



User Interface (2)

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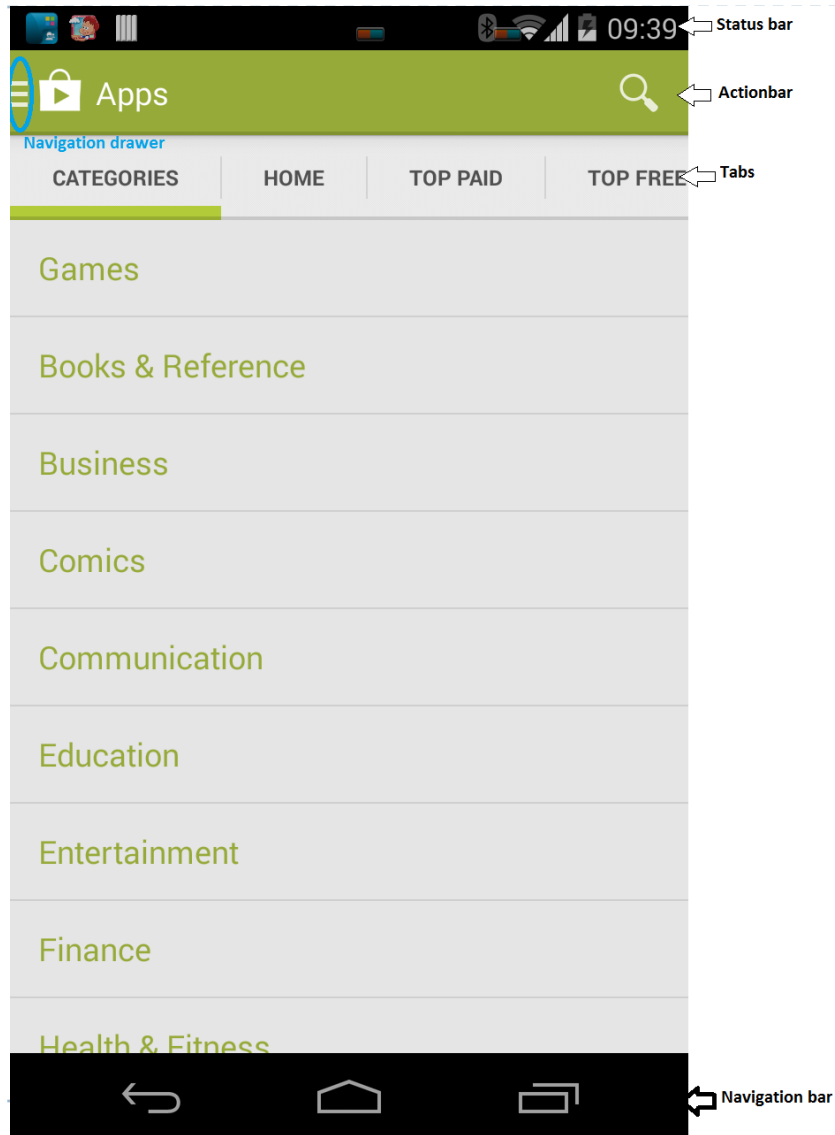
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Outline

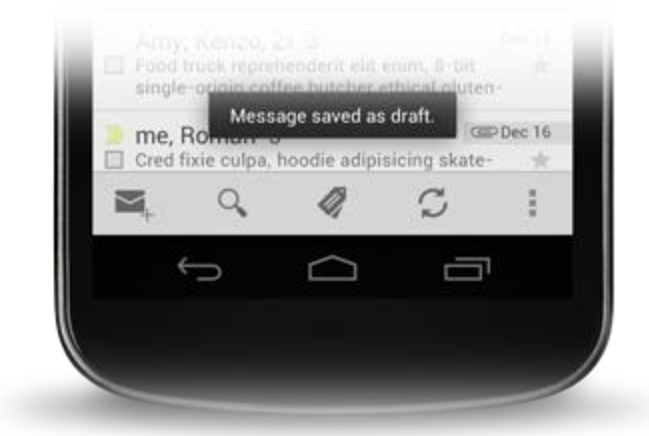
1. Toast
2. Notification
3. Dialog
4. Menu
5. Action Bar
6. Settings

