

ADAPTERS

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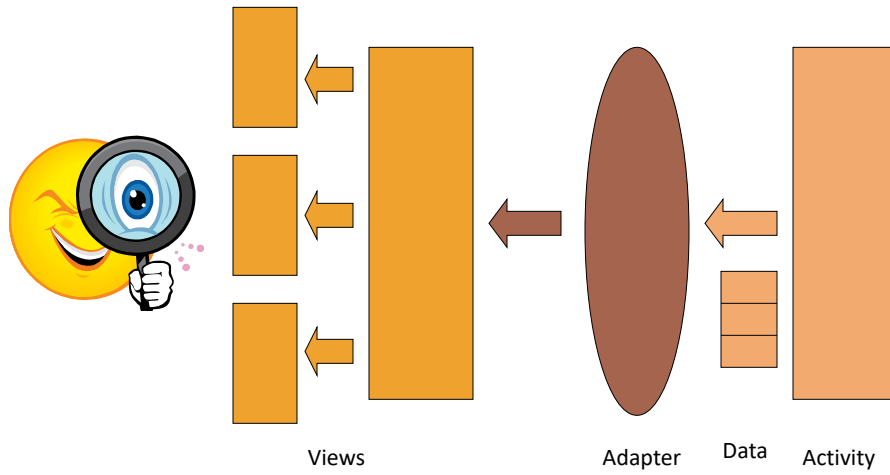
Adapters

- Bind data to user-interface views
- Create child views to represent each item
- Provide access to the underlying data
- Useful pre-defined adapter classes:
 - `ArrayAdapter`
 - Bind array of data to a view
 - `SimpleCursorAdapter`
 - Bind result of database query to a view

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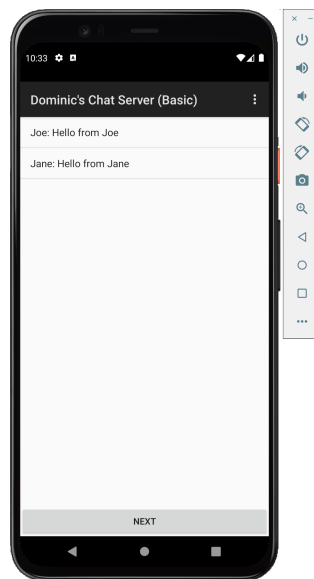
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Adapters



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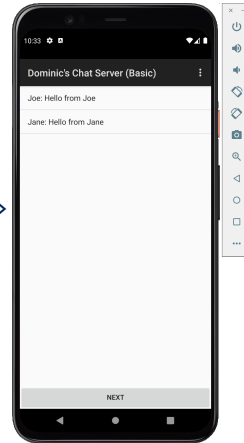
Example: To Do List

```
<LinearLayout
  xmlns:android="http://schemas.android.com/apk/res/android"
  android:layout_width="match_parent"
  android:layout_height="match_parent"
  android:orientation="vertical" >

  <ListView
    android:id="@+id/message_list"
    android:layout_width="match_parent"
    android:layout_height="0dip"
    android:layout_weight="1"
    android:transcriptMode="alwaysScroll"/>

  <Button
    android:id="@+id/next"
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
    android:text="@string/next_Label"/>

</LinearLayout>
```



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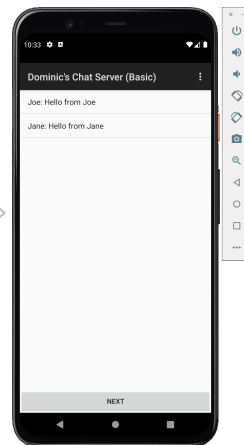
Example: To Do List

```
<LinearLayout
  xmlns:android="http://schemas.android.com/apk/res/android"
  android:layout_width="match_parent"
  android:layout_height="match_parent"
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    android:layout_height="wrap_content"
    android:text="@string/next_Label"/>

</LinearLayout>
```



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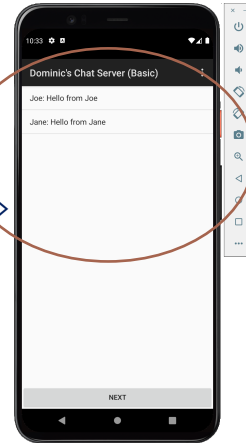
Example: To Do List

```
<LinearLayout
    xmlns:android="http://schemas.android.com/apk/res/android"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    android:orientation="vertical" >

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        android:id="@+id/message_list"
        android:layout_width="match_parent"
        android:layout_height="0dip"
        android:layout_weight="1"
        android:transcriptMode="alwaysScroll"/>

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        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:text="@string/next_Label"/>

</LinearLayout>
```



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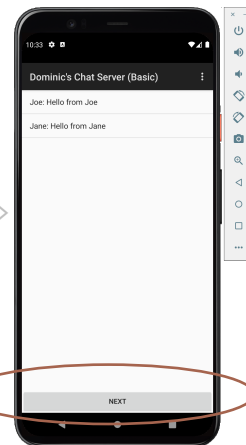
Example: To Do List

```
<LinearLayout
    xmlns:android="http://schemas.android.com/apk/res/android"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    android:orientation="vertical" >

    <ListView
        android:id="@+id/message_list"
        android:layout_width="match_parent"
        android:layout_height="0dip"
        android:layout_weight="1"
        android:transcriptMode="alwaysScroll"/>

    <Button
        android:id="@+id/next"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:text="@string/next_Label"/>

</LinearLayout>
```



