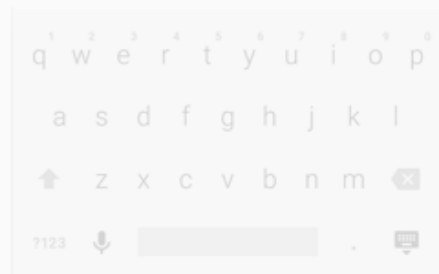
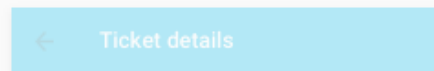
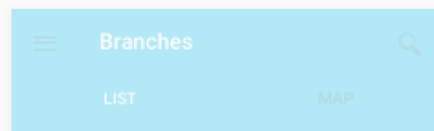
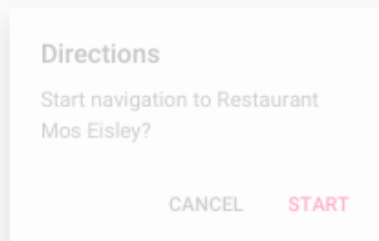
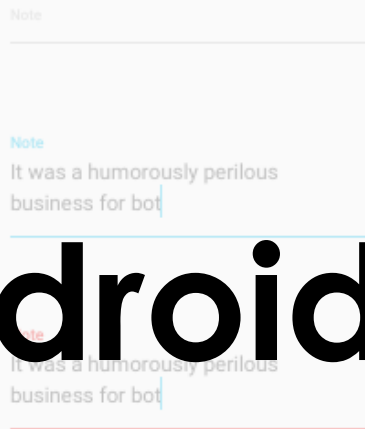
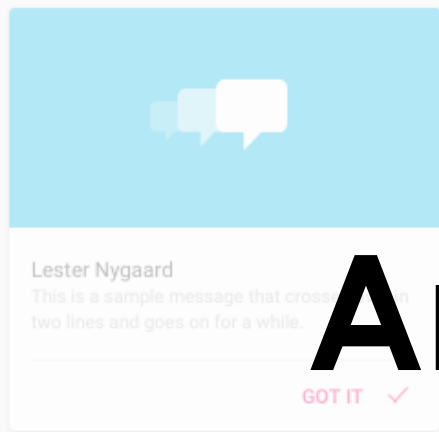


Android UI Elements



List of Items (Lollipop and above)

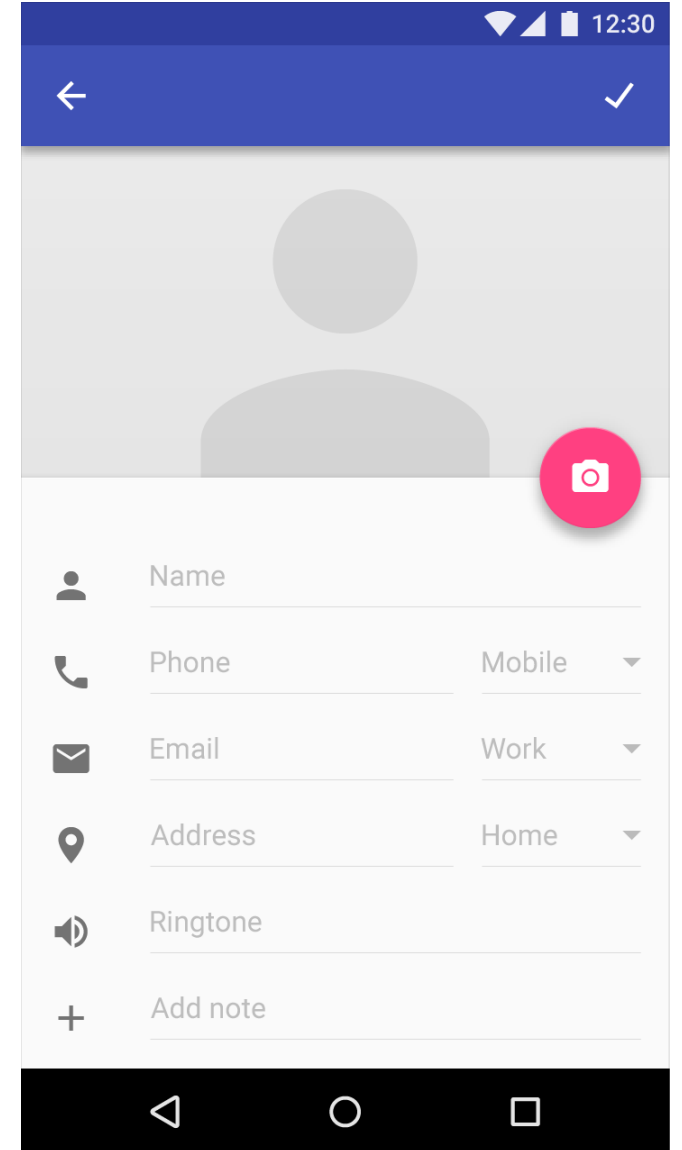
- Alerts
- Buttons
- Cards
- Chips
- Dialogs
- Dividers
- Grid lists
- Lists
- Menus
- Pickers
- Progress & activity
- Selection controls
- Sheet
- Sliders
- Snackbars & toasts
- Subheaders
- Steppers
- Tabs
- Text fields
- Toolbars
- Tooltips
- Notifications
- Checkboxes
- Radio Buttons
- Toggle Buttons
- Spinners
- Settings
- App Drawer
- Home Screen
- Lock Screen
- Widgets

Buttons

A Button clearly communicates what action will occur when the user touches it. It consists of text, an image, or both, designed in accordance with your app's color theme.

There are three standard types of buttons:

- **Floating Action Button:** A raised circular material button
- **Raised Button:** A raised rectangular material button
- **Flat Button:** Normal Text Button with no border



Buttons



Floating Action Button

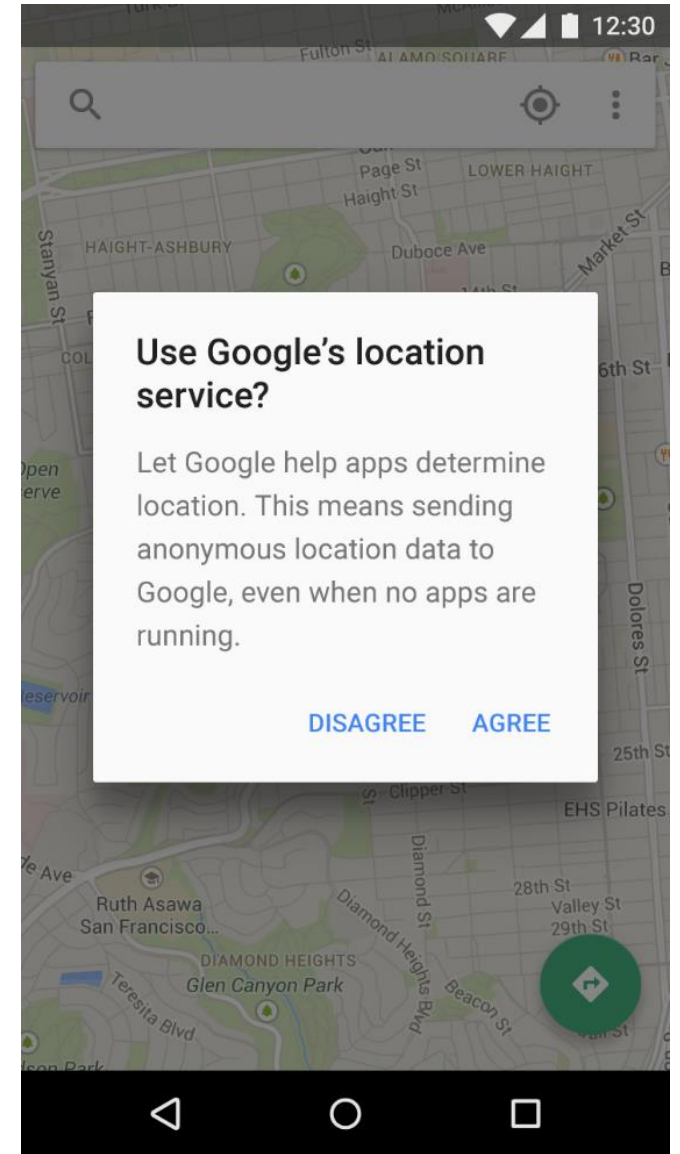
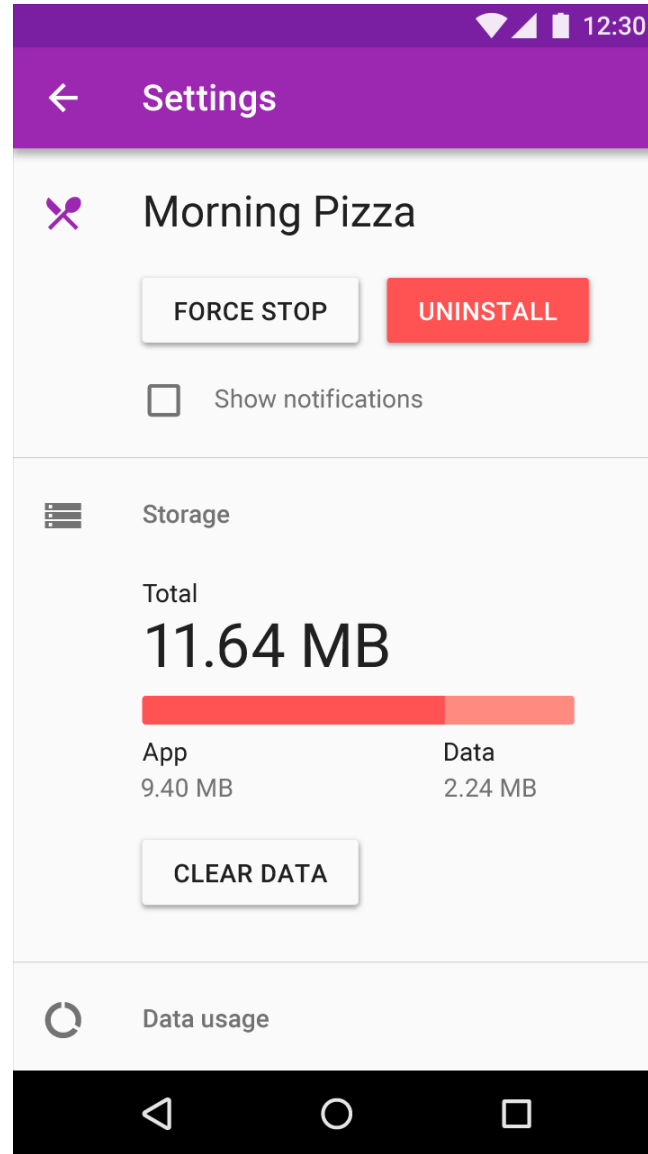
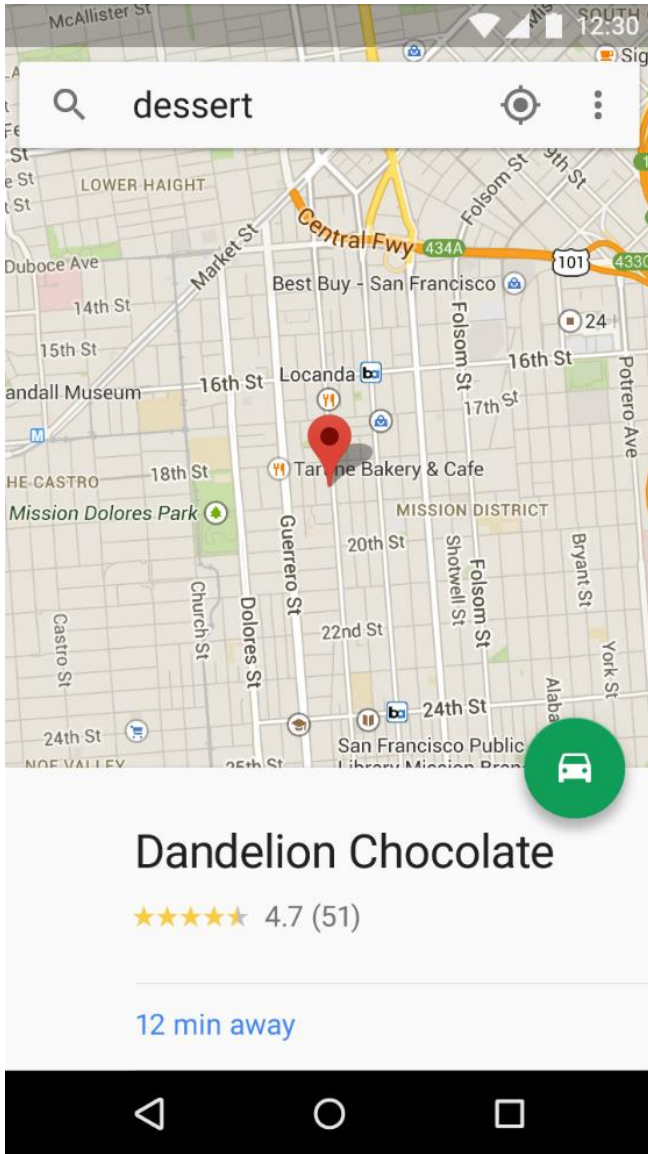


