Android UI Dialog

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“Learn with Passion!”

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Topics

- What is a Dialog?
- Dialog Types
  - AlertDialog
  - PickerDialog
  - ProgressDialog

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.

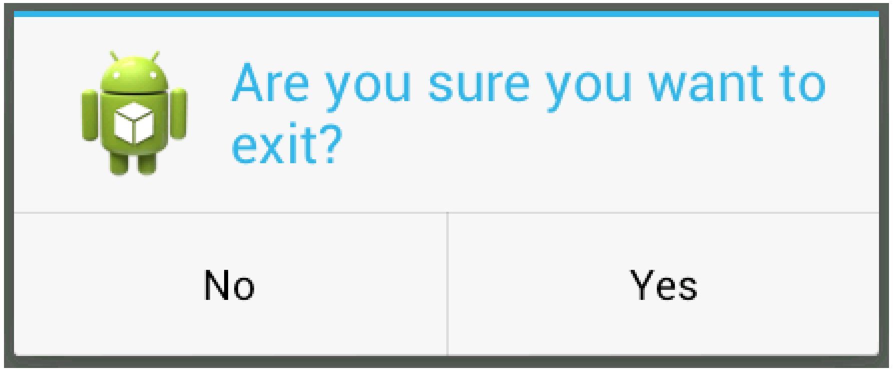
AlertDialog

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)
  - Custom xml format

How to Create AlertDialog?

- Add class which extends DialogFragment
  - Class MyAlertDialogFrag extends DialogFragment
- Show dialog of the DialogFragment class
  - MyAlertDialogFrag dlg = MyAlertDialogFrag.newInstance(title)
- Have functions for positive, negative, neutral callbacks



Are you sure you want to exit?

DialogFragment class #1

```
 public static MyAlertDialogFragment newInstance(int title) {
   MyAlertDialogFragment frag = new MyAlertDialogFragment();
   Bundle args = new Bundle();
   args.putInt("title", title);
   frag.setArguments(args);
   return frag;
 }

@Override
 public void onCreateDialog(Bundle savedInstanceState) {
   int title = getArguments().getInt("title");

   return new AlertDialog.Builder(getActivity())
       .setIcon(R.drawable.ic_launcher)
       .setTitle(title)
       .setPositiveButton(R.string.action_yes,
           new DialogInterface.OnClickListener() {
               public void onClick(DialogInterface dialog, int id) {
                   ((MainActivity) getActivity())
                           .doPositiveClick();
               }
           })
```

Callback for positive click

DialogFragment class #2

```
            .setNegativeButton(R.string.action_no,
             new DialogInterface.OnClickListener() {
                 public void onClick(DialogInterface dialog, int        {
                     ((MainActivity) getActivity())
                         .doNegativeClick();
                     }
             }).create();
    }
```

Callback for negative click

MainActivity callback action functions:

```
 public void doPositiveClick() {
        ...
    }

    public void doNegativeClick() {
        ...
    }
```

