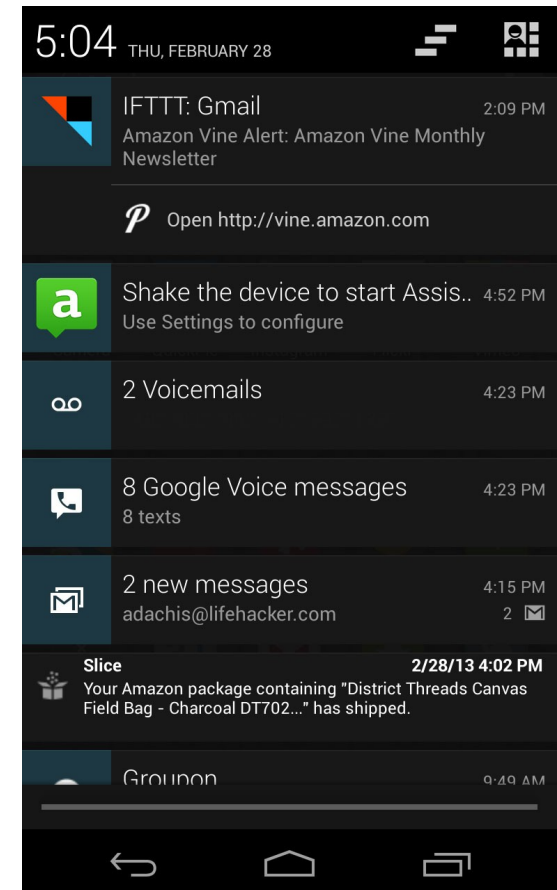
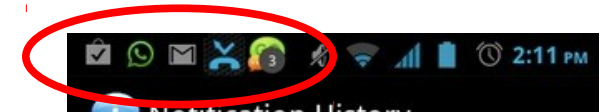


CS 193A

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
 - ...



Creating a Notification

- Create a notification using a NotificationBuilder.
- 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 properties ([link](#))

- `setAutoCancel(boolean)` - whether to hide when clicked
- `setColor(argb)` - background color
- `setContentIntent(Intent)` - intent for action to run when clicked
- `setContentText("s")` - detailed description
- `setContentTitle("s")` - large heading text
- `setGroup("s")` - group similar notifications together
- `setLargeIcon(Bitmap)` - image for big icon
- `setLights(argb, onMS, offMS)` - blinking lights
- `setNumber(n)` - a large number at right of notification
- `setSmallIcon(id)` - image file for icon
- `setSound(Uri)` - a sound to play
- `setTicker("s")` - text to scroll across top bar
- `setVisibility(vis)` - whether notification should show
- `setWhen(ms)` - timestamp of 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();
...
```