Raised Button

BUTTON

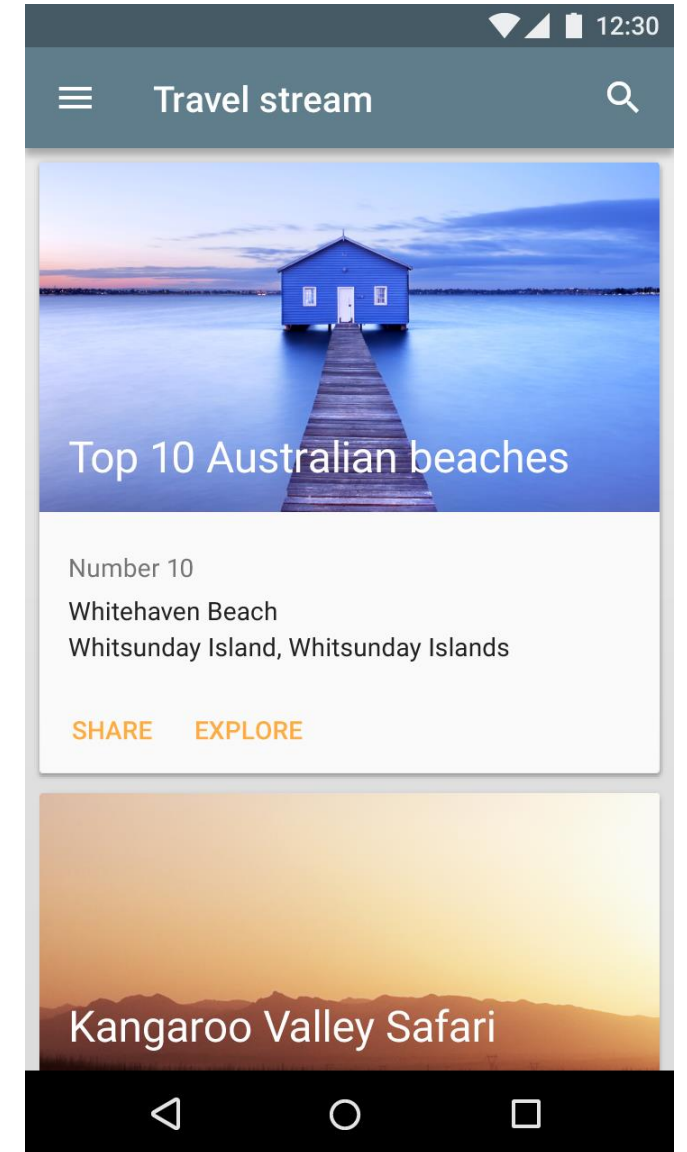
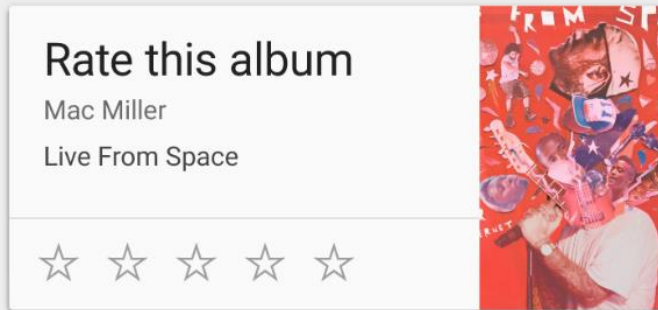
Flat Button

Buttons

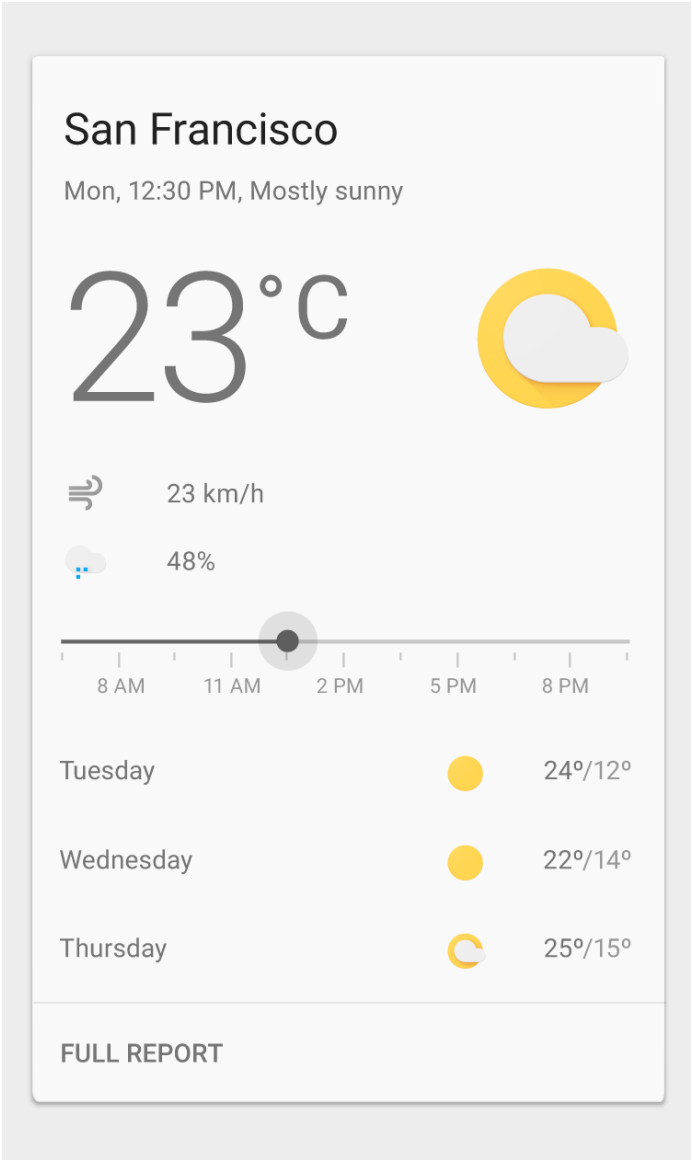
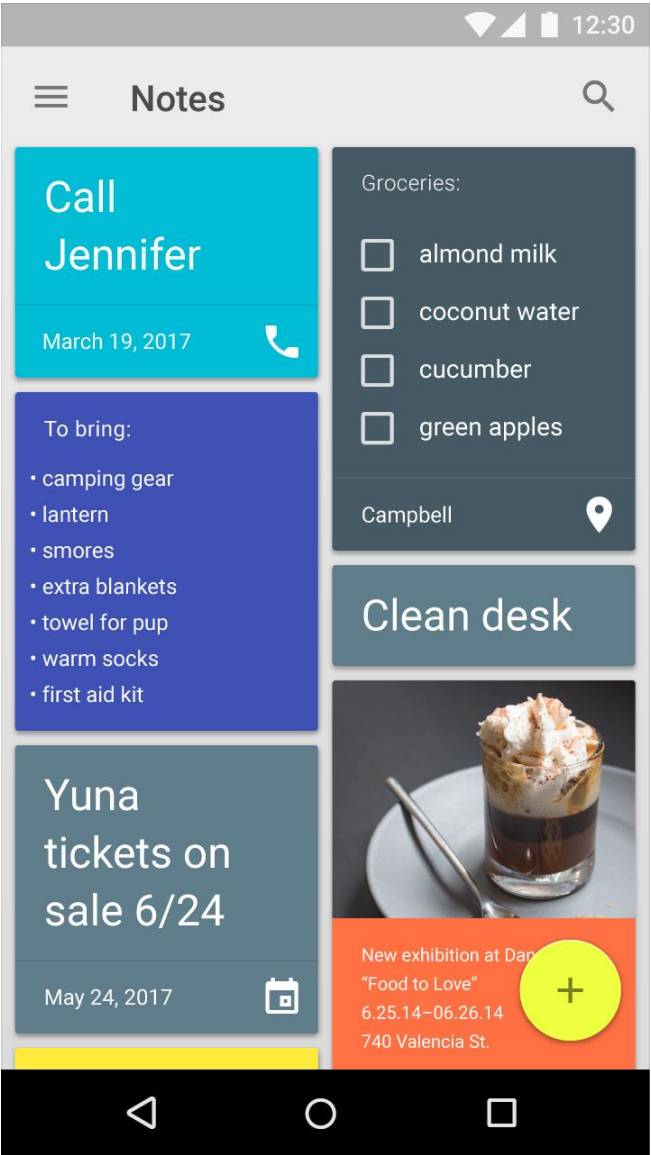
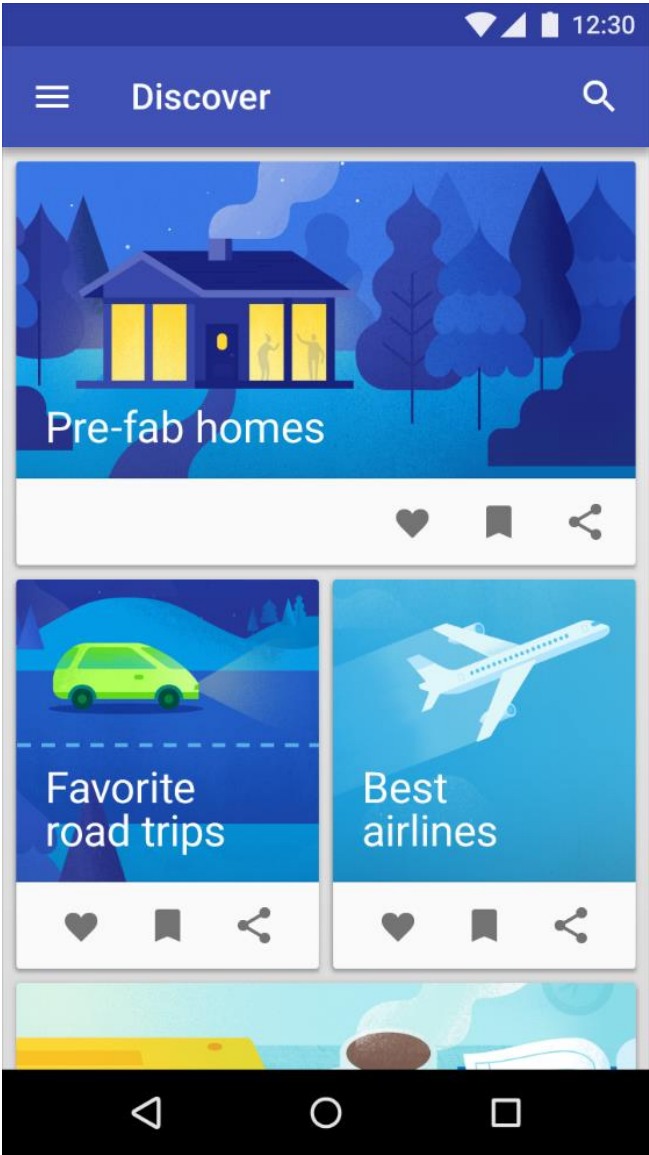


Cards

A card is a piece of paper with unique related data that serves as an entry point to more detailed information. For example, a card could contain a photo, text, and a link about a single subject.



Cards

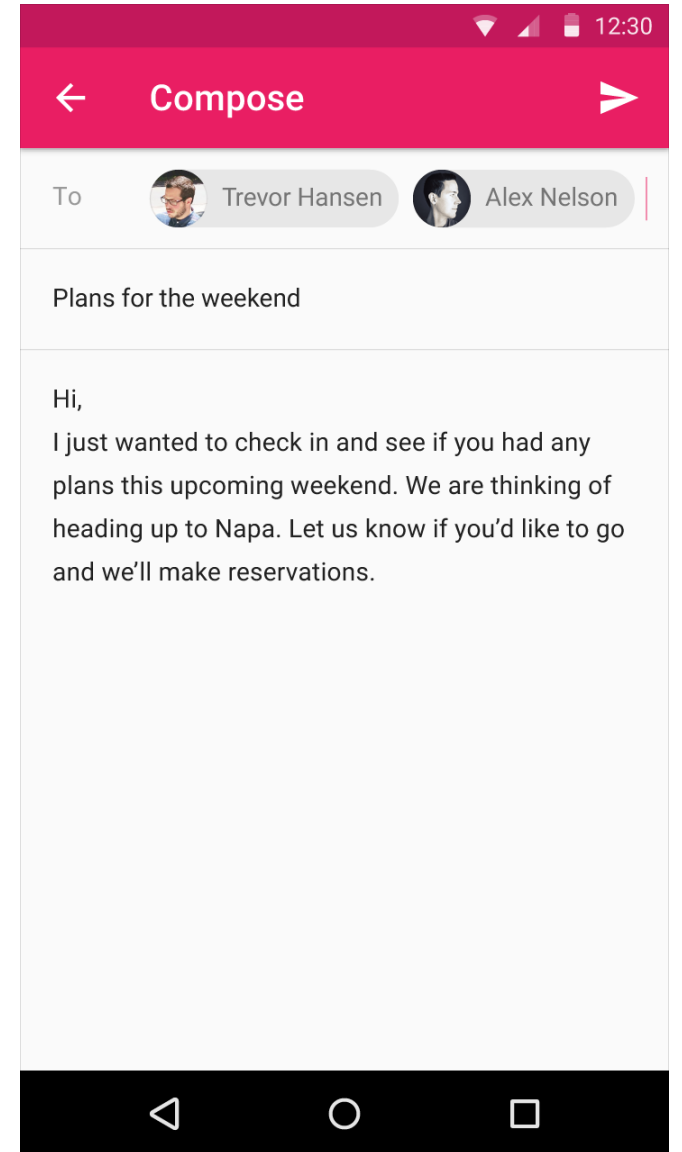


Chips

Chips represent complex entities in small blocks, such as a contact. They can contain a photo, short title string, and brief information.

Touching a chip opens a full detailed view, either in a card or full screen, or a menu of options related to that chip.

Chips can be used for various types of entities, including free form text, predefined text, rules, or contacts. Chips may also contain icons.

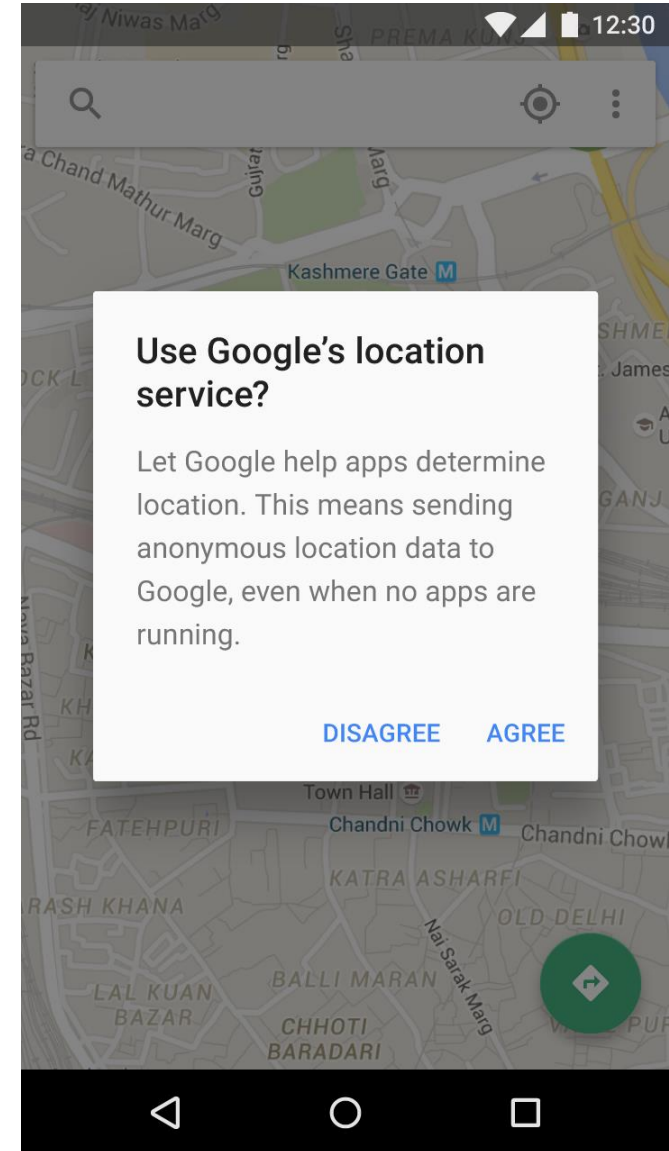


Dialogs

Dialogs contain text and UI controls focused on a specific task. They inform users about critical information, require users to make decisions, or involve multiple tasks.

