



flight



Building Power Track: Philosophy & Design

Eoin Coffey

Realtime Team Lead, Twitter | @ecoffey

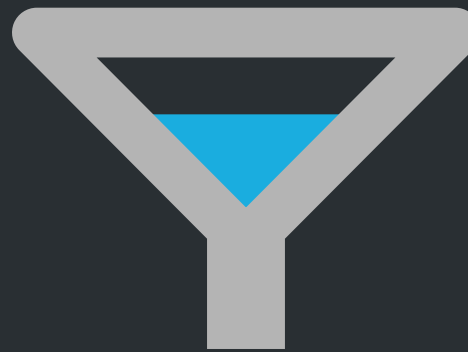
500 M Tweets per day

Finding the needle in the haystack

FIREHOSE



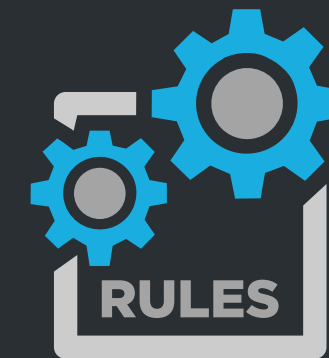
FILTERING



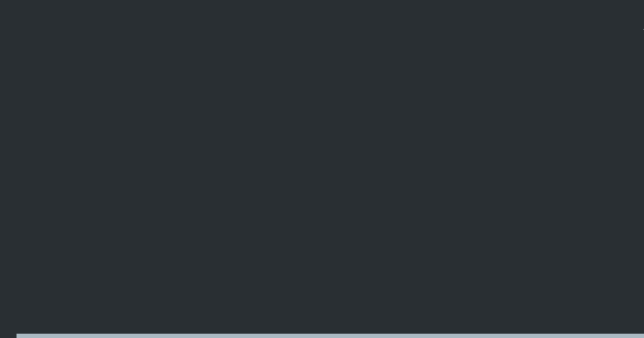
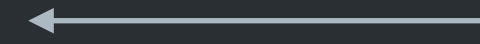
STREAMING



CUSTOMER



RULES



PowerTrack

Product Highlights

How We Built PowerTrack

`from:ecoffey (has:mentions OR has:media)`

 **Eoin Coffey**
@ecoffey

 Follow

Trust, but verify



FAVORITES
6



2:04 PM - 8 May 2015



 **Eoin Coffey**
@ecoffey

 Follow

You could randomly pick enough @sarahmei tweets to fill a book and it'd be a Software Development best seller

