLayout>
```

One more Example




```
<TableLayout xmlns:android="http://schemas.android.com/apk/res/android"
    android:orientation="vertical"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    android:stretchColumns="1">
    <TableRow android:padding="5dip">
        <TextView
            android:layout_height="wrap_content"
            android:text="Student Enrolment Form"
            android:layout_span="2"
            android:gravity="center_horizontal"
            android:textSize="20dip" />
    </TableRow>
    <TableRow>
        <TextView
            android:layout_height="wrap_content"
            android:text="Student Id:"
            android:layout_column="0"
            android:textStyle="bold" />
        <EditText
            android:id="@+id/st_id"
            android:layout_height="wrap_content"
            android:layout_column="1"/>
    </TableRow>
```

```

<TableRow>
    <TextView
        android:layout_height="wrap_content"
        android:text="Name:"
        android:layout_column="0"
        android:textStyle="bold" />
    <EditText
        android:id="@+id/name"
        android:layout_height="wrap_content"
        android:scrollHorizontally="true" />
</TableRow>
<TableRow>
    <TextView
        android:layout_height="wrap_content"
        android:text="Fee Paid:"
        android:textStyle="bold" />
    <EditText
        android:id="@+id/fee_paid"
        android:layout_height="wrap_content" />
</TableRow>
<TableRow>
    <Button
        android:id="@+id/add_button"
        android:text="Add Student"
        android:layout_height="wrap_content" />
    <Button
        android:id="@+id/cancel_button"
        android:text="Cancel"
        android:layout_height="wrap_content" />
</TableRow>
</TableLayout>

```

Reference

- For stretch/shrink columns
 - <https://www.youtube.com/watch?v=KZiP73VHSwY>
- For collapseColumns(hiding columns)
 - <https://www.youtube.com/watch?v=x0X19LJJGjc>
 - <https://www.youtube.com/watch?v=DxFnSKnQ-OQ>