Dialogs always retain focus until dismissed or a required action has been taken, such as choosing a setting.

If developed right, Dialogs can be cancelled by using the **Back** button OR by touching the screen outside the dialog area.



Dialogs - Alerts

Alerts are a type of Dialogs.

Alerts are urgent interruptions, requiring acknowledgement, that inform the user about a situation.

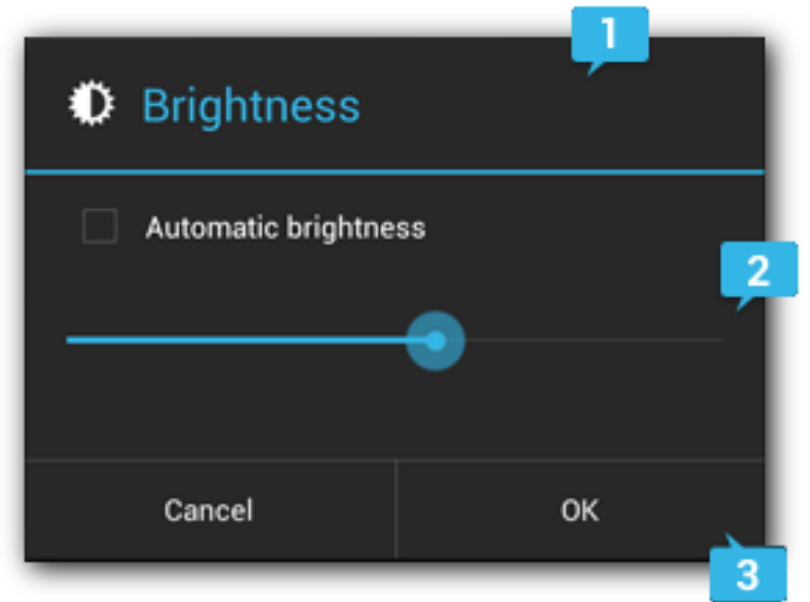
Most alerts don't need titles.

They summarize a decision in a sentence or two by either:

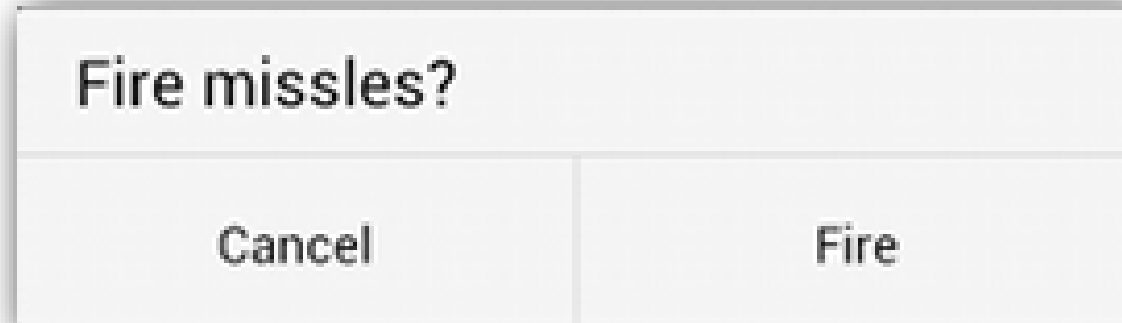
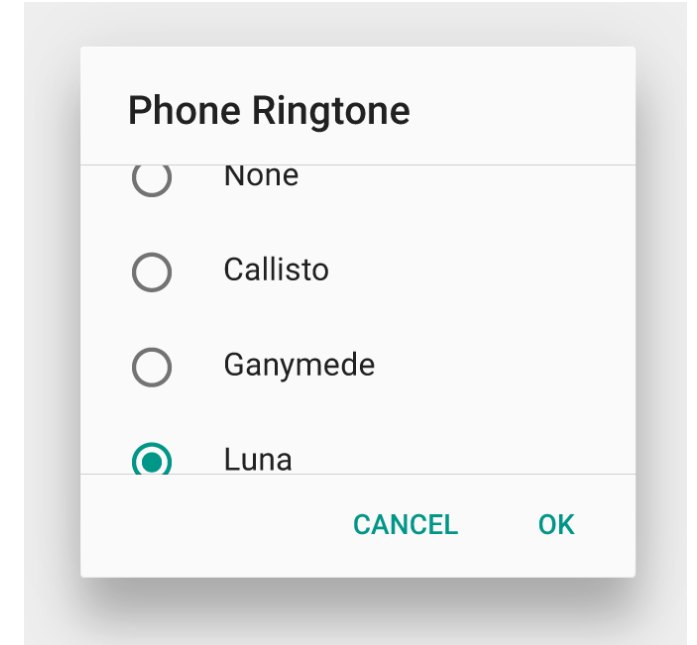
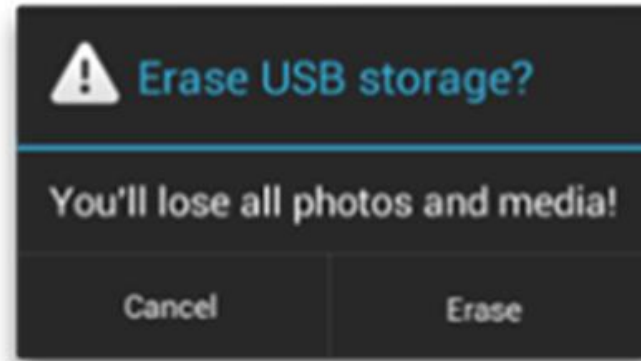
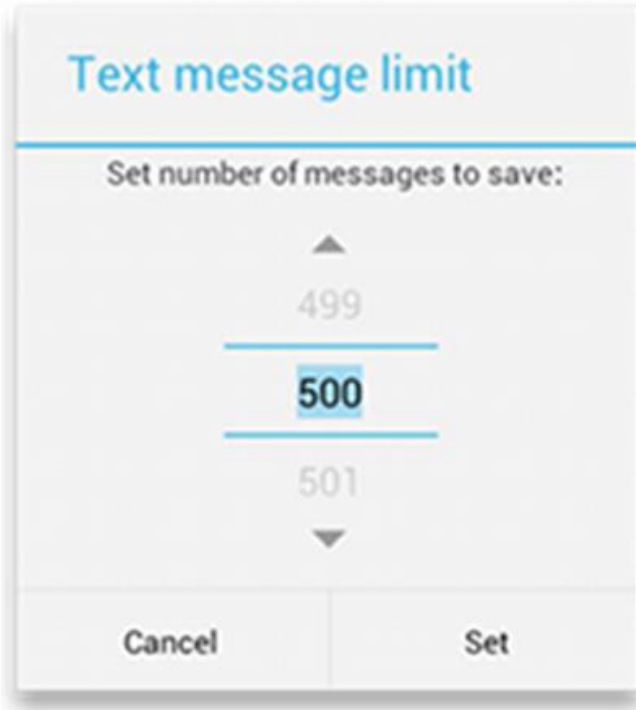
- Asking a question (e.g. "Delete this conversation?")
- Making a statement related to the action buttons

An Alert has 3 parts:

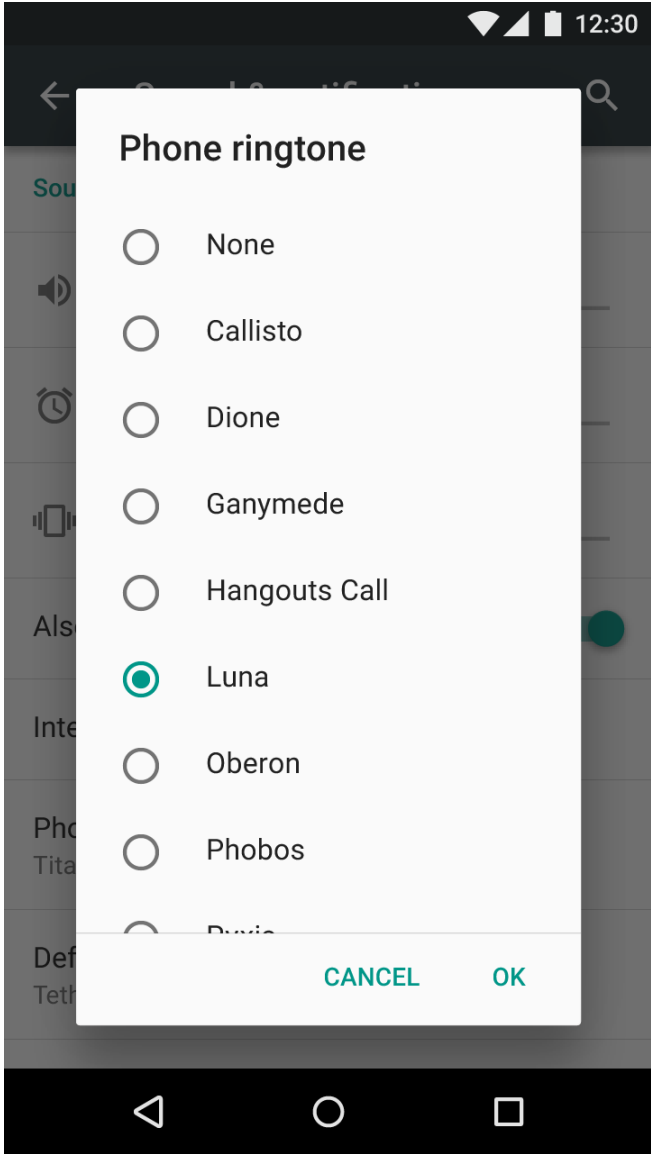
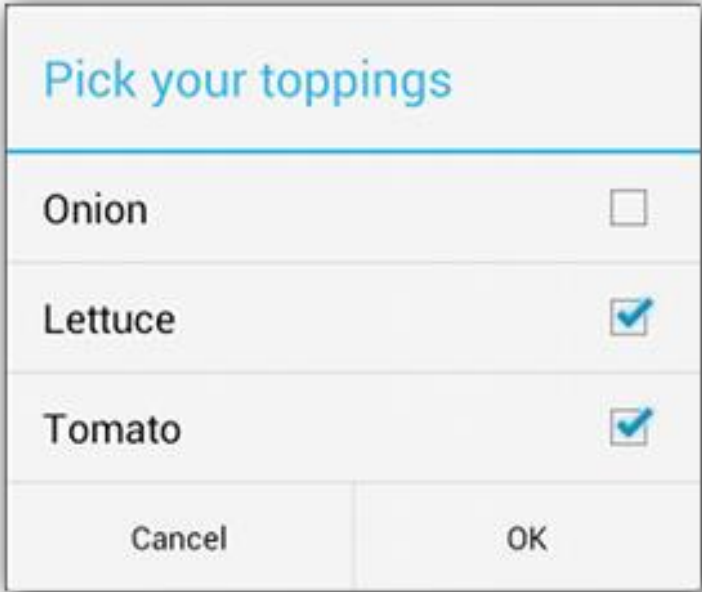
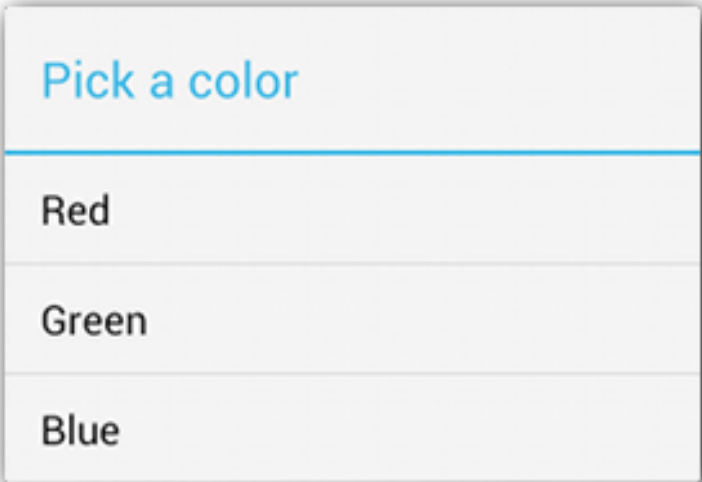
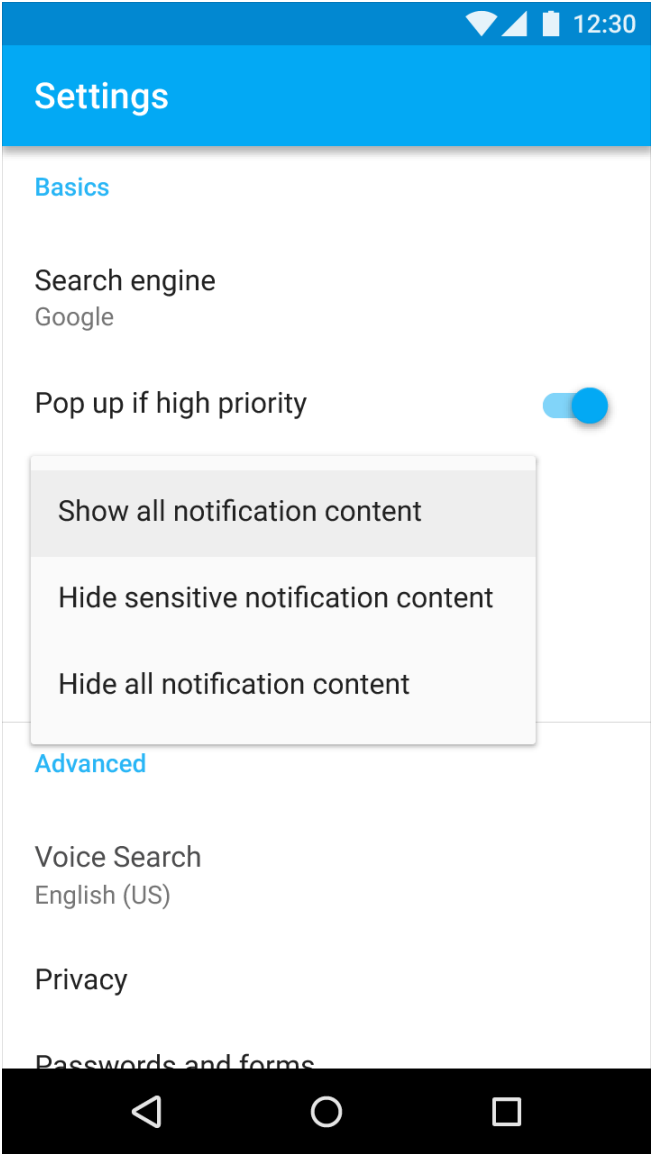
- Title (Optional)
- Content Area
- Action Buttons (Can be buttons, List, etc.)