Adding a AlertDialog List

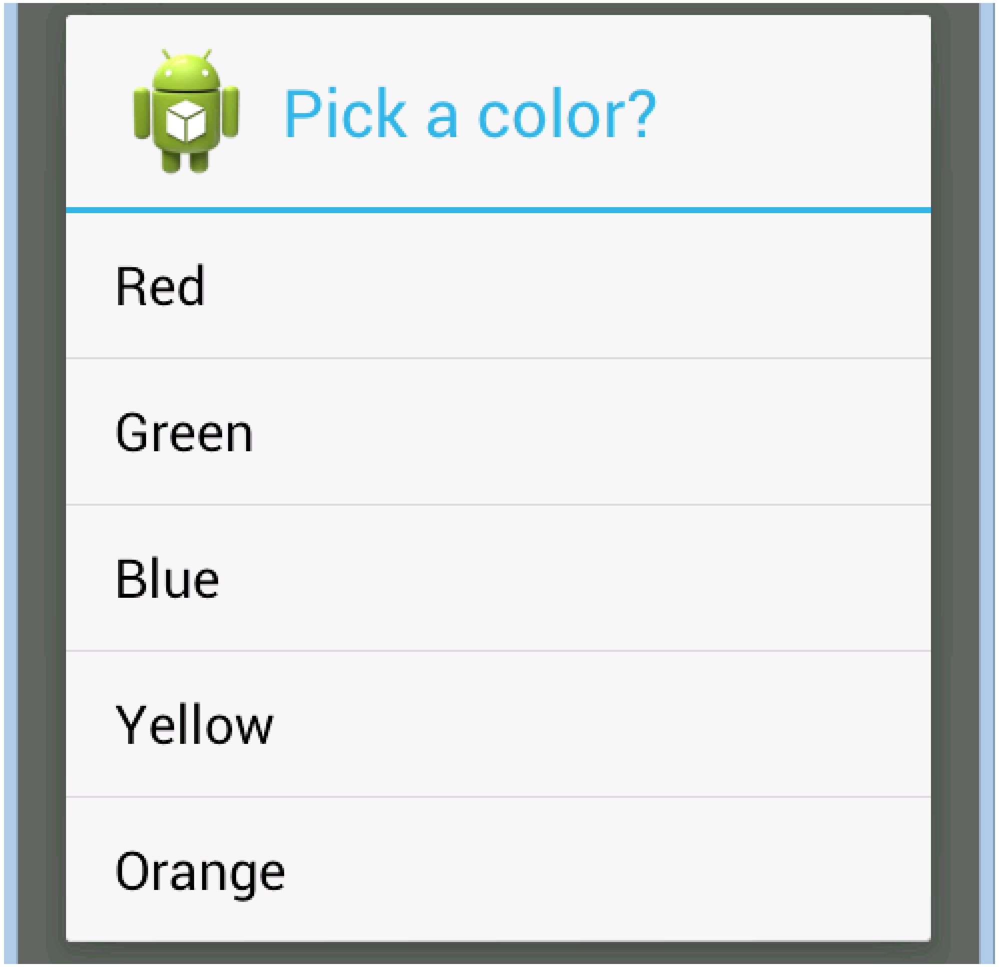
DialogFragment SetItems:

```
public void onCreateDialog(Bundle savedInstanceState) {
     int title = getArguments().getInt("title");
     int arrayResource = getArguments().getInt("array");

     return new AlertDialog.Builder(getActivity())
         .setIcon(R.drawable.ic_launcher)
         .setTitle(title)
         setItems(arrayResource,
             new DialogInterface.OnClickListener() {
                 public void onClick(DialogInterface dialog, int which) {
                     ((MainActivity) getActivity())
                             .doListClick(which);
                 }
             }).create();
   }
```

Set List Onto SetItems

AlertDialog List Sample Pick Color



Pick a color?