FAVORITE

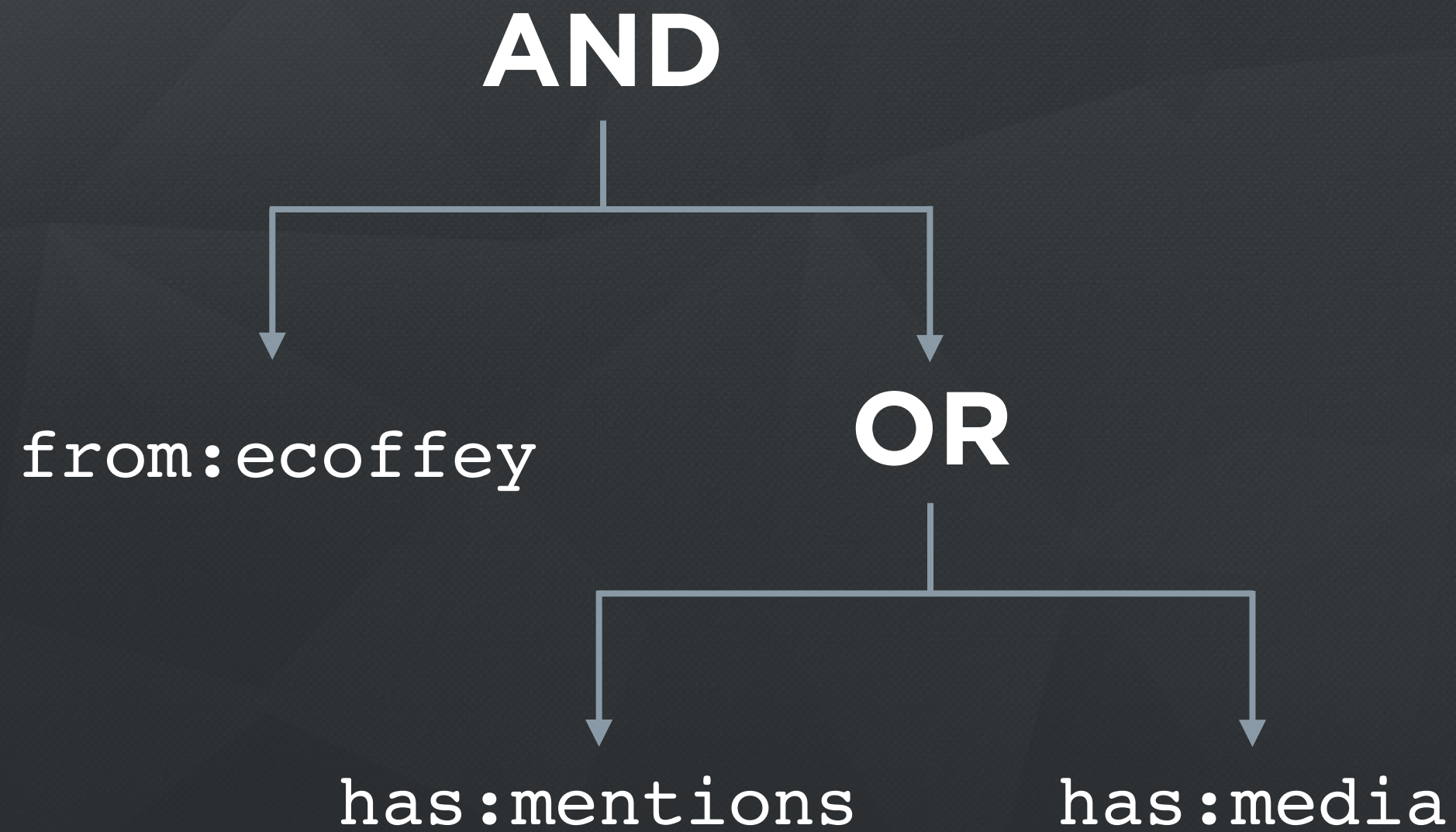
1



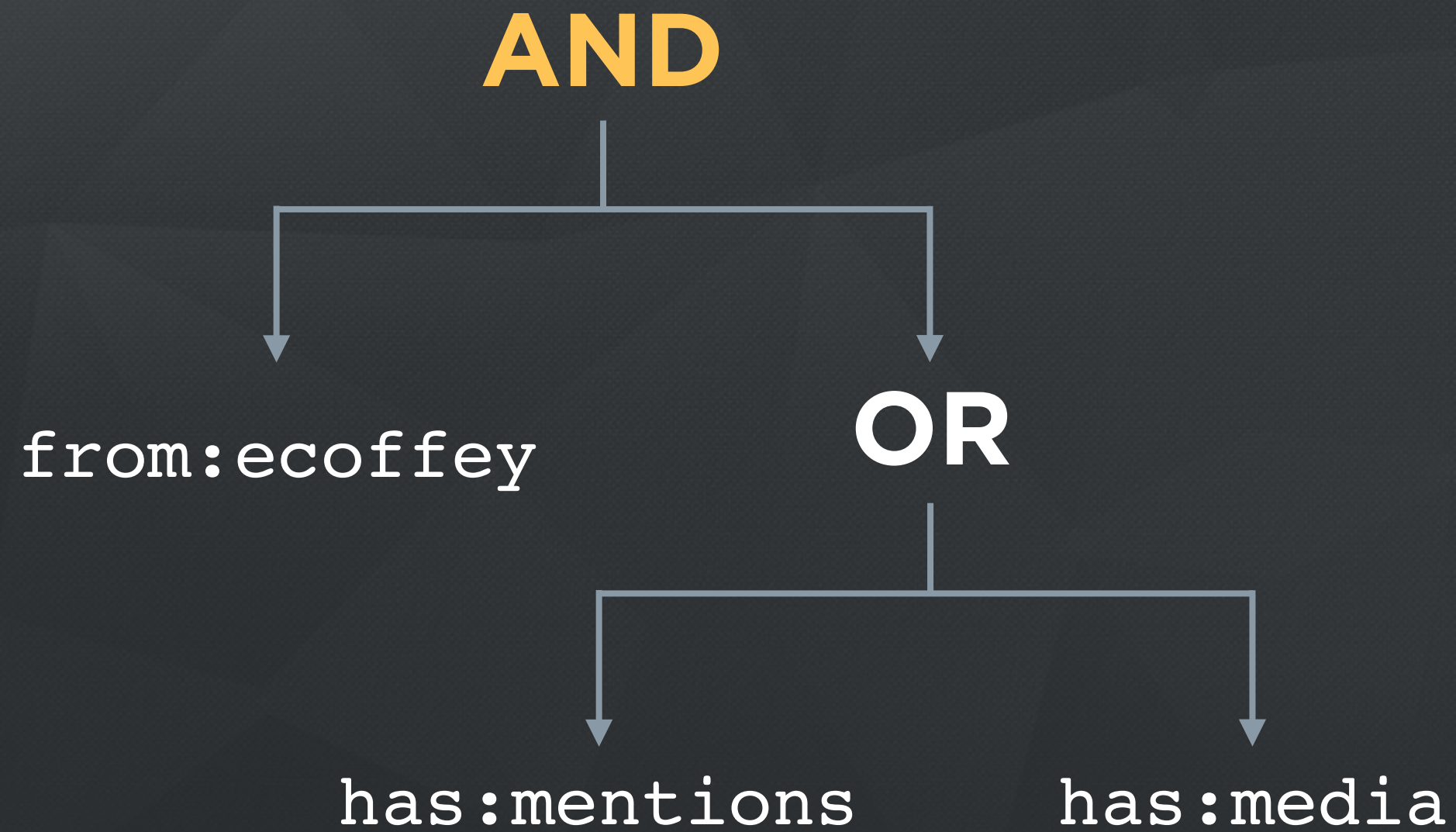