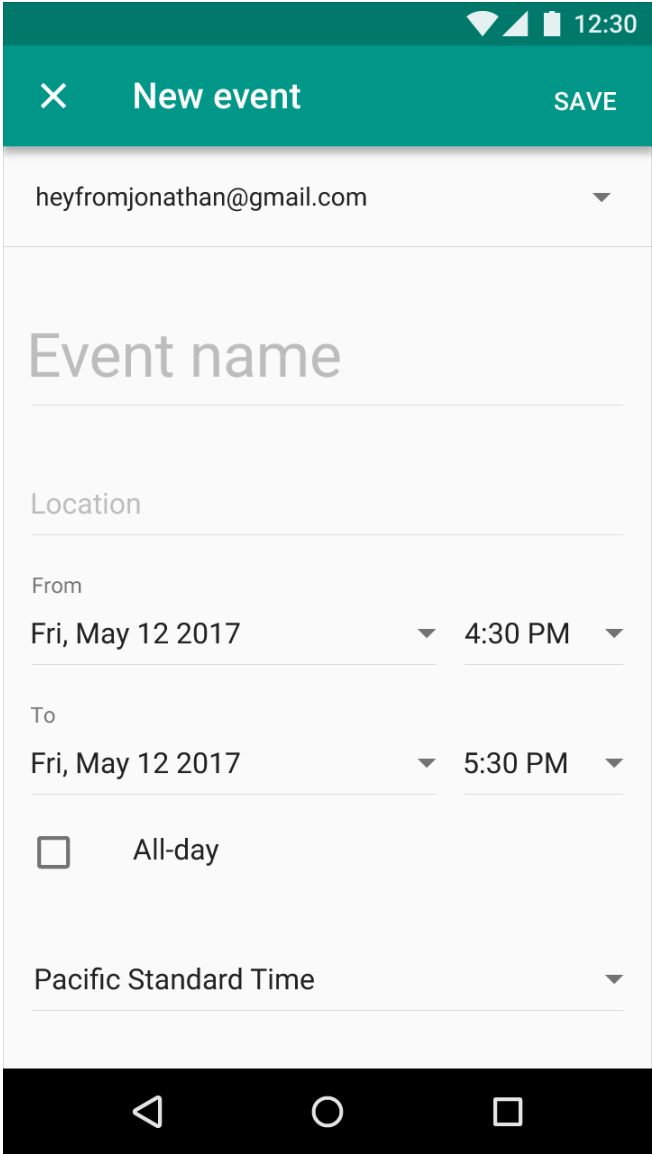
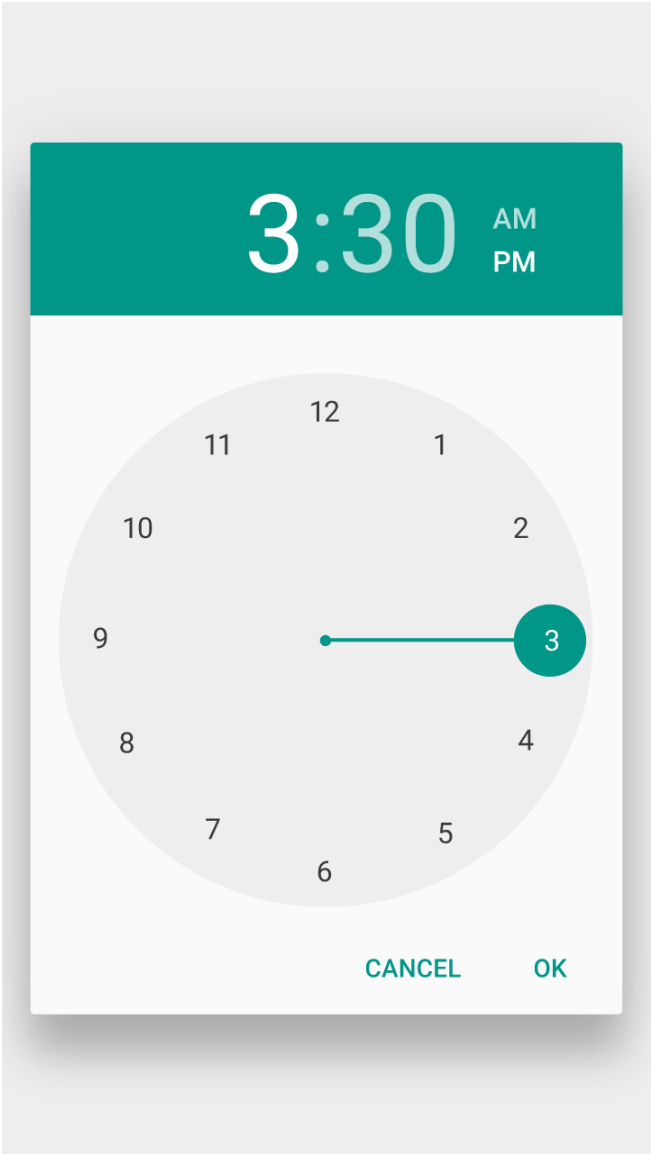
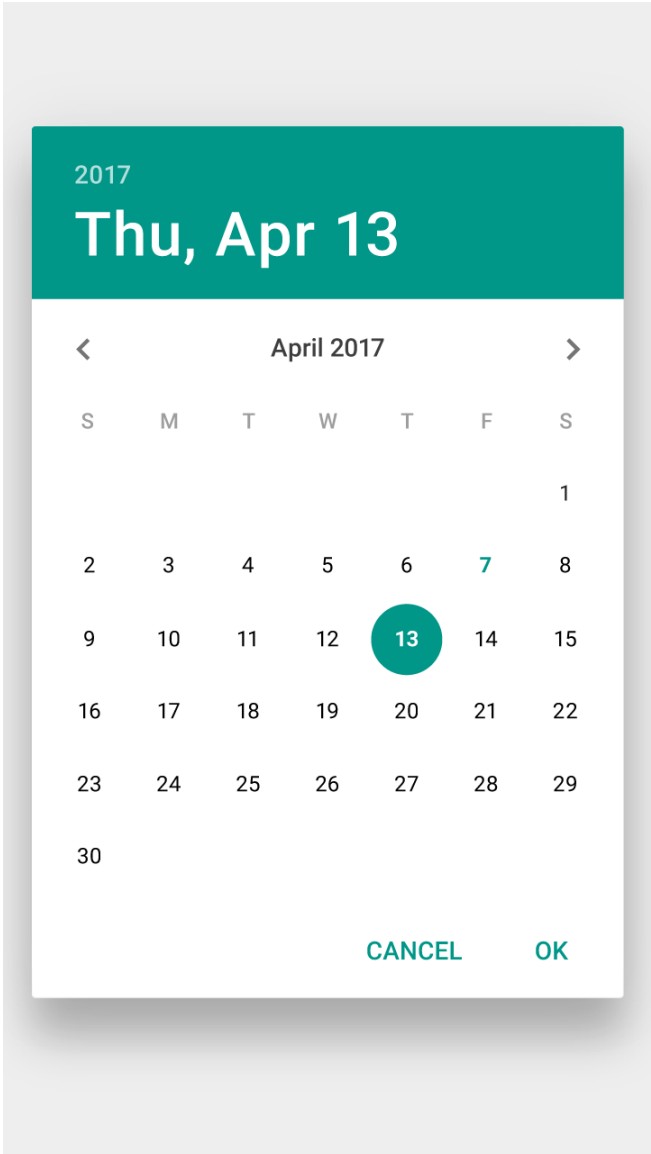
Dialogs - Examples



Dialogs - Examples



Dialogs - Examples

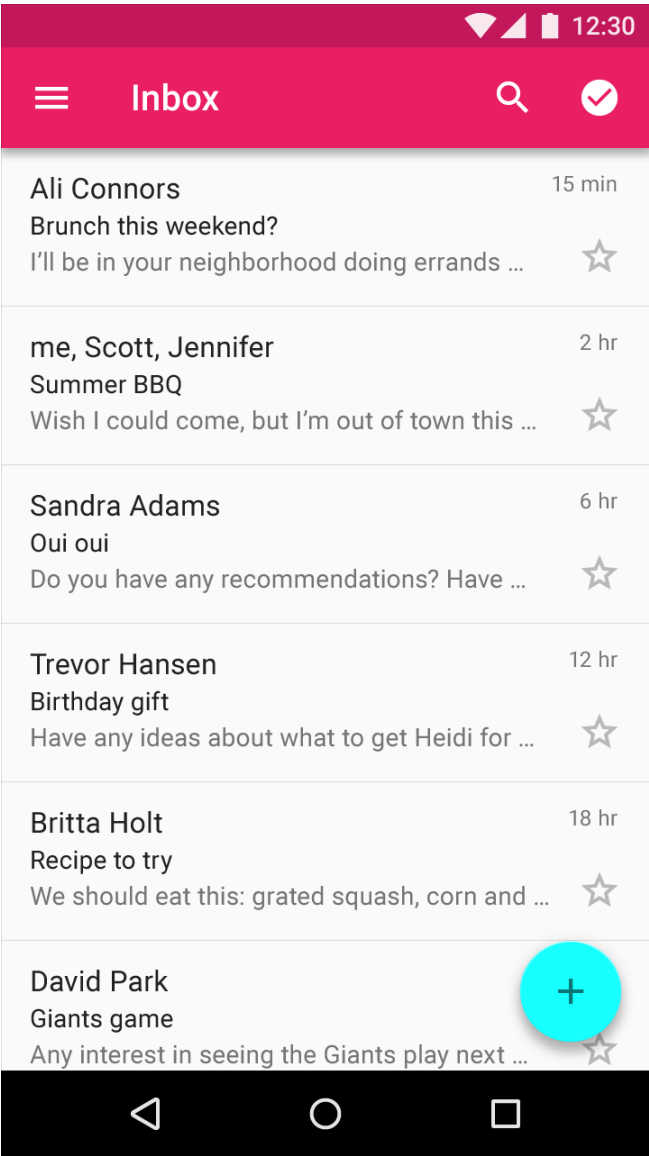


Dividers

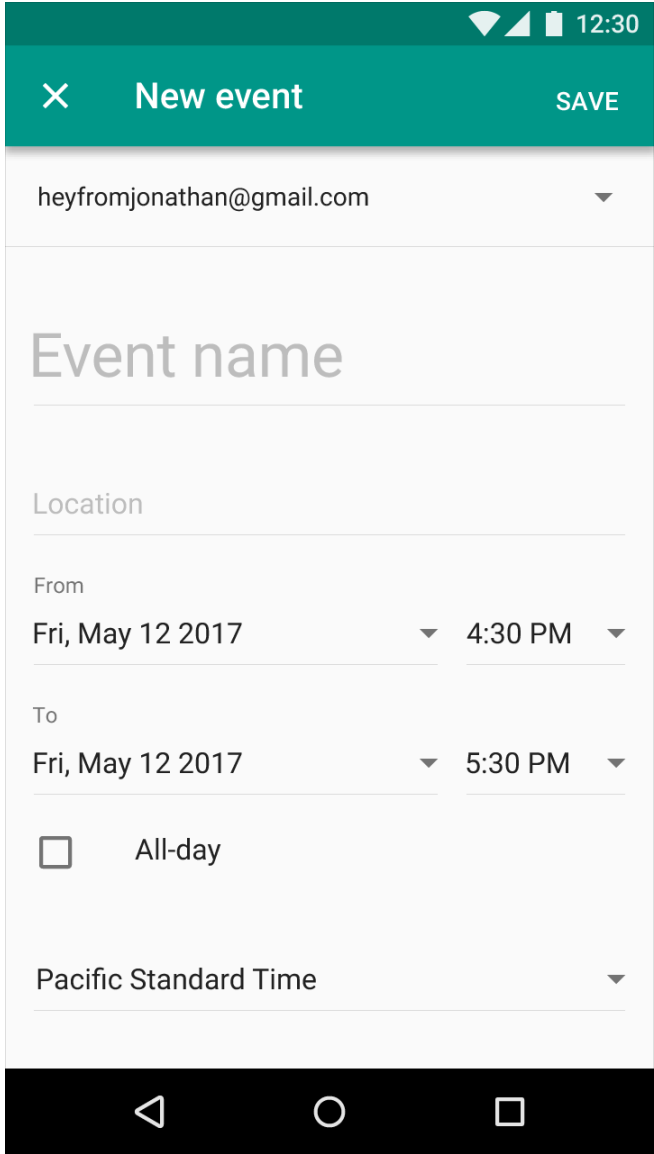
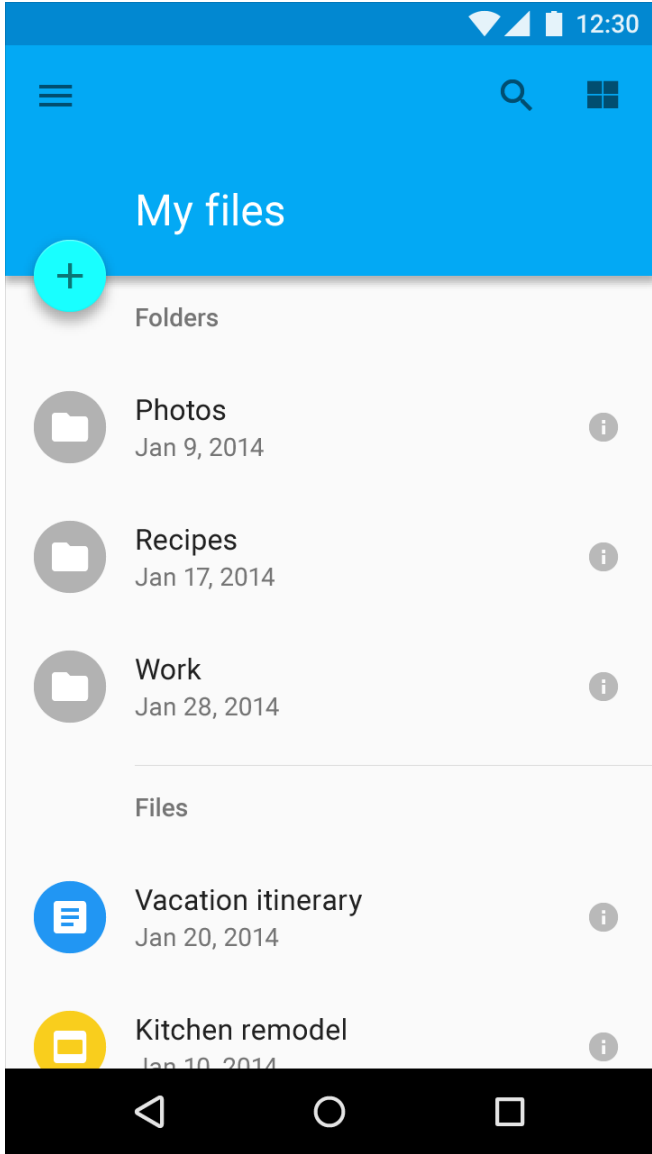
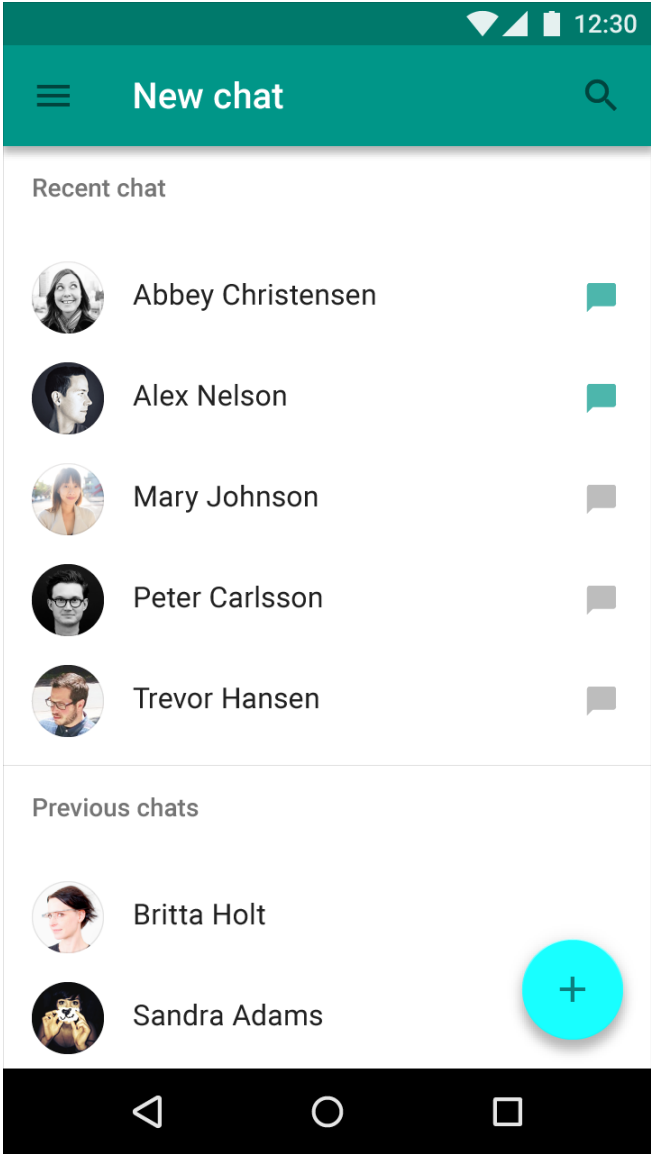
Dividers group and separate content within lists and page layouts. The divider is a thin rule, lightweight yet sufficient to distinguish content visually and spatially.