Overview



Toast

- ▶ Show a short message without block current UI



- ▶

```
Context context = getApplicationContext();  
CharSequence text = "Mesasge saved as draft";  
int duration = Toast.LENGTH_SHORT;  
Toast toast = Toast.makeText(context, text, duration);  
toast.show();
```

Notification

- Show information on notification bar

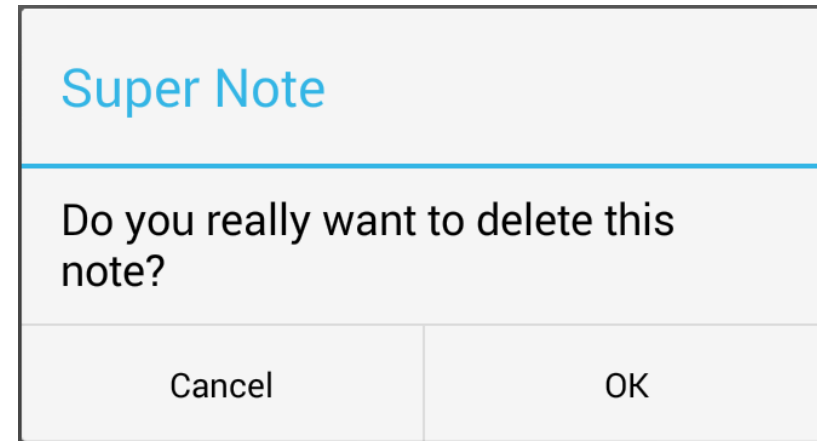


```
NotificationCompat.Builder mBuilder = new NotificationCompat.Builder(  
this).setSmallIcon(R.drawable.ic_launcher)  
.setContentType("Super Note")  
.setContentText("Notes are synced with cloud");  
// Creates an explicit intent for an Activity in your app  
Intent resultIntent = new Intent(this, MainActivity.class);  
PendingIntent resultPendingIntent = PendingIntent.getActivity(getApplicationContext(), 0, resultIntent, 0);  
mBuilder.setContentIntent(resultPendingIntent);  
NotificationManager nm = (NotificationManager) getSystemService(Context.NOTIFICATION_SERVICE);  
// mId allows you to update the notification later on.  
nm.notify(1, mBuilder.build());
```

Dialog

- ▶ A small window that prompts the user to make a decision or enter additional information

```
AlertDialog.Builder builder = new AlertDialog.Builder(this);
builder.setTitle("Super Note");
builder.setMessage("Do you really want to delete this note?");
builder.setPositiveButton("OK",
    new DialogInterface.OnClickListener() {
        @Override
        public void onClick(DialogInterface dialog, int which) {
            //delete noet
        }
    });
builder.setNegativeButton("Cancel",
    new DialogInterface.OnClickListener() {
        @Override
        public void onClick(DialogInterface dialog, int which) {
            dialog.dismiss();
        }
    });
builder.show();
```