7:27 PM - 26 Aug 2015



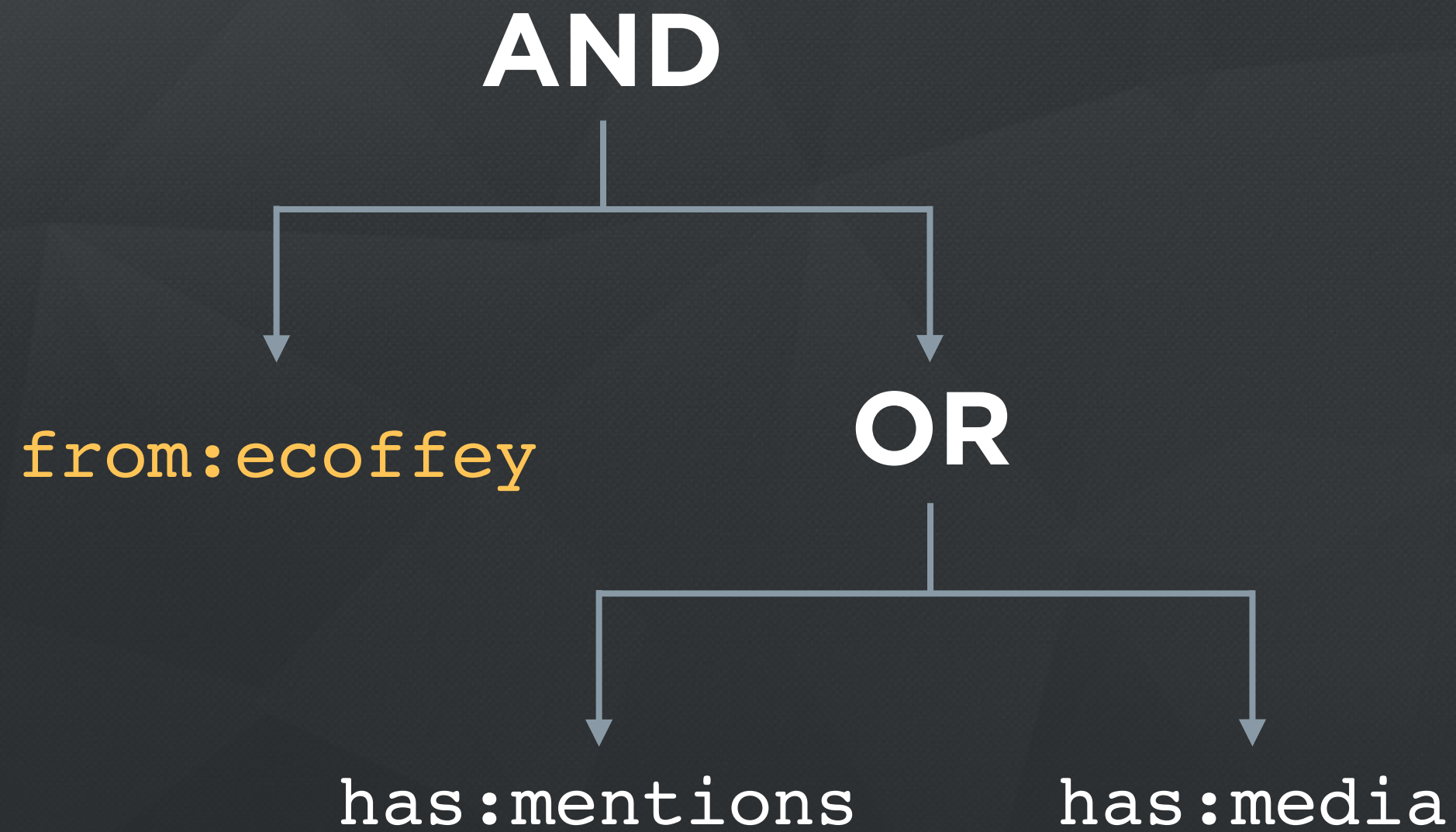
`from:ecoffey (has:mentions OR has:media)`