Red

Green

Blue

Yellow

Orange

Add AlertDialog Checkbox List Sample Pick Color

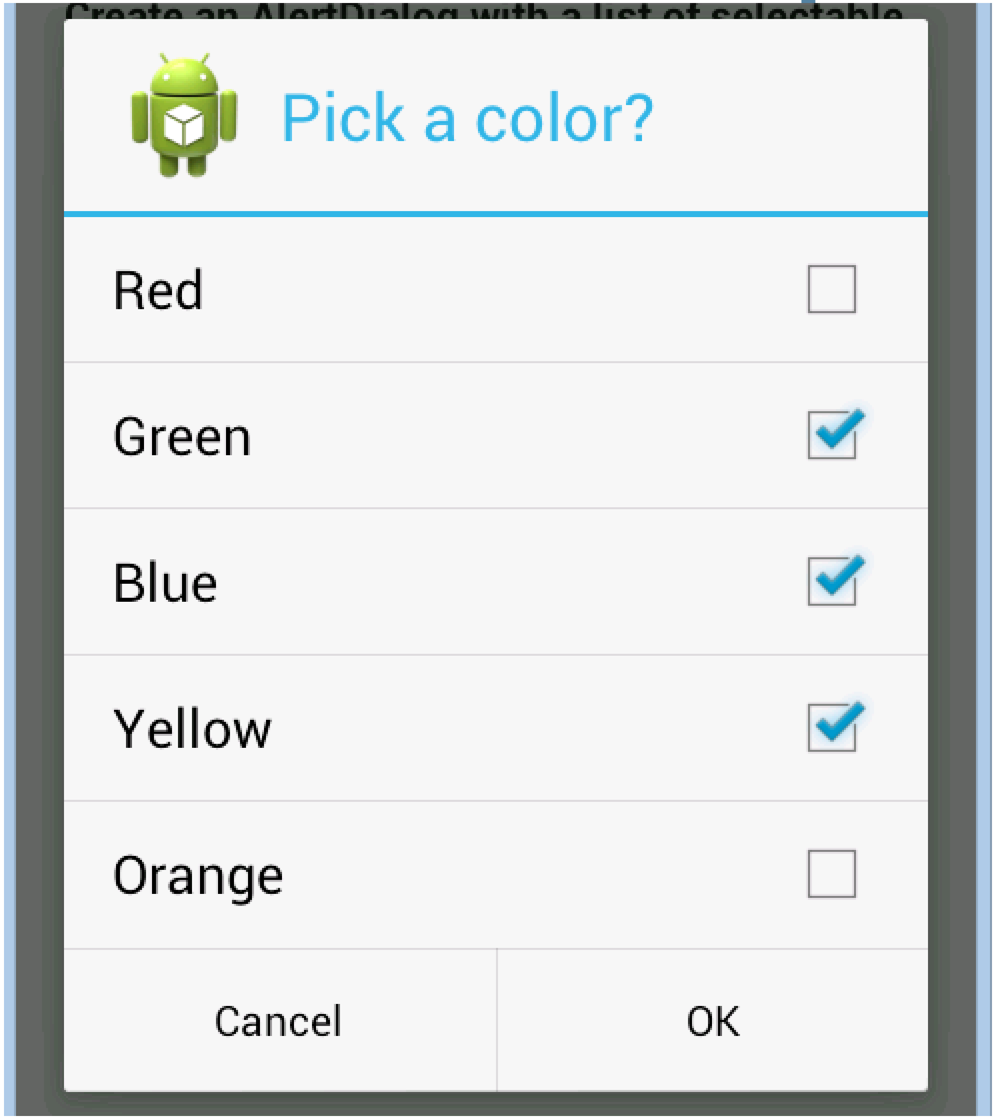
```
public Dialog onCreateDialog(Bundle savedInstanceState) {
      int title = getArguments().getInt("title");
      int arrayResource = getArguments().getInt("array");
      return new AlertDialog.Builder(getActivity())
                  .setIcon(R.drawable.ic_launcher)
                  .setTitle(title)
                  .setMultiChoiceItems(arrayResource, null,
                              new DialogInterface.OnMultiChoiceClickListener() {
                                    public void onClick(DialogInterface dialog,
                                                int which, boolean isChecked) {
                                          ((MainActivity) getActivity())
                                                      .doListItemClick(which, isChecked);
                                    }
                              })
                  .setPositiveButton(R.string.ok,
                              new DialogInterface.OnClickListener() {
                                    @Override
                                    public void onClick(DialogInterface dialog, int id) {
                                          ((MainActivity) getActivity()).doOkClick();
                                    }
                              })
                  .setNegativeButton(R.string.cancel,
                              new DialogInterface.OnClickListener() {
                                    @Override
                                    public void onClick(DialogInterface dialog, int id) {
                                    }
                              }).create();
```

