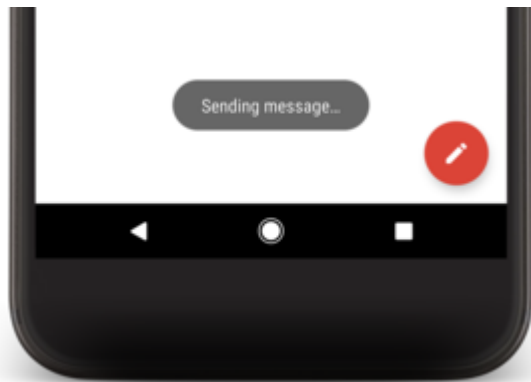


# Toasts overview

A toast provides simple feedback about an operation in a small popup. It only fills the amount of space required for the message and the current activity remains visible and interactive. Toasts automatically disappear after a timeout.

For example, clicking **Send** on an email triggers a "Sending message..." toast, as shown in the following screen capture:



If user response to a status message is required, consider instead using a [Notification](https://developer.android.com/guide/topics/ui/notifiers/notifications.html) (<https://developer.android.com/guide/topics/ui/notifiers/notifications.html>).

## The Basics

First, instantiate a [Toast](https://developer.android.com/reference/android/widget/Toast.html) (<https://developer.android.com/reference/android/widget/Toast.html>) object with one of the [`makeText\(\)`](https://developer.android.com/reference/android/widget/Toast.html#makeText(android.content.Context, int, int)).

([`https://developer.android.com/reference/android/widget/Toast.html#makeText\(android.content.Context, int, int\)`](https://developer.android.com/reference/android/widget/Toast.html#makeText(android.content.Context, int, int)))

methods. This method takes three parameters: the application [Context](https://developer.android.com/reference/android/content/Context.html)

(<https://developer.android.com/reference/android/content/Context.html>), the text message, and the duration for the toast. It returns a properly initialized Toast object. You can display the toast notification with [`show\(\)`](https://developer.android.com/reference/android/widget/Toast.html#show()).

([`https://developer.android.com/reference/android/widget/Toast.html#show\(\)`](https://developer.android.com/reference/android/widget/Toast.html#show())), as shown in the following example:

KOTLIN

JAVA

```
Context context = getApplicationContext();  
CharSequence text = "Hello toast!";  
int duration = Toast.LENGTH_SHORT;
```



```
Toast toast = Toast.makeText(context, text, duration);
toast.show();
```

This example demonstrates everything you need for most toast notifications. You should rarely need anything else. You may, however, want to position the toast differently or even use your own layout instead of a simple text message. The following sections describe how you can do these things.

You can also chain your methods and avoid holding on to the Toast object, like this:

KOTLIN

JAVA

```
Toast.makeText(context, text, duration).show();
```



## Positioning your Toast

A standard toast notification appears near the bottom of the screen, centered horizontally. You can change this position with the `setGravity(int, int, int)`

([https://developer.android.com/reference/android/widget/Toast.html#setGravity\(int, int, int\)](https://developer.android.com/reference/android/widget/Toast.html#setGravity(int, int, int))) method.

This accepts three parameters: a `Gravity`

(<https://developer.android.com/reference/android/view/Gravity.html>) constant, an x-position offset, and a y-position offset.

For example, if you decide that the toast should appear in the top-left corner, you can set the gravity like this:

KOTLIN

JAVA

```
toast.setGravity(Gravity.TOP|Gravity.LEFT, 0, 0);
```



If you want to nudge the position to the right, increase the value of the second parameter. To nudge it down, increase the value of the last parameter.

## Creating a Custom Toast View

If a simple text message isn't enough, you can create a customized layout for your toast notification. To create a custom layout, define a View layout, in XML or in your application code, and pass the root `View` (<https://developer.android.com/reference/android/view/View.html>) object to the `setView(View)`.

([https://developer.android.com/reference/android/widget/Toast.html#setView\(android.view.View\)](https://developer.android.com/reference/android/widget/Toast.html#setView(android.view.View))) method.

The following snippet contains a customized layout for a toast notification (saved as `layout/custom_toast.xml`):

```
<LinearLayout xmlns:android="http://schemas.android.com/apk/res/android"
    android:id="@+id/custom_toast_container"
    android:orientation="horizontal"
    android:layout_width="fill_parent"
    android:layout_height="fill_parent"
    android:padding="8dp"
    android:background="#DAAA"
    >
    <ImageView android:src="@drawable/droid"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_marginRight="8dp"
        />
    <TextView android:id="@+id/text"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:textColor="#FFF"
        />
</LinearLayout>
```

Notice that the ID of the `LinearLayout` element is `"custom_toast_container"`. You must use this ID and the ID of the XML layout file `"custom_toast"` to inflate the layout, as shown here:

KOTLIN

JAVA

```
LayoutInflater inflater = getLayoutInflater();
View layout = inflater.inflate(R.layout.custom_toast,
    (ViewGroup) findViewById(R.id.custom_toast_container));

TextView text = (TextView) layout.findViewById(R.id.text);
text.setText("This is a custom toast");

Toast toast = new Toast(getApplicationContext());
toast.setGravity(Gravity.CENTER_VERTICAL, 0, 0);
toast.setDuration(Toast.LENGTH_LONG);
toast.setView(layout);
toast.show();
```

First, retrieve the [LayoutInflater](#)

(<https://developer.android.com/reference/android/view/LayoutInflater.html>) with

**getLayoutInflater().**

([https://developer.android.com/reference/android/app/Activity.html#getLayoutInflater\(\)](https://developer.android.com/reference/android/app/Activity.html#getLayoutInflater())) (or

**getSystemService().**

([https://developer.android.com/reference/android/content/Context.html#getSystemService\(java.lang.String\)](https://developer.android.com/reference/android/content/Context.html#getSystemService(java.lang.String))))

), and then inflate the layout from XML using **inflate(int, ViewGroup).**

([https://developer.android.com/reference/android/view/LayoutInflater.html#inflate\(int,android.view.ViewGroup\)](https://developer.android.com/reference/android/view/LayoutInflater.html#inflate(int,android.view.ViewGroup)))

. The first parameter is the layout resource ID and the second is the root View. You can use this inflated layout to find more View objects in the layout, so now capture and define the content for the ImageView and TextView elements. Finally, create a new Toast with

**Toast(Context).**

([https://developer.android.com/reference/android/widget/Toast.html#Toast\(android.content.Context\)](https://developer.android.com/reference/android/widget/Toast.html#Toast(android.content.Context)))

and set some properties of the toast, such as the gravity and duration. Then call

**setView(View).**

([https://developer.android.com/reference/android/widget/Toast.html#setView\(android.view.View\)](https://developer.android.com/reference/android/widget/Toast.html#setView(android.view.View))) and

pass it the inflated layout. You can now display the toast with your custom layout by calling

**show().** ([https://developer.android.com/reference/android/widget/Toast.html#show\(\)](https://developer.android.com/reference/android/widget/Toast.html#show())).

**Note:** Do not use the public constructor for a Toast unless you are going to define the layout with

**setView(View).**

([https://developer.android.com/reference/android/widget/Toast.html#setView\(android.view.View\)](https://developer.android.com/reference/android/widget/Toast.html#setView(android.view.View))). If

you do not have a custom layout to use, you must use **makeText(Context, int, int).**

([https://developer.android.com/reference/android/widget/Toast.html#makeText\(android.content.Context,int,int\)](https://developer.android.com/reference/android/widget/Toast.html#makeText(android.content.Context,int,int)))

to create the Toast.

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