Subheaders And Dividers

When using a divider with a subheader, place the divider above the subheader to reinforce the relationship between the subheader and the content.



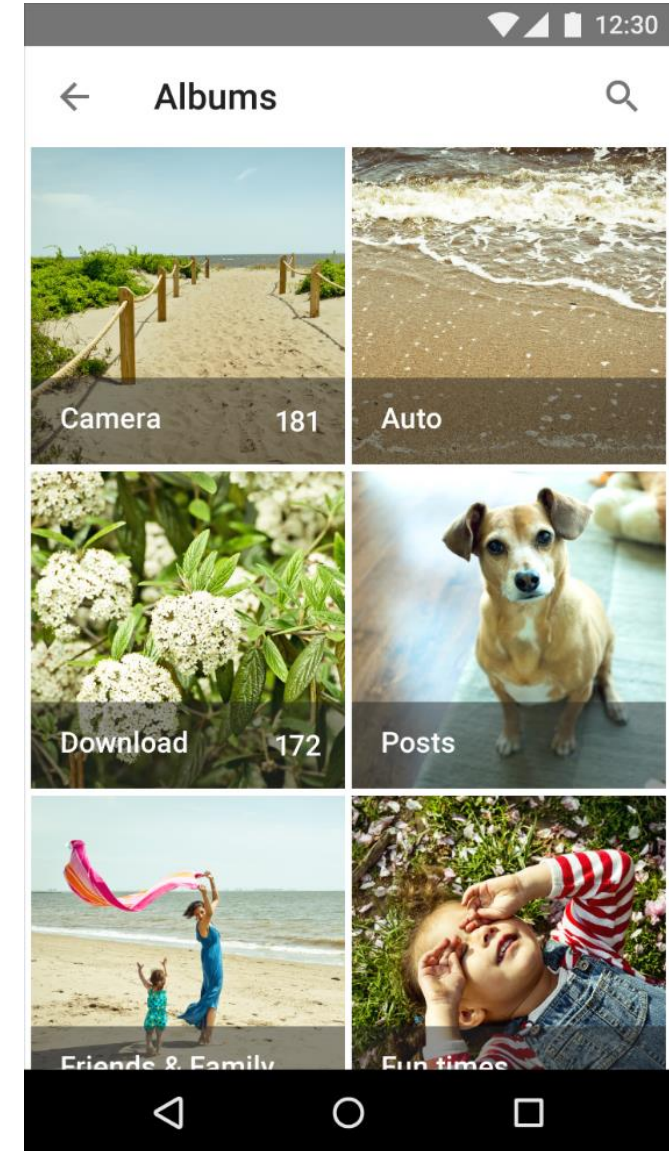
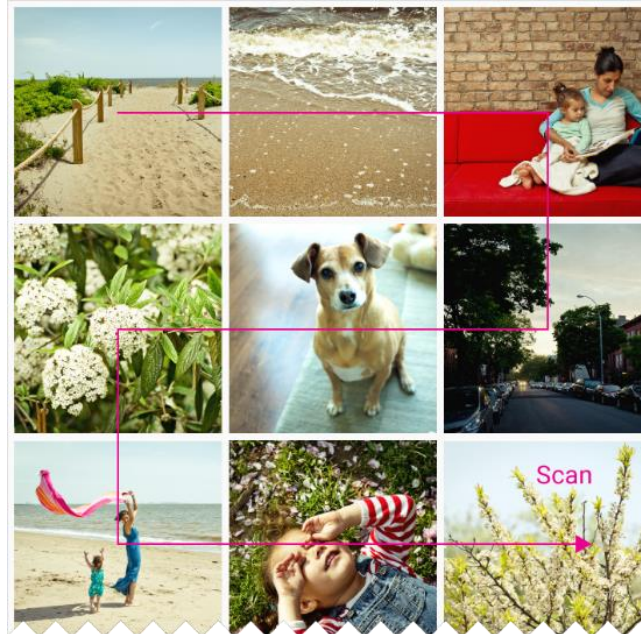
Dividers - Examples



Grid List

Grid lists are an alternative to standard list views. A grid list is best suited to presenting homogenous data, typically images, and is optimized for visual comprehension and differentiating between similar data types.

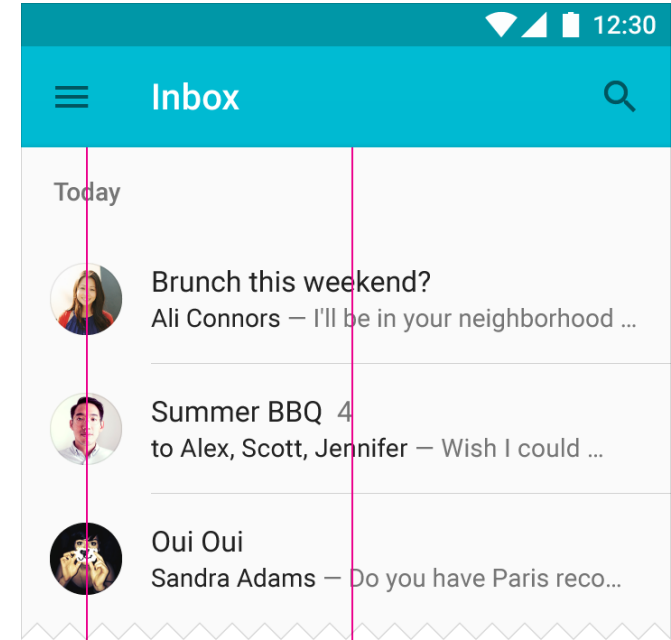
A grid list consists of a repeated pattern of cells arrayed vertically and horizontally within the grid list.



Lists

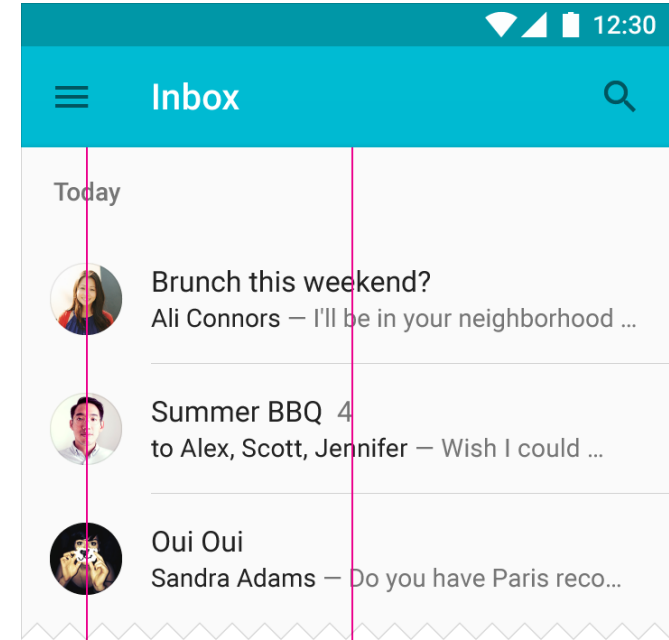
Lists present multiple line items in a vertical arrangement as a single continuous element.

A list consists of a single continuous column of tessellated subdivisions of equal width called rows that function as containers for tiles.



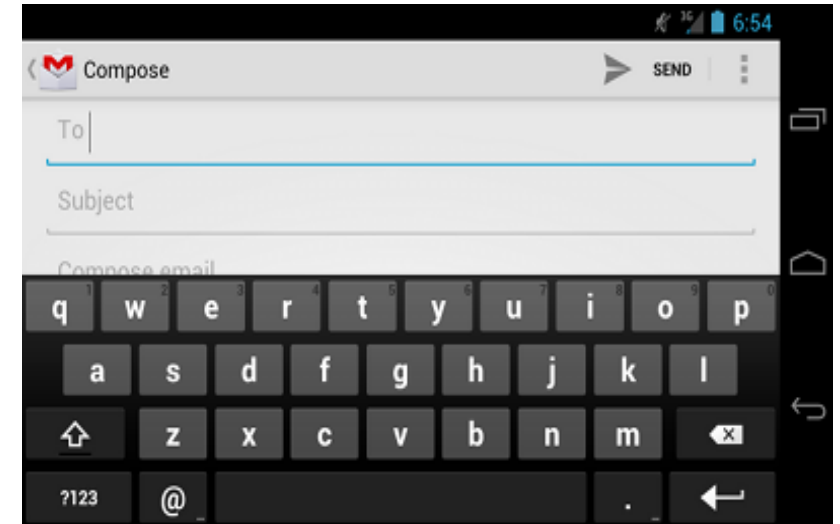
Lists - Controls

List controls are icons that appear to the left or right of the list text. They indicate the state of a list item, information about a list item, or serve as an action related to the list item. Leave-behinds are list controls, which are revealed only upon swipe.



Text Fields

A text field allows the user to type text into your app. It can be either single line or multi-line. Touching a text field places the cursor and automatically displays the keyboard. In addition to typing, text fields allow for a variety of other activities, such as text selection (cut, copy, paste) and data look-up via auto-completion.

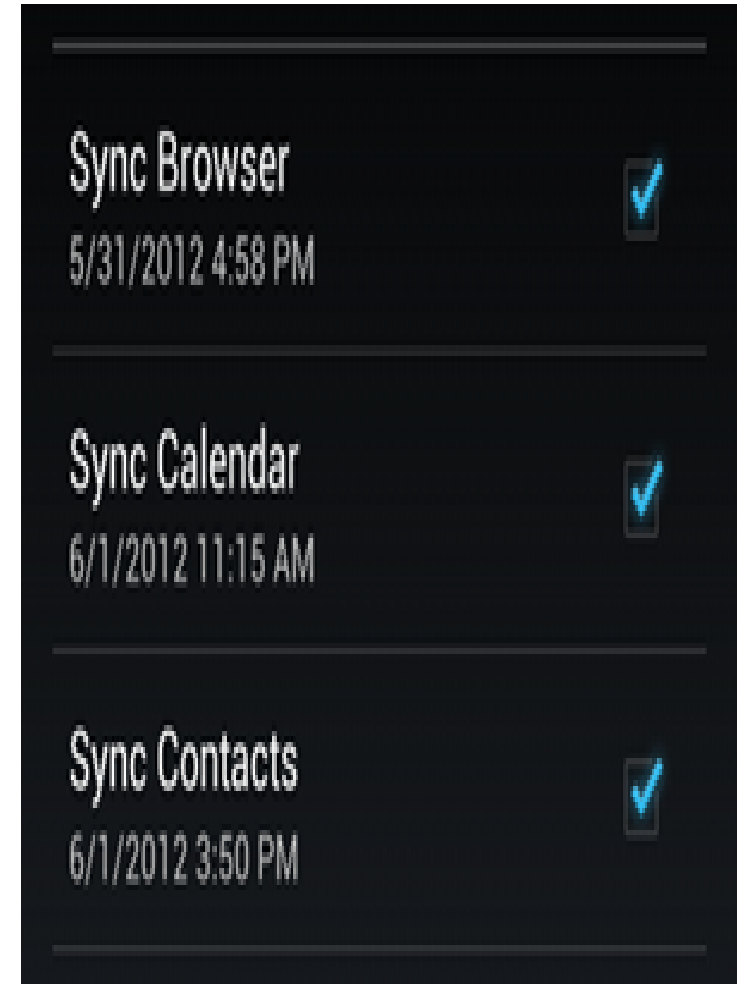


Text fields can have different input types, such as number, date, password, or email address.



