

I3350

Mobile Application Development

Notifications

Notifications

•**notification**: A message displayed to the user outside of any app's UI in a top *notification drawer* area.

–used to indicate system events, status of service tasks, etc.



•notifications can have:

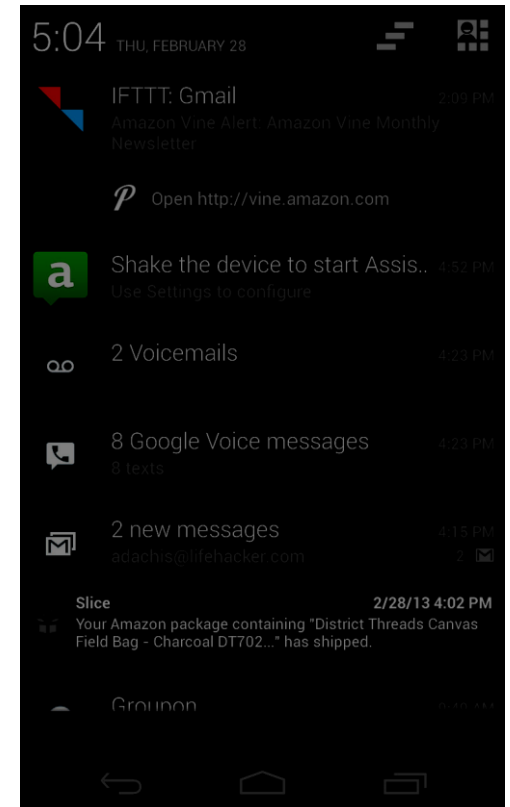
–**icons** (small, large)