Checkbox List

Ok

Cancel

AlertDialog Checkbox List Sample
Pick Color

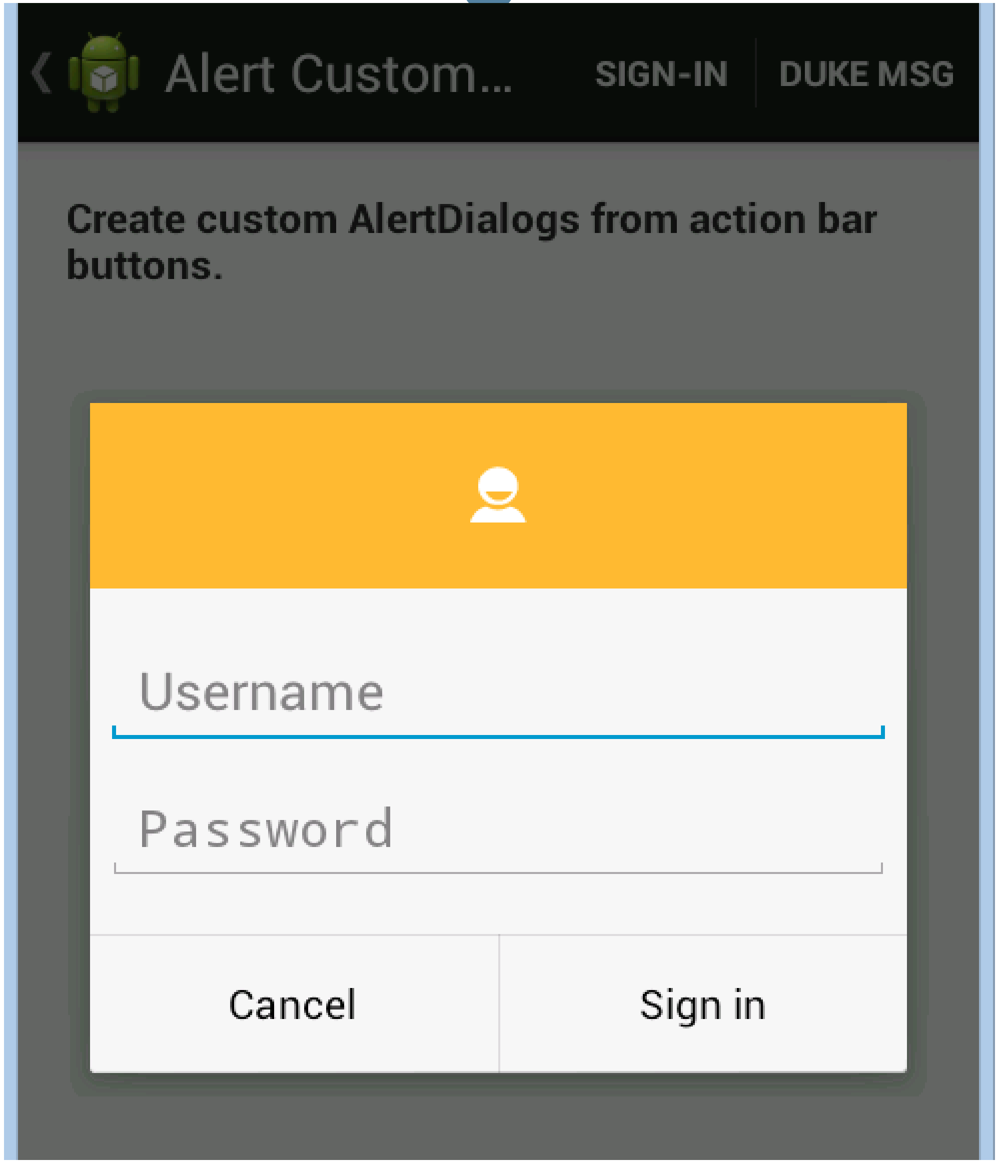


Create an AlertDialog with a list of selectable

Pick a color?

- Red ☐
- Green ☑
- Blue ☑
- Yellow ☑
- Orange ☐

AlertDialog Custom Dialog



Create custom AlertDialogs from action bar buttons.