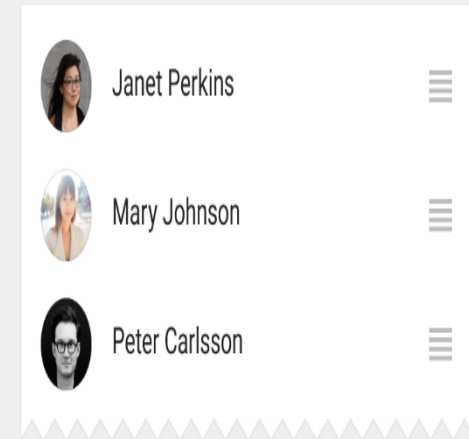
Checkboxes

Checkboxes allow the user to select one or more options from a set. Typically, you should present each checkbox option in a vertical list.



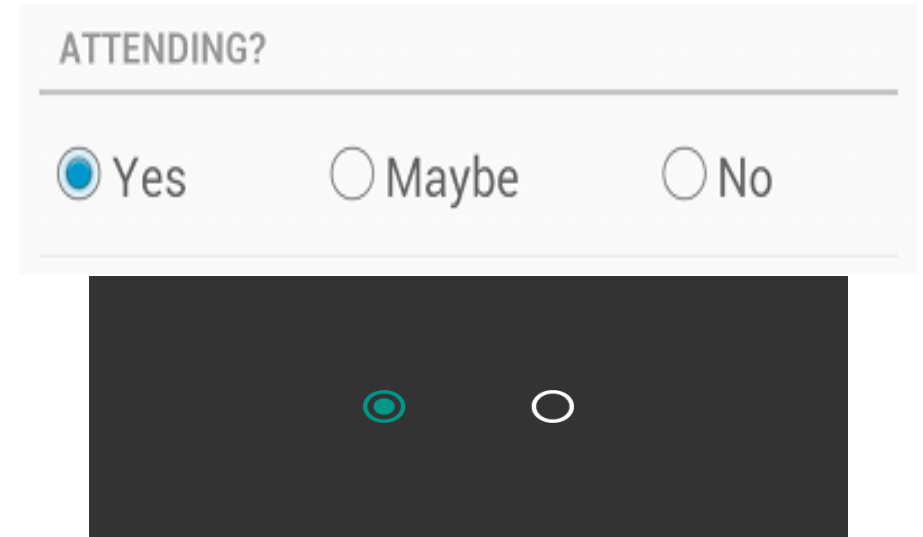
Reorder

Allows dragging of the list item to other locations within the list. It usually appears in list editing mode.



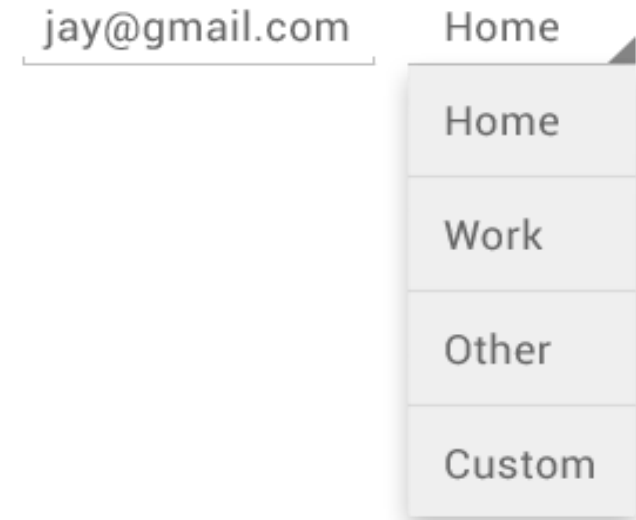
Radio Buttons

Radio buttons allow the user to select one option from a set. You should use radio buttons for optional sets that are mutually exclusive if you think that the user needs to see all available options side-by-side. If it's not necessary to show all options side-by-side, use a [spinner](#) instead.



Spinners

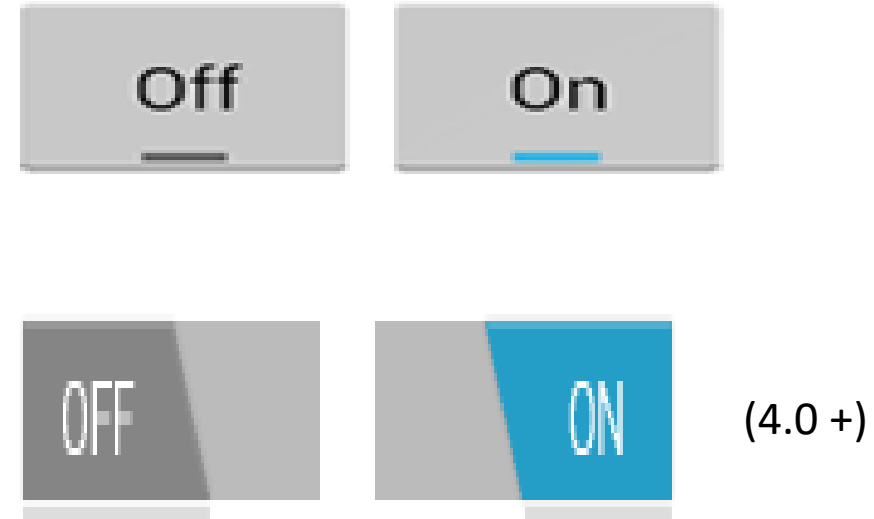
Spinners provide a quick way to select one value from a set. In the default state, a spinner shows its currently selected value. Touching the spinner displays a dropdown menu with all other available values, from which the user can select a new one.



Toggle Buttons

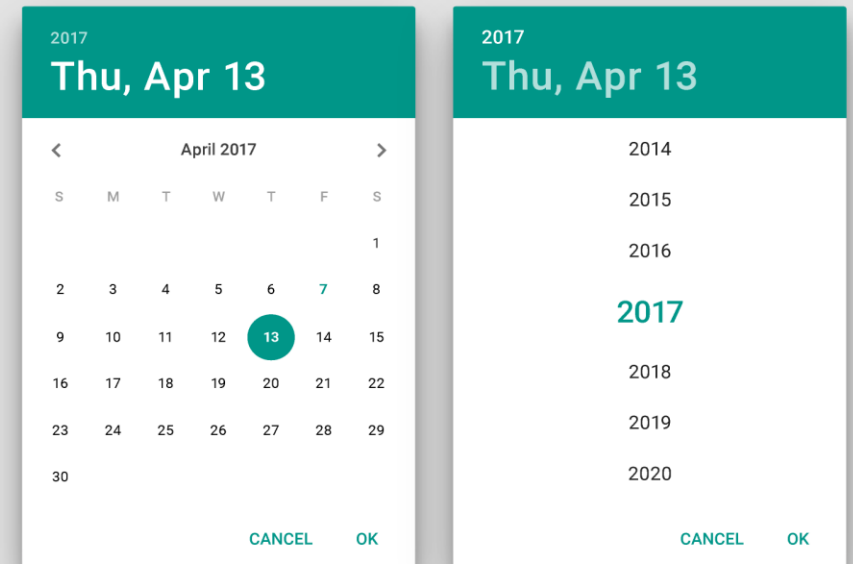
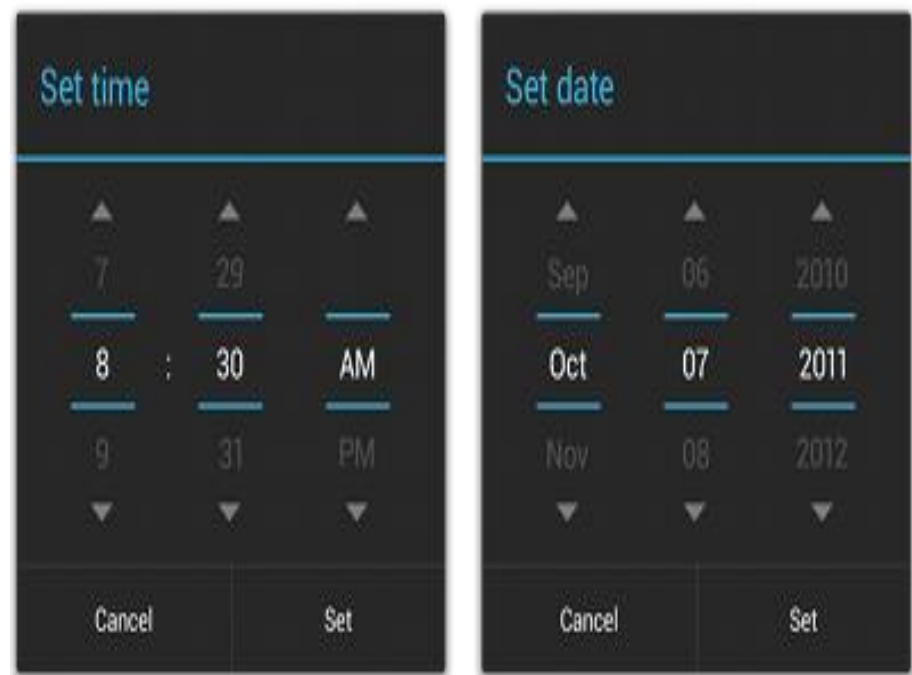
A toggle button allows the user to change a setting between two states.

You can add a basic toggle button to your layout with the [ToggleButton](#) object. **Android 4.0 (API level 14)** introduces another kind of toggle button called a switch that provides a slider control, which you can add with a [Switch](#) object.



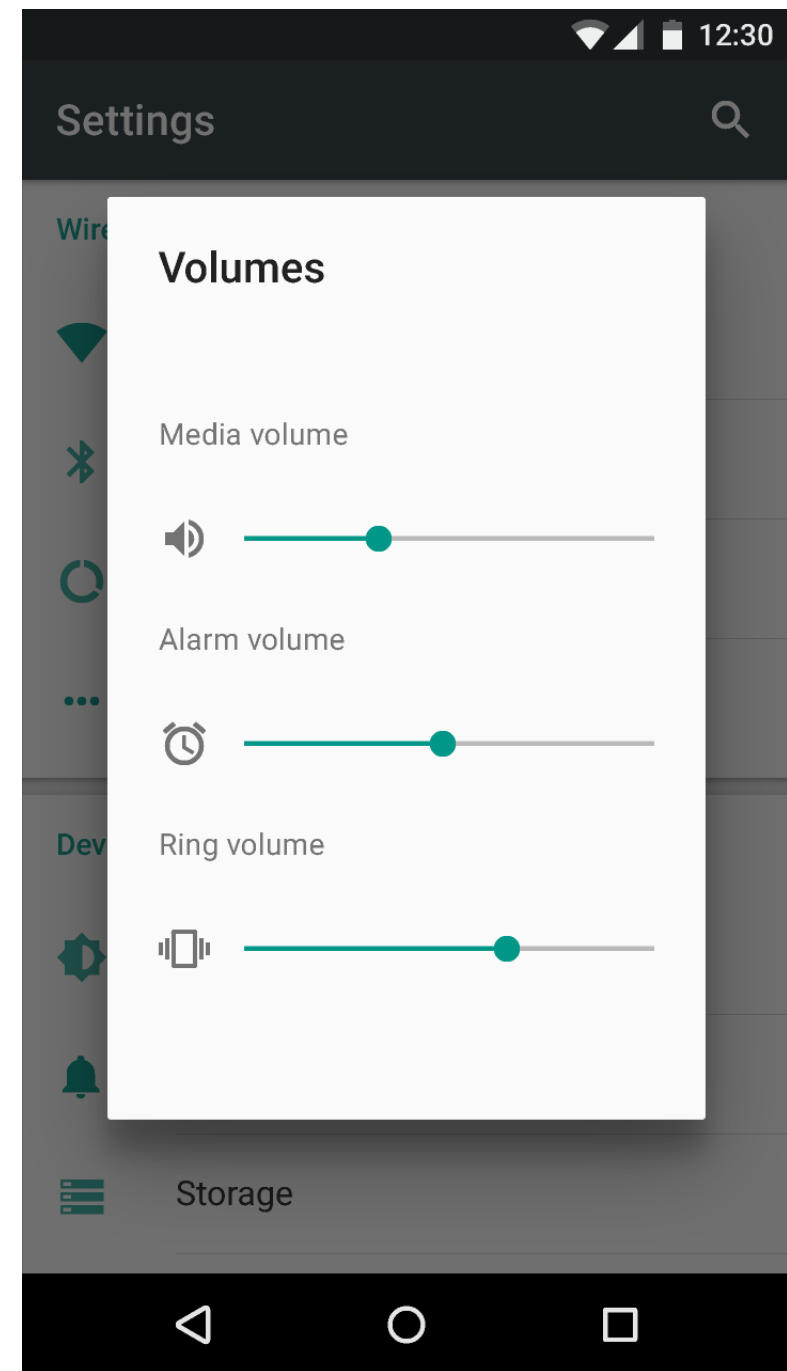
Pickers

Android provides controls for the user to pick a time or pick a date as ready-to-use dialogs. Each picker provides controls for selecting each part of the time (hour, minute, AM/PM) or date (month, day, year). Using these pickers helps ensure that your users can pick a time or date that is valid, formatted correctly, and adjusted to the user's locale.



Sliders

Sliders let users select a value from a continuous or discrete range of values by moving the slider thumb. The smallest value is to the left, the largest to the right. Sliders can have icons to the left and right of the bar that reflect the value intensity. The interactive nature of the slider makes it a great choice for settings that reflect intensity levels, such as volume, brightness, or color saturation.



