Android UI Dialog

Topics

- What is a Dialog?
- AlertDialog
- ProgressDialog
- Creating a custom Dialog

What is a Dialog?

- A dialog is usually a small window that appears in front of the current Activity.
- The underlying Activity loses focus and the dialog accepts all user interaction.
- Dialogs are normally used for notifications and short activities that directly relate to the application in progress.

Types of Dialog

- AlertDialog
- ProgressDialog
- DatePickerDialog
- TimePickerDialog

AlertDialog

What is AlertDialog?

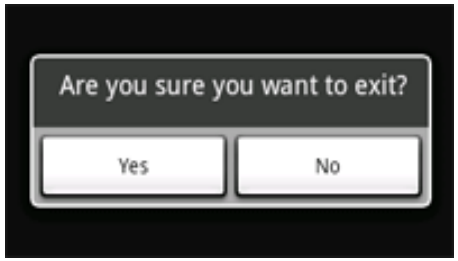
- An *AlertDialog* is an extension of the *Dialog* class.
- It is capable of constructing most dialog user interfaces and is the suggested dialog type.
- You should use it for dialogs that use any of the following features
  - A title
  - A text message
  - One, two, or three buttons
  - A list of selectable items (with optional checkboxes or radio buttons)

How to Create AlertDialog?

- Get a Builder with *AlertDialog.Builder(Context)* and then use the class's public methods to define all of the AlertDialog properties.
- After you're done with the Builder, retrieve the AlertDialog object with create()

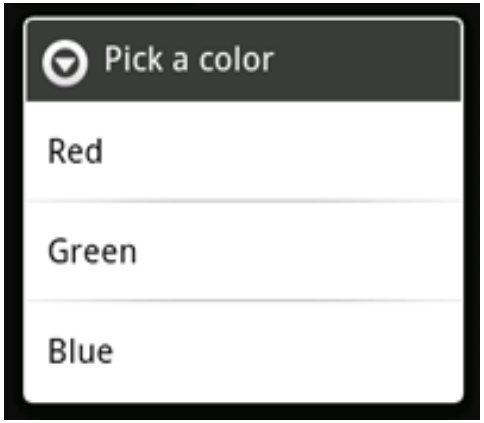
Adding Buttons to AlertDialog

```
AlertDialog.Builder builder = new AlertDialog.Builder(this);
builder.setMessage("Are you sure you want to exit?")
       .setCancelable(false)
       .setPositiveButton("Yes", new DialogInterface.OnClickListener() {
           public void onClick(DialogInterface dialog, int id) {
               MyActivity.this.finish();
           }
       })
       .setNegativeButton("No", new DialogInterface.OnClickListener() {
           public void onClick(DialogInterface dialog, int id) {
               dialog.cancel();
           }
       });
AlertDialog alert = builder.create();
```



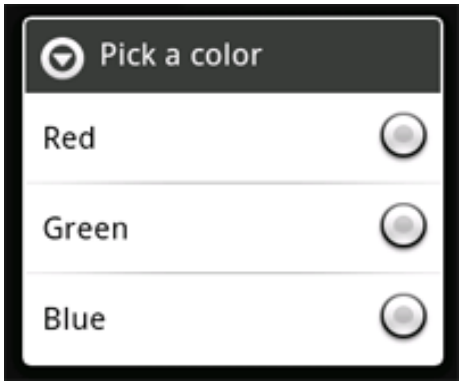
Adding a list to AlertDialog

```
final CharSequence[] items = {"Red", "Green", "Blue"};

AlertDialog.Builder builder = new AlertDialog.Builder(this);
builder.setTitle("Pick a color");
builder.setItems(items, new DialogInterface.OnClickListener() {
    public void onClick(DialogInterface dialog, int item) {
        Toast.makeText(getApplicationContext(), items[item],
                        Toast.LENGTH_SHORT).show();
    }
});
AlertDialog alert = builder.create();
```



Adding checkboxes and radio buttons

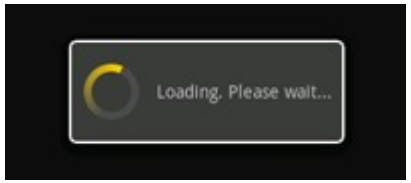
```
final CharSequence[] items = {"Red", "Green", "Blue"};

AlertDialog.Builder builder = new AlertDialog.Builder(this);
builder.setTitle("Pick a color");
builder.setSingleChoiceItems(items, -1, new
DialogInterface.OnClickListener() {
    public void onClick(DialogInterface dialog, int item) {
        Toast.makeText(getApplicationContext(), items[item],
                                Toast.LENGTH_SHORT).show();
    }
});
AlertDialog alert = builder.create();
```

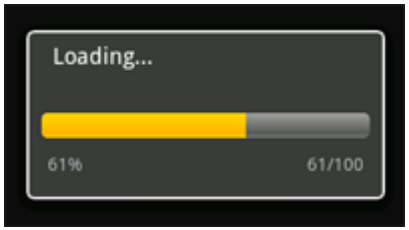


ProgressDialog

What is ProgressDialog?

- A ProgressDialog is an extension of the AlertDialog class that can display a progress animation in the form of
  - a spinning wheel, for a task with progress that's undefined, or
  - a progress bar, for a task that has a defined progression.
- The dialog can also provide buttons, such as one to cancel a download.





Creating a Progress Bar?

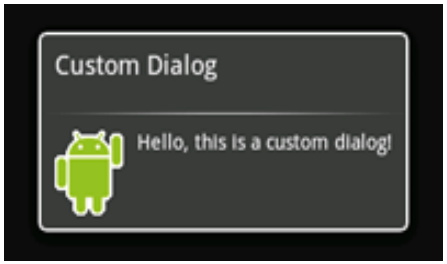
```
ProgressDialog progressDialog;
progressDialog = new ProgressDialog(mContext);
progressDialog.setProgressStyle(ProgressDialog.STYLE_HORIZONTAL);
progressDialog.setMessage("Loading...");
progressDialog.setCancelable(false);
```

Creating a Custom Dialog

Steps for Creating a Custom Dialog

- Step #1 - Create an XML layout
- Step #2 - Set the above layout as the dialog's content view and define the content for the view elements
- Step #3 - Show the dialog

Suppose we want to create a Custom dialog as shown below



Step #1: Create XML Layout

```
<LinearLayout
xmlns:android="http://schemas.android.com/apk/res/android"
            android:id="@+id/layout_root"
            android:orientation="horizontal"
            android:layout_width="fill_parent"
            android:layout_height="fill_parent"
            android:padding="10dp"
            >
   <ImageView android:id="@+id/image"
             android:layout_width="wrap_content"
             android:layout_height="fill_parent"
             android:layout_marginRight="10dp"
             />
   <TextView android:id="@+id/text"
            android:layout_width="wrap_content"
            android:layout_height="fill_parent"
            android:textColor="#FFF"
            />
</LinearLayout>
```

Step #2: Create Dialog

```
Context mContext = getApplicationContext();
Dialog dialog = new Dialog(mContext);

dialog.setContentView(R.layout.custom_dialog);
dialog.setTitle("Custom Dialog");

TextView text = (TextView) dialog.findViewById(R.id.text);
text.setText("Hello, this is a custom dialog!");
ImageView image = (ImageView) dialog.findViewById(R.id.image);
image.setImageResource(R.drawable.android);
```

Thank you