AlertDialog Custom Dialog

```
return new AlertDialog.Builder(getActivity())
        .setView(inflater.inflate(R.layout.dialog_signin, null))
        // Set the action buttons
        .setPositiveButton(R.string.signin,
          new DialogInterface.OnClickListener() {
            @Override
            public void onClick(DialogInterface dialog, int id) {
              ((MainActivity) getActivity())
              .doOkClick();
            }
          })
        .setNegativeButton(R.string.cancel,
          new DialogInterface.OnClickListener() {
            @Override
            public void onClick(DialogInterface dialog, int id) {
            }
          }).create();
```

Xml Dialog Format

AlertDialog Custom Dialog Xml

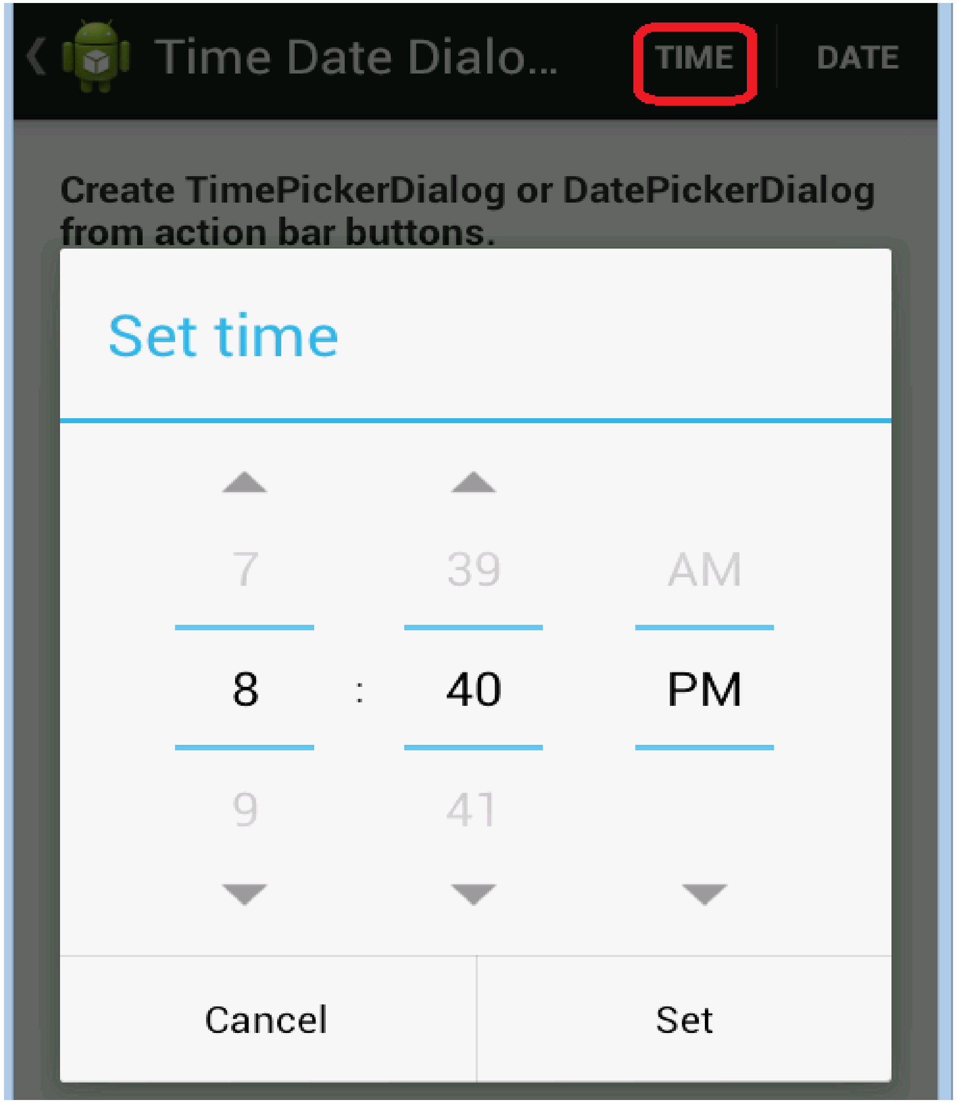
```
<LinearLayout xmlns:android="http://schemas.android.com/apk/res/android"
        android:orientation="vertical"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content" >
  <ImageView
        android:src="@drawable/ic_action_user"
        android:layout_width="match_parent"
        android:layout_height="64dp"
        android:scaleType="center"
        android:background="#FFFFBB33"
        android:contentDescription="@string/app_name" />
  <EditView
        android:id="@+id/username"
        android:inputType="textEmailAddress"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:layout_marginTop="16dp"
        android:layout_marginLeft="4dp"
        android:layout_marginRight="4dp"
        android:layout_marginBottom="4dp"
        android:text="@string/username" />
  ...
```

PickerDialog

Picker Dialog for Time

DialogFragment Implements

TimePickerDialog.OnTimeSetListener



Create TimePickerDialog or DatePickerDialog from action bar buttons.