Steppers

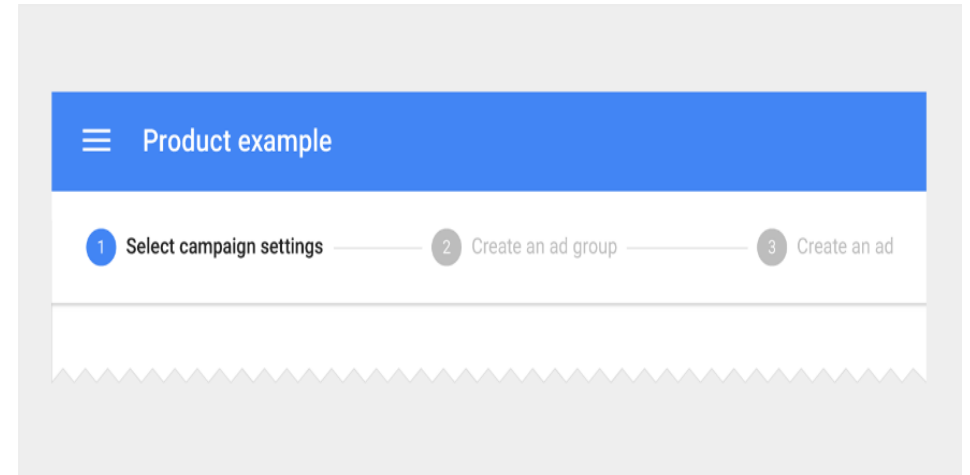
Steppers convey progress through numbered steps. They may also be used for navigation.

There are four types of Steppers:

- **Horizontal Steppers:**
- **Vertical Steppers**
- **Linear Steppers**
- **Non- Linear Steppers**

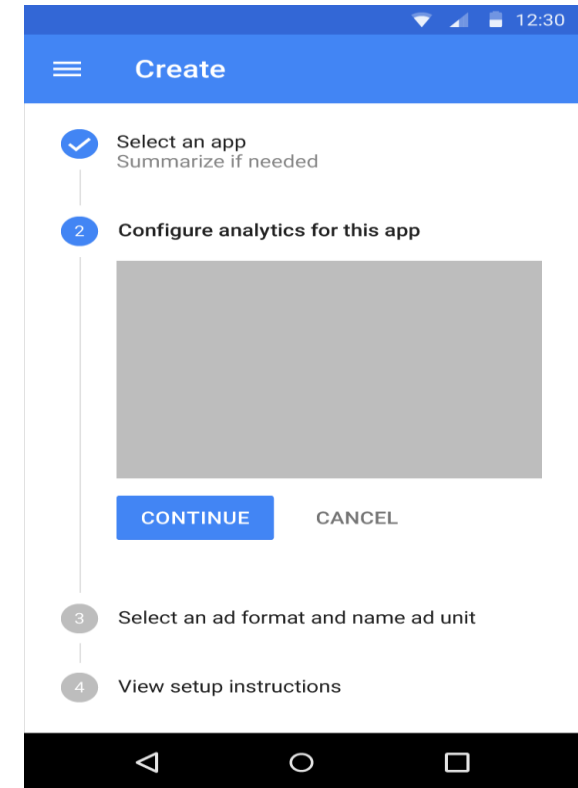
Horizontal Steppers

Horizontal steppers are ideal when the contents of one step depend on an earlier step.



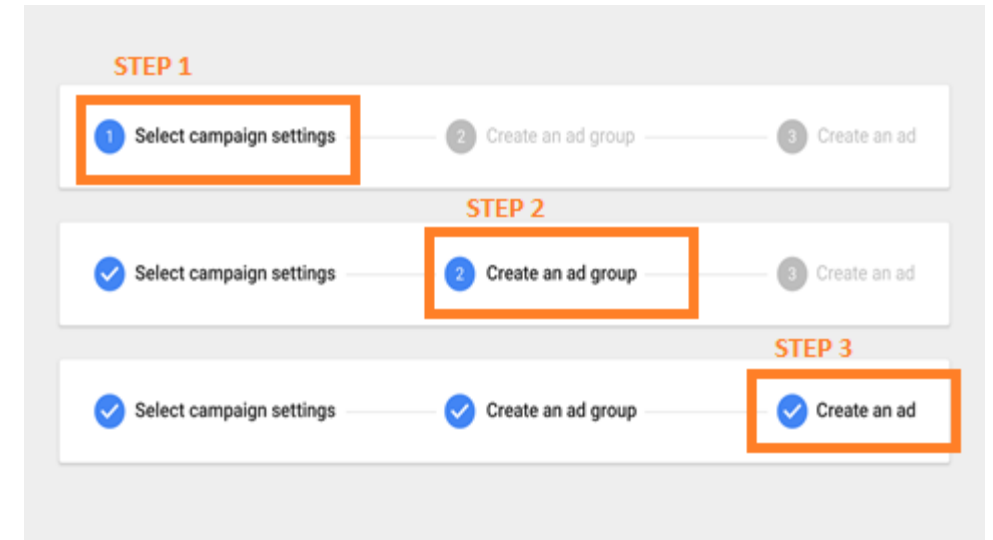
Vertical Steppers

Vertical steppers are designed for narrow screen sizes. They are ideal for mobile.



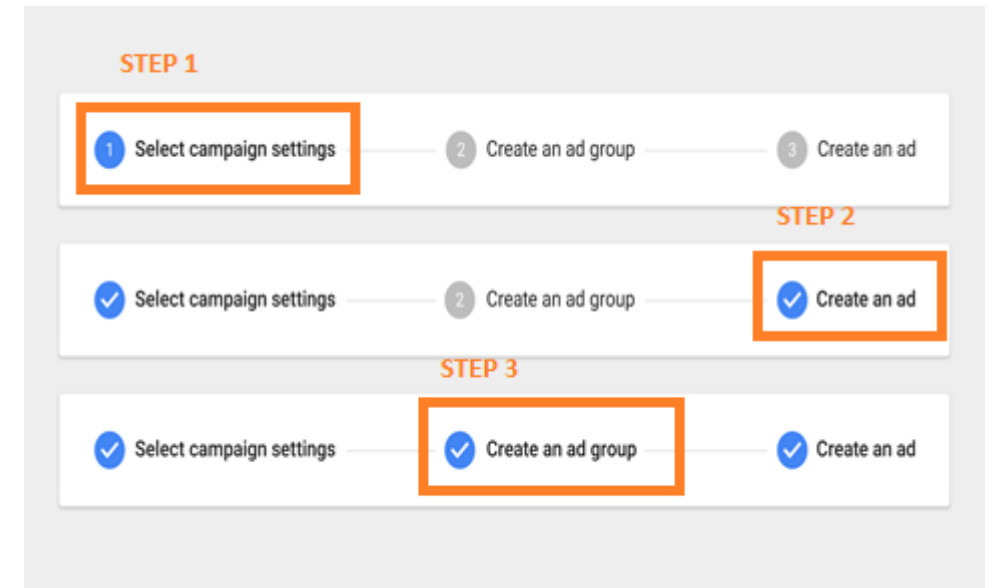
Linear Steppers

Linear steppers require users to complete one step in order to move on to the next.



Non-Linear Steppers

Non-linear steppers allow users to enter a multi-step flow at any point.



Notifications

A notification is a message you can display to the user outside of your application's normal UI. When you tell the system to issue a notification, it first appears as an icon in the notification area. To see the details of the notification, the user opens the notification drawer. Both the notification area and the notification drawer are system-controlled areas that the user can view at any time.



Figure 3: Head-Up Notifications

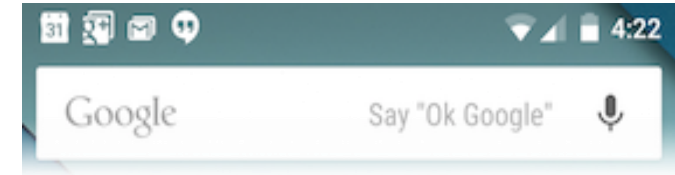


Figure1: Notifications in the notification area.

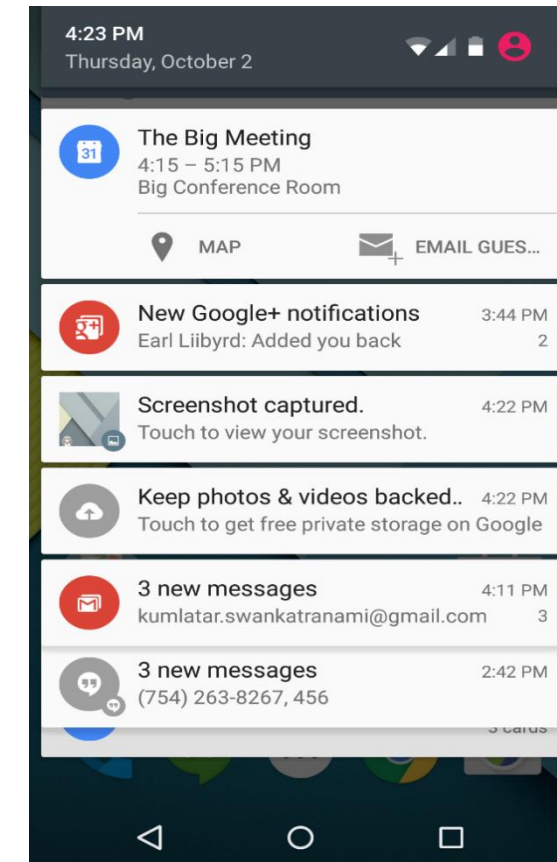


Figure 2 : Notifications in the notification Drawer.

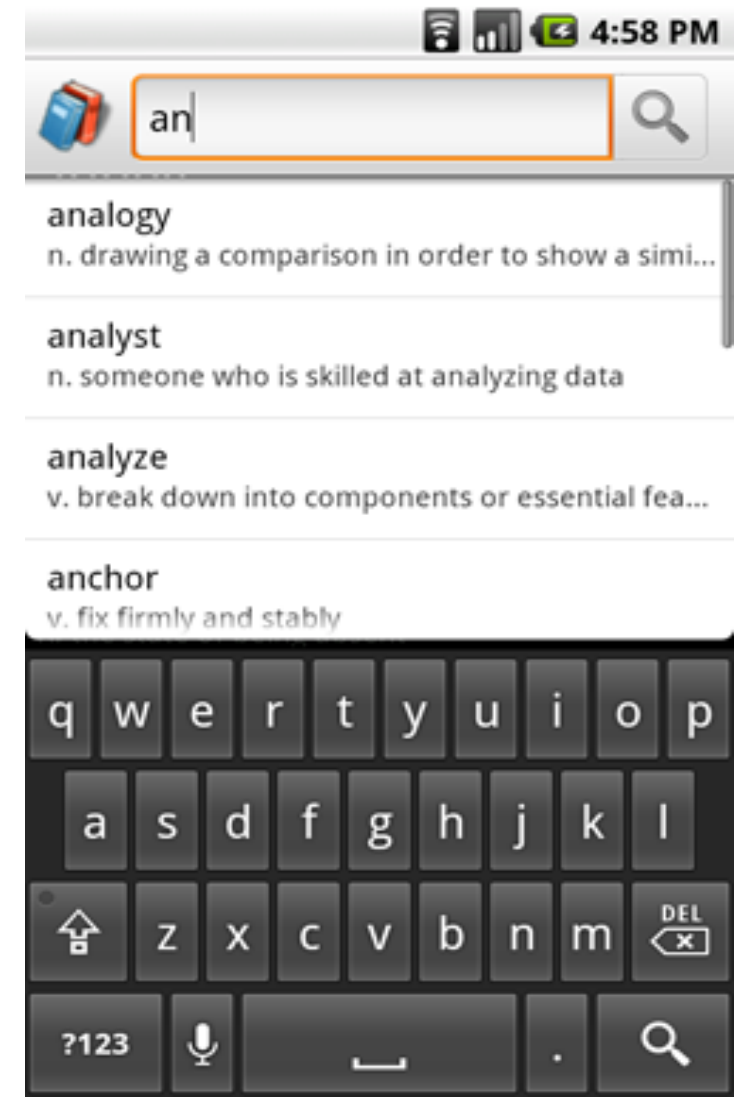
Toasts Message

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. For example, navigating away from an email before you send it triggers a "Draft saved" toast to let you know that you can continue editing later. Toasts automatically disappear after a timeout.



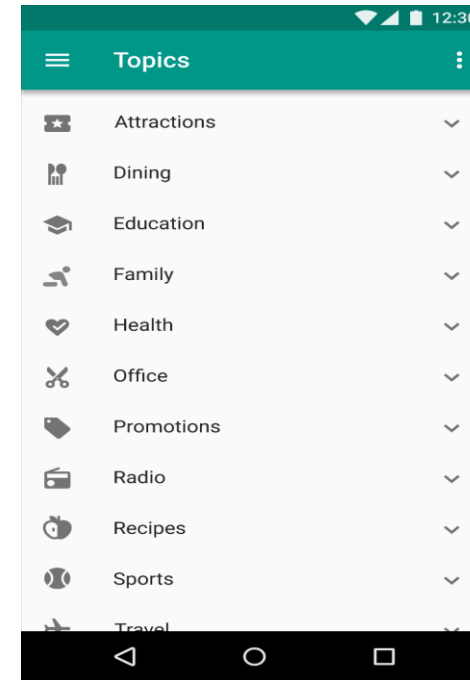
Search

Search is a core user feature on Android. Users should be able to search any data that is available to them, whether the content is located on the device or the Internet. To help create a consistent search experience for users, Android provides a search framework that helps you implement search for your application.



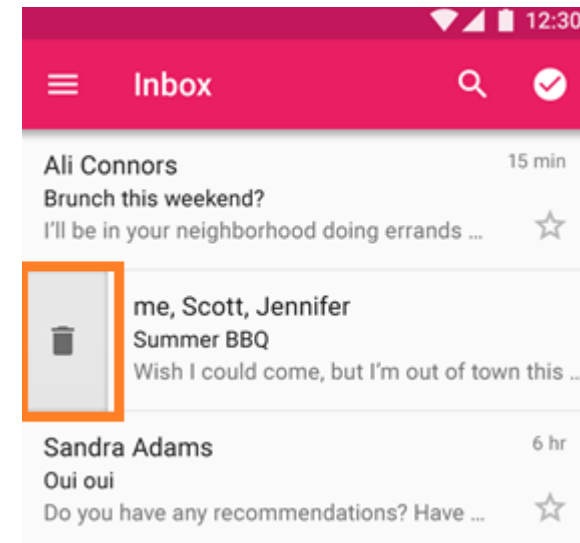
Expand/Collapse

Expands and collapses a list view vertically to show and hide details of existing list items.



Leave-Behinds

A leave-behind is an informative hint as to what swiping a list item away will do to that item. The leave-behind can transform into an action



Tabs

Tabs make it easy to explore and switch between different views or functional aspects of an app or to browse categorized data sets.

A tab provides the affordance for displaying grouped content. A tab label succinctly describes the tab's associated grouping of content.