–a **title**

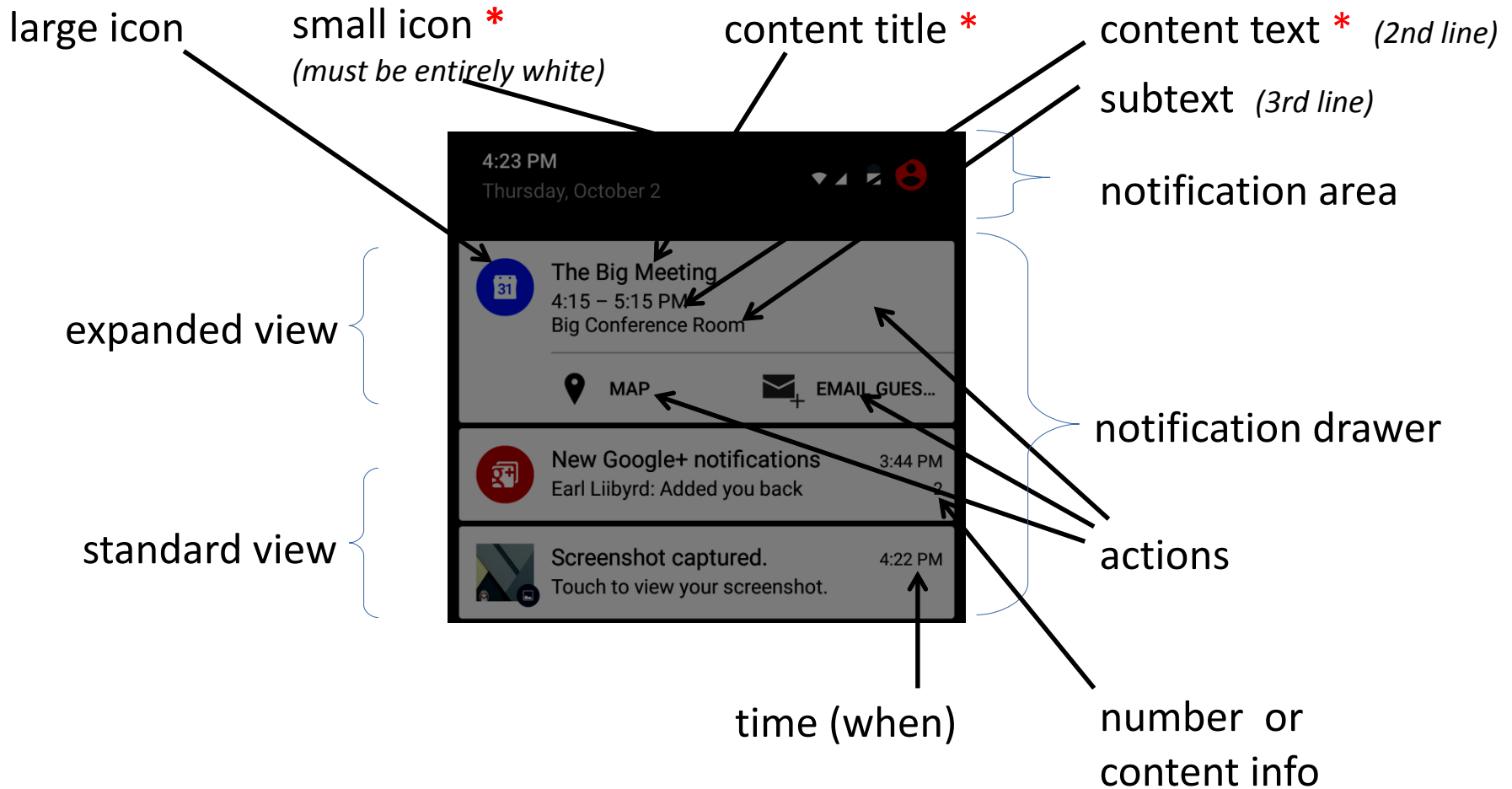
–a detailed **description**

–one or more associated **actions** that will occur when clicked

–...



Anatomy of a notification



* = required

Creating a Notification

- Create a notification using a `Notification.Builder`.
- Use `NotificationManager` to send out the notification.

```
Notification.Builder builder = new Notification.Builder(this)
    .setContentTitle("title")
    .setContentText("text")
    .setAutoCancel(true)
    .setSmallIcon(R.drawable.icon);
Notification notification = builder.build();
```

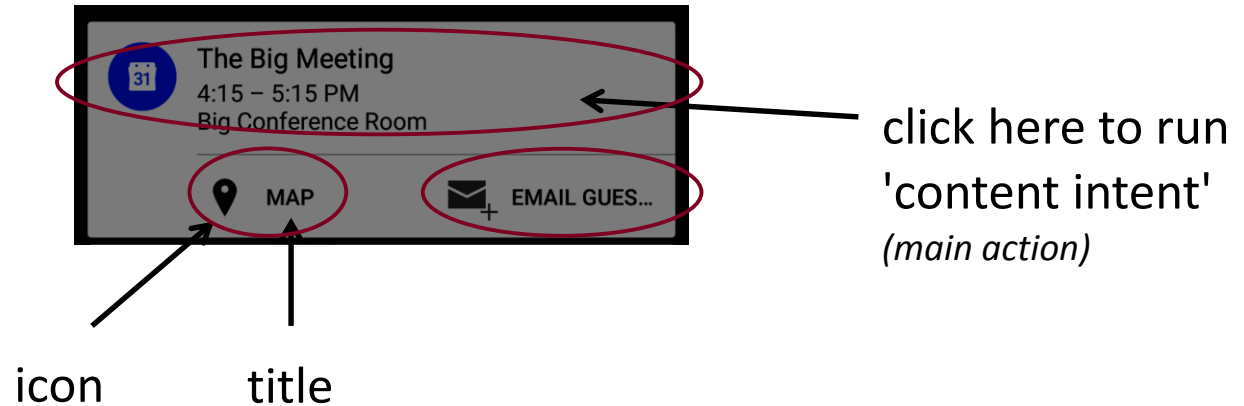
```
NotificationManager manager = (NotificationManager)
    getSystemService(Context.NOTIFICATION_SERVICE);
manager.notify(ID, notification);
```

Notification with action

- Normally when the user clicks on a notification, an action should occur. (direct the user to a particular app / activity, etc.)
- To achieve this, use an intent inside your notification.
- Must wrap it inside a "pending intent" object.

```
Notification.Builder builder = ...;  
Intent intent = new Intent(this, ActivityClassName.class);  
intent.putExtra("key1", "value1");  
...  
PendingIntent pending = PendingIntent.getActivity(  
    this, 0, intent, 0);  
builder.setContentIntent(pending);  
  
Notification notification = builder.build();
```

Anatomy of a Notif. Action



Multiple actions ([link](#))

- You can supply additional actions to a notification.
- Build an `Action` object, then call `addAction` to add it.
- The actions will appear underneath the expanded notification.

```
Notification.Action action =  
    new Notification.Action.Builder(iconID, "title", PendingIntent)  
        .build();
```

```
Notification.Builder builder = new Notification.Builder(this)  
    .setContentTitle("title")  
    .set ...  
    .addAction(action);  
Notification notification = builder.build();  
...
```