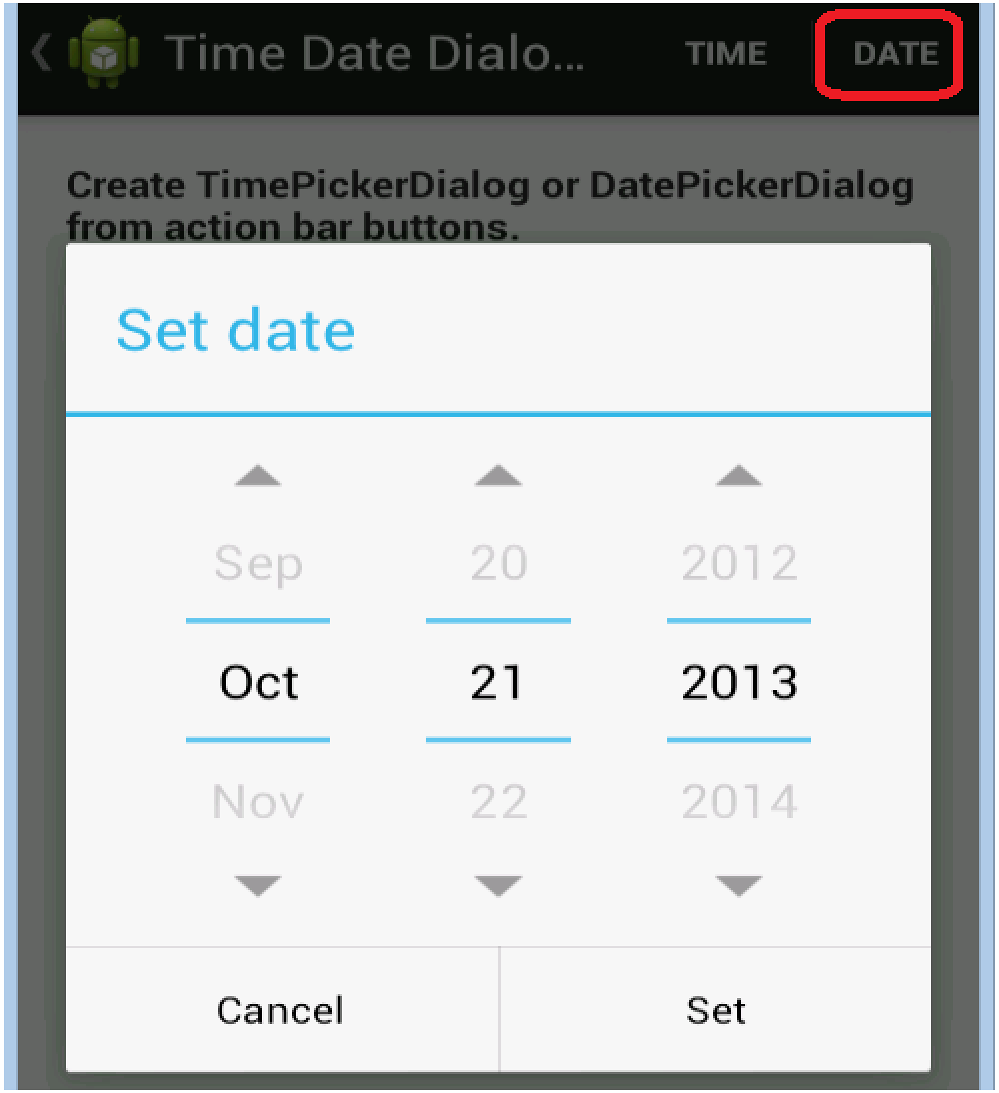
Set time

8 : 40 PM

Picker Dialog for Date

DialogFragment Implements

DatePickerDialog.OnDateSetListener



Create TimePickerDialog or DatePickerDialog from action bar buttons.

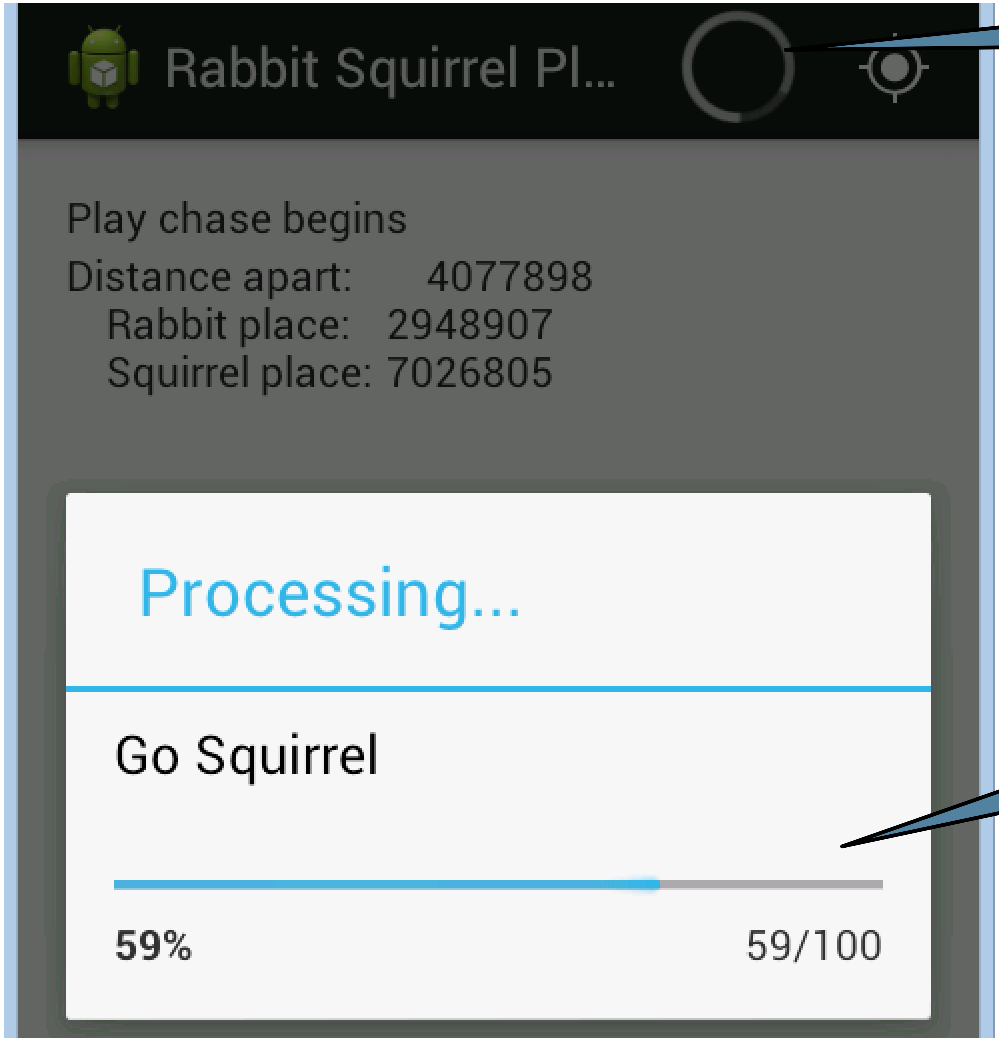
Set date

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.

Progess Dialog



Rabbit Squirrel Pl...

Play chase begins
Distance apart: 4077898
Rabbit place: 2948907
Squirrel place: 7026805

Processing...

Go Squirrel

59%   59/100

Progress Wheel

Progress Bar

Thank you!

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