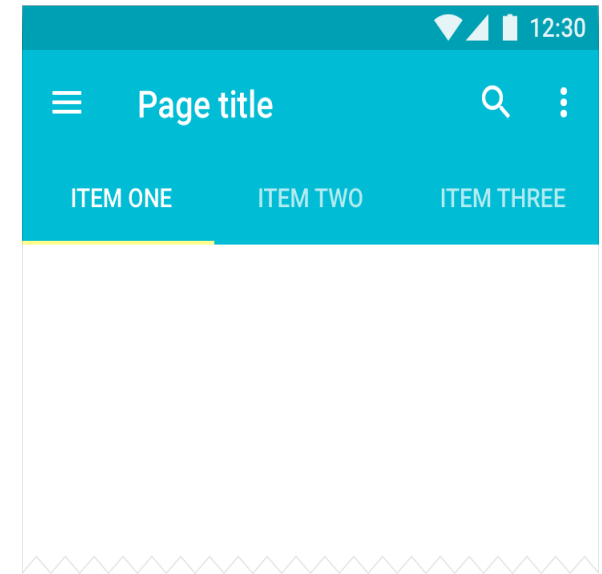
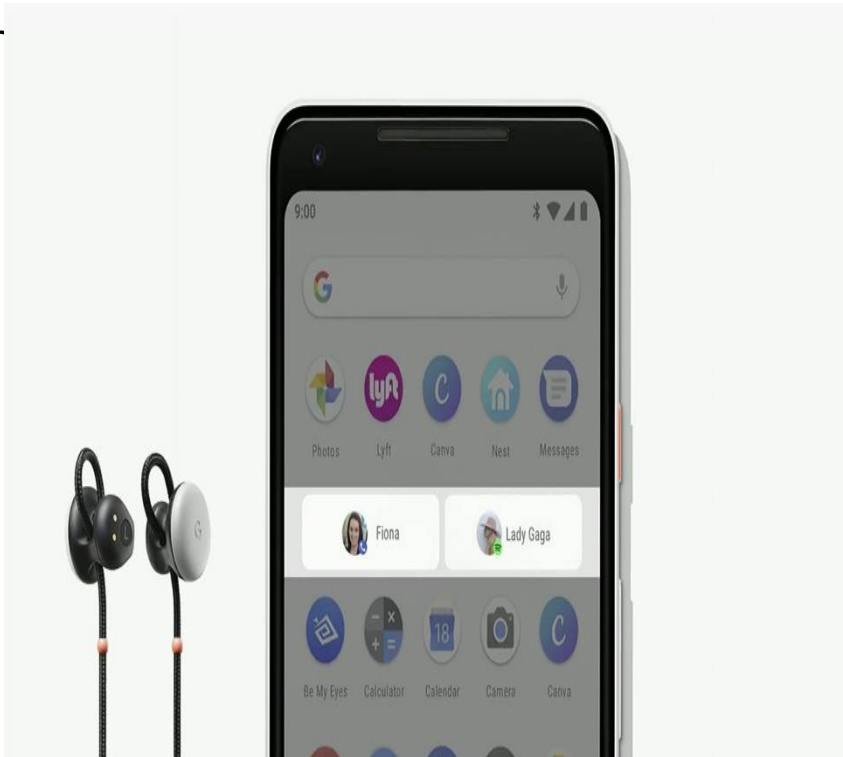


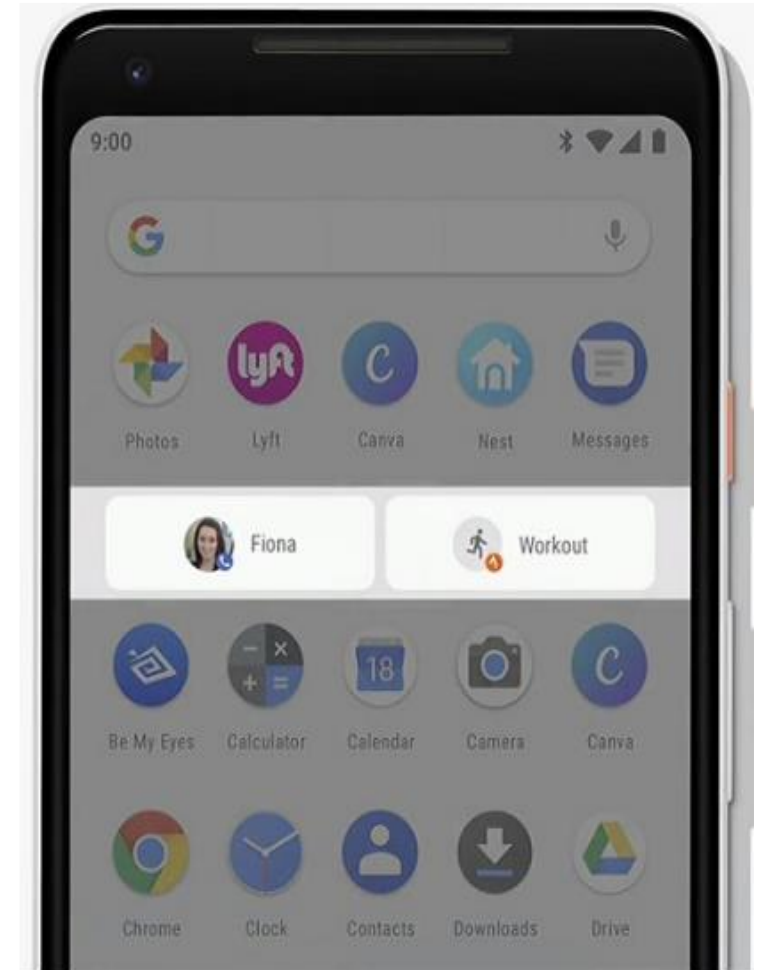
Figure 1: Scrollable Tabs

App Actions

App Actions predicts what you're about to do, so you get to your next task more quickly. If you do something like connect your headphones, the playlist you were listening



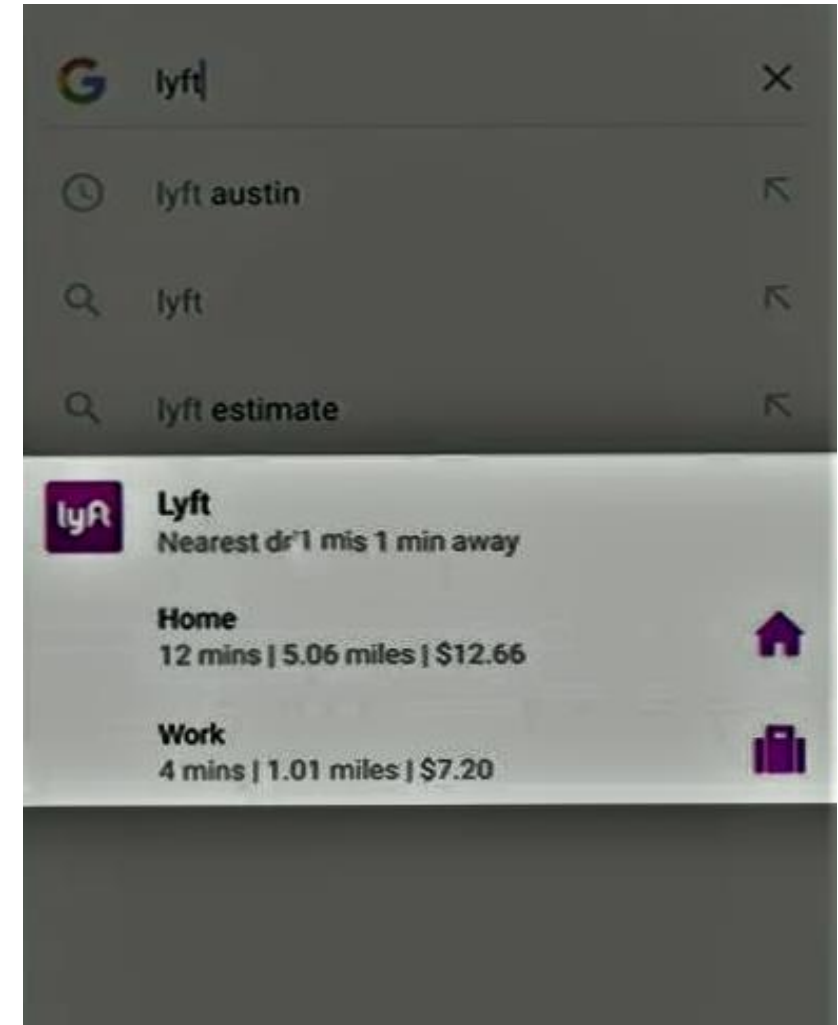
When you use headphones



Adapts for your morning commute

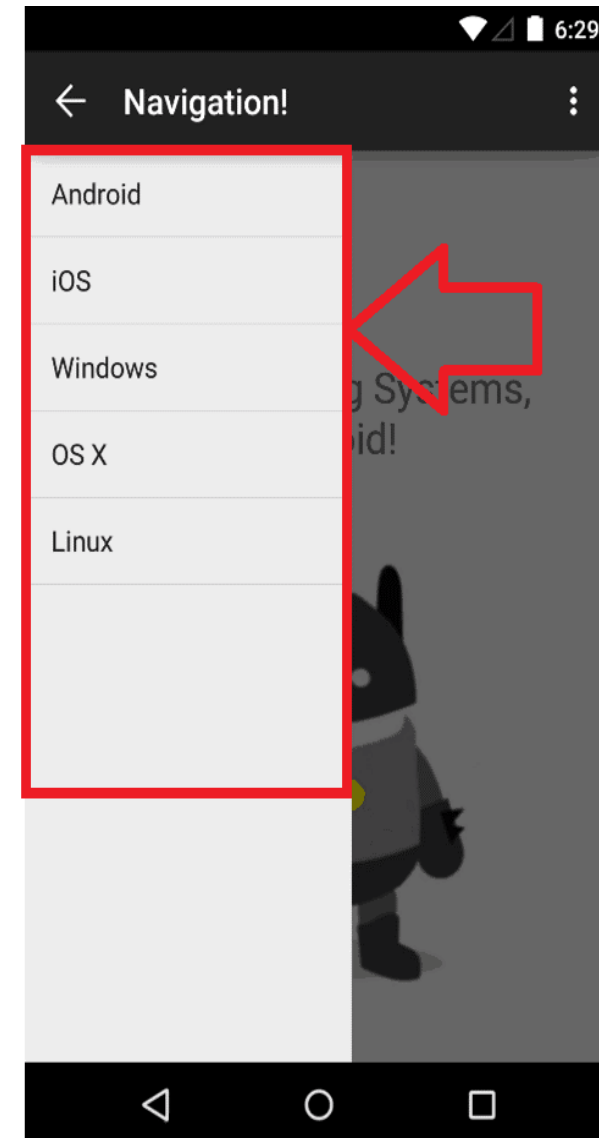
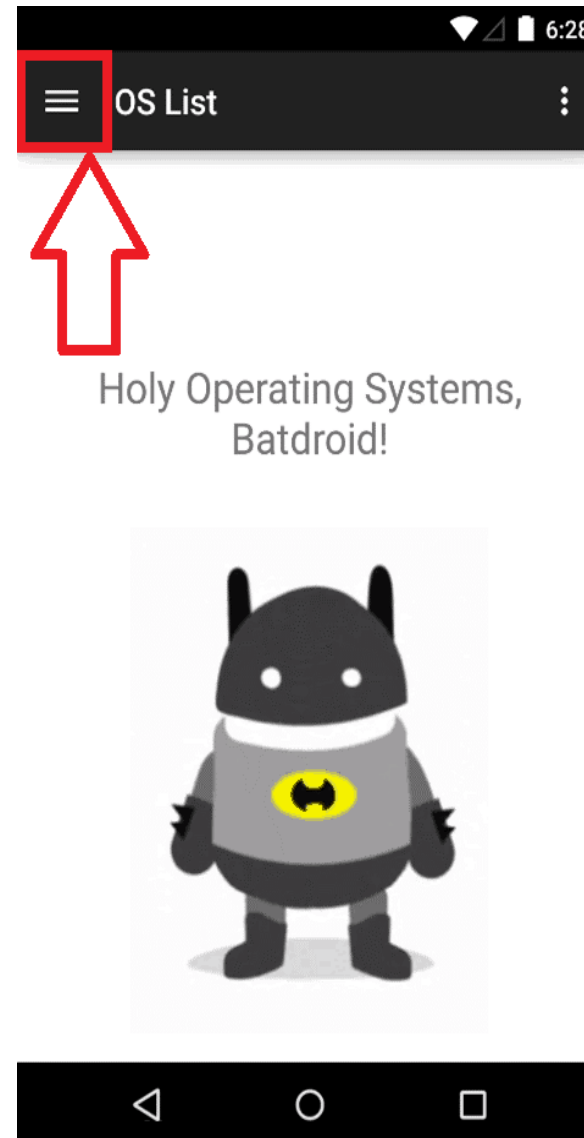
Slices

Slices bring relevant parts of your favourite apps to the surface. Next time you search for Lyft, you can see prices and driver ETA



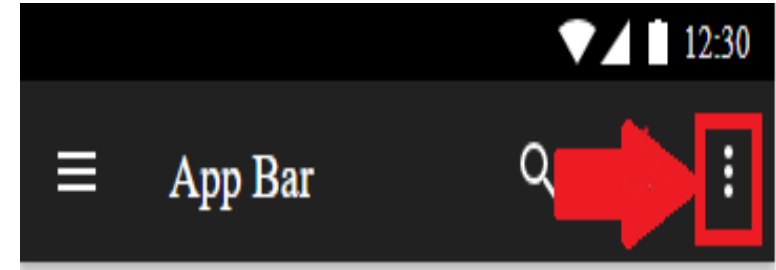
Navigation Drawer / Hamburger menu

The navigation drawer is a UI panel that shows your app's main navigation menu. It is hidden when not in use, but appears when the user swipes a finger from the left edge of the screen or, when at the top level of the app, the user touches the drawer icon in the app bar



Action overflow button / overflow button / ANT button

The action bar is an important design element, usually at the top of each screen in an app, that provides a consistent familiar look between Android apps. It is used to provide better user interaction and experience by supporting easy navigation through tabs and drop-down lists



Volume Control in Android Pie

When you hit either the volume up or volume down button on the side of your device, you'll see the volume box pop up on the right side of the screen, and "Media" will be the sound that adjusts with the presses. You can tap on the note symbol to mute or unmute. you can tap on the arrows icon to switch your Bluetooth output.