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Example (cont'd)

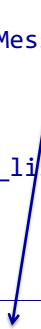
```
ListView list = (ListView)findViewById(R.id.message_list);

ArrayList<Message> messages = new ArrayList<Message>();

ArrayAdapter<Message> messagesAdapter =
    new ArrayAdapter<Message>(this,
        android.R.layout.simple_list_item_1,
        messages);

list.setAdapter(messagesAdapter);

...
```



```
<ListView
    android:id="@+id/message_list"
    android:layout_width="match_parent"
    android:layout_height="0dip"
    android:weight="1"
/>
```


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```
OnClickListener nextListener = new OnClickListener() {
    public void onClick(View v) {
        Message message; ...
        messages.add(message);
        arrayAdapter.notifyDataSetChanged();
    }
}

Button nextButton = (Button) findViewById(R.id.next);

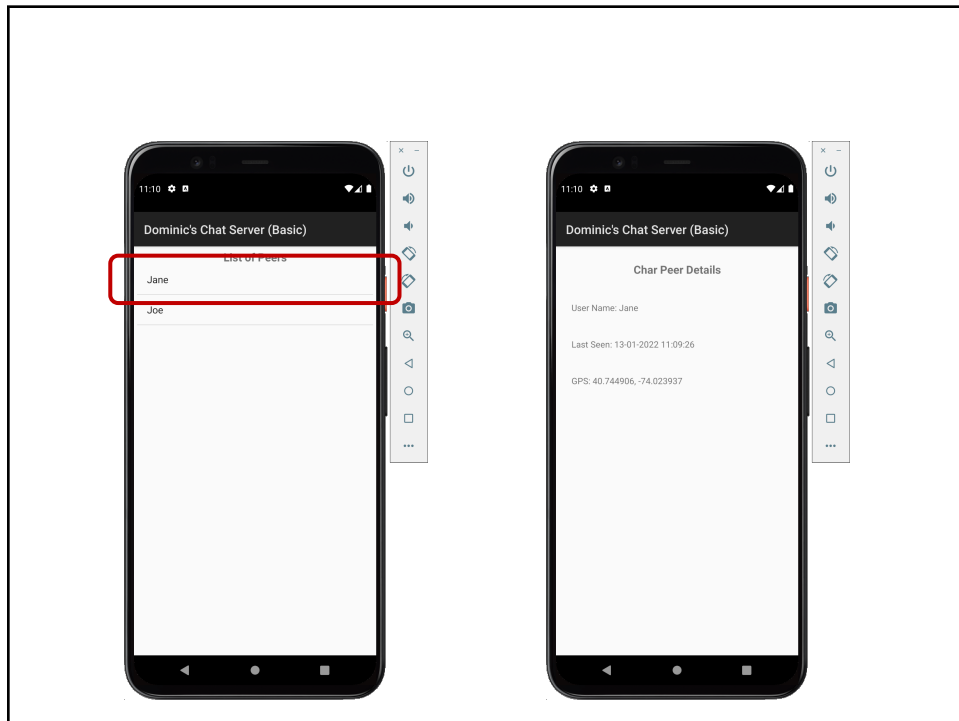
nextButton.setOnClickListener(nextListener);
```



```
<Button
    android:id="@+id/next"
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
    android:text="@string/next_Label"
/>
```

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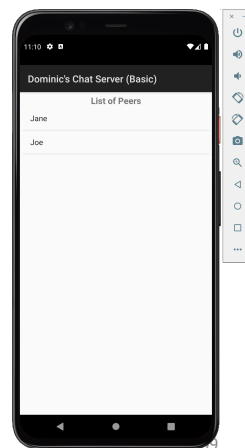
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Example: To Do List

```
<LinearLayout xmlns:android="..."
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    android:orientation="vertical"
    android:padding="5dip">

    ...

    <ListView
        android:id="@+id/peer_list"
        android:layout_width="match_parent"
        android:layout_height="0dip"
        android:layout_weight="1" >
    </ListView>
</LinearLayout>
```



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Example (cont'd)

```
ListView peersList = (ListView)findViewById(R.id.peer_list);

ArrayList<Peer> peers = ...;

ArrayAdapter<Peer> peersAdapter =
    new ArrayAdapter<Peer>(this,
        android.R.layout.simple_list_item_1,
        peers);

peersList.setAdapter(peersAdapter);

...

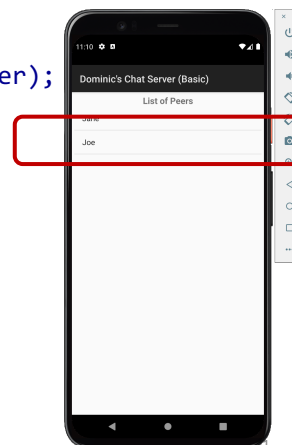
<ListView
    android:id="@+id/peer_list"
    android:layout_width="match_parent"
    android:layout_height="0dip"
    android:weight="1"
/>
```

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```
OnItemClickListener listener = new.OnItemClickListener()
{
    public void onItemClick(..., int position, long id) {
        Peer peer = peersAdapter.get(position);
        ...
    }
}

peersList.setOnItemClickListener(listener);
```



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