Menu

▶ Menu

- ▶ Option menu & actionbar
- ▶ Contextual menu
- ▶ Popup menu

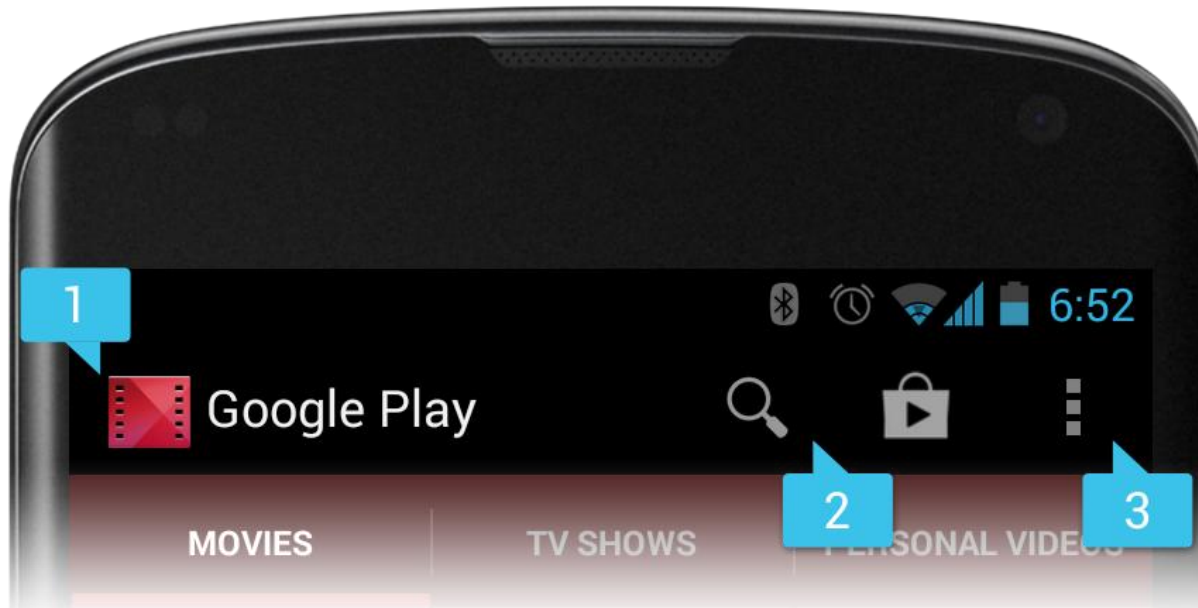
▶ Define in XML

```
<menu xmlns:android="http://schemas.android.com/apk/res/android">
    <item
        android:id="@+id/action_new_note"
        android:icon="@android:drawable/ic_menu_add"
        android:orderInCategory="100"
        android:title="@string/action_new_note"
        app:showAsAction="always"/>
    <item
        android:id="@+id/action_settings"
        android:orderInCategory="100"
        android:title="@string/action_settings"
        app:showAsAction="never"/>
</menu>
```

Menu

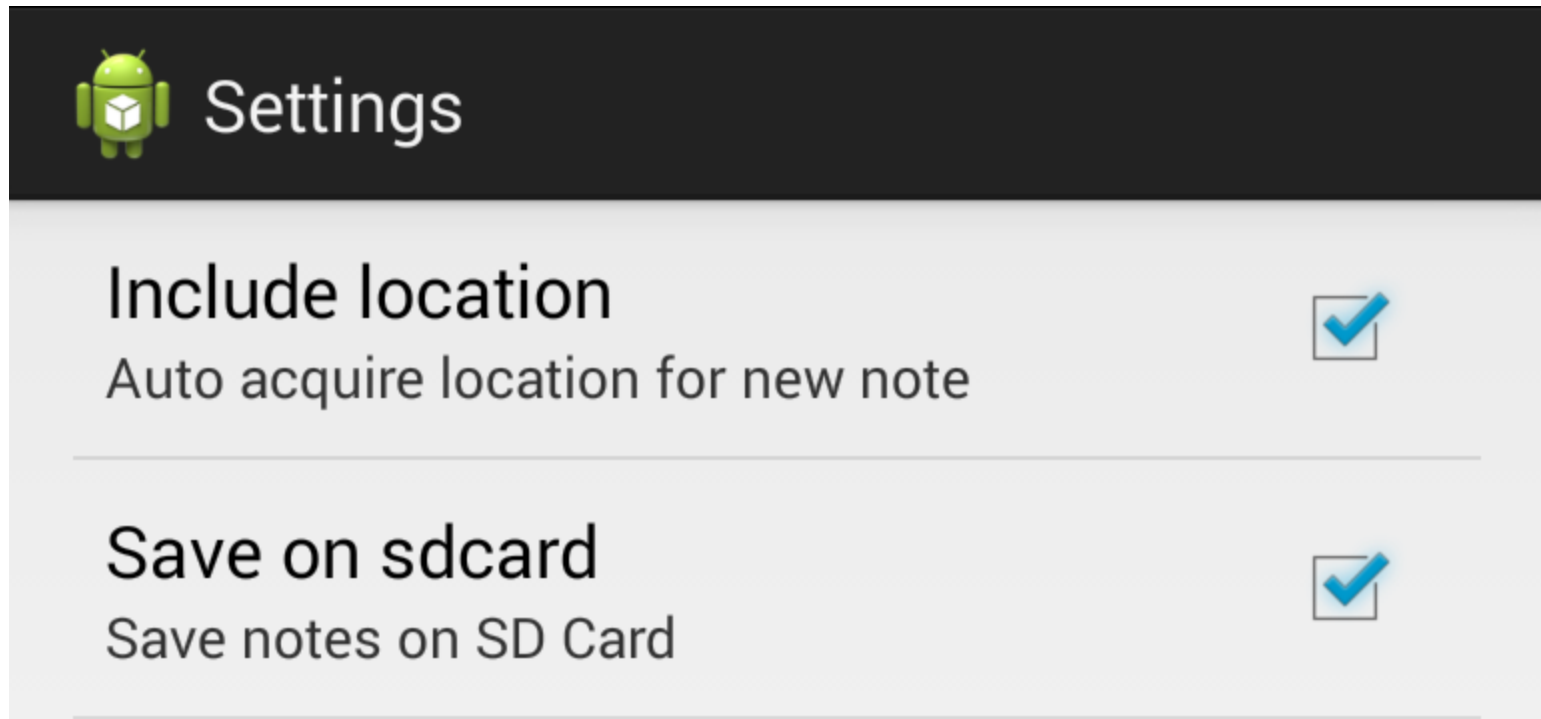
```
public class MenuActivity extends Activity {  
    @Override  
    public boolean onCreateOptionsMenu(Menu menu) {  
        MenuInflater inflater = getMenuInflater();  
        inflater.inflate(R.menu.note_menu, menu);  
        return true;  
    }  
    @Override  
    public boolean onOptionsItemSelected(MenuItem item) {  
        // Handle item selection  
        switch (item.getItemId()) {  
            case R.id.action_new_note:  
                newNote();  
                return true;  
            case R.id.action_settings:  
                showSettings();  
                return true;  
            default:  
                return super.onOptionsItemSelected(item);  
        }  
    }  
}
```


Actionbar



- ▶ [1] app icon, [2] two action items, and [3] action overflow.

Settings



Settings

► Define in XML

```
<PreferenceScreen xmlns:android="http://schemas.android.com/apk/res/android">  
    <CheckBoxPreference android:defaultValue="true" android:key="include_location"  
        android:summary="Auto acquire location for new note"  
        android:title="Include location" />  
    <CheckBoxPreference android:defaultValue="true" android:key="save_on_sdcard"  
        android:summary="Save notes on SD Card"  
        android:title="Save on sdcard" />  
</PreferenceScreen>
```

► Java code

```
public class SettingsActivity extends PreferenceActivity {  
    @Override  
    public void onCreate(Bundle savedInstanceState) {  
        super.onCreate(savedInstanceState);  
        addPreferencesFromResource(R.xml.settings);  
    }  
}
```

Reference

- ▶ <http://developer.android.com/guide/topics/ui/index.html>
- ▶ <http://developer.android.com/guide/topics/ui/declaring-layout.html>
- ▶ <http://developer.android.com/guide/topics/ui/themes.html>
- ▶ <http://developer.android.com/guide/topics/resources/providing-resources.html>
- ▶ http://developer.android.com/guide/practices/screens_support.html
- ▶ <http://mobile.tutsplus.com/series/android-user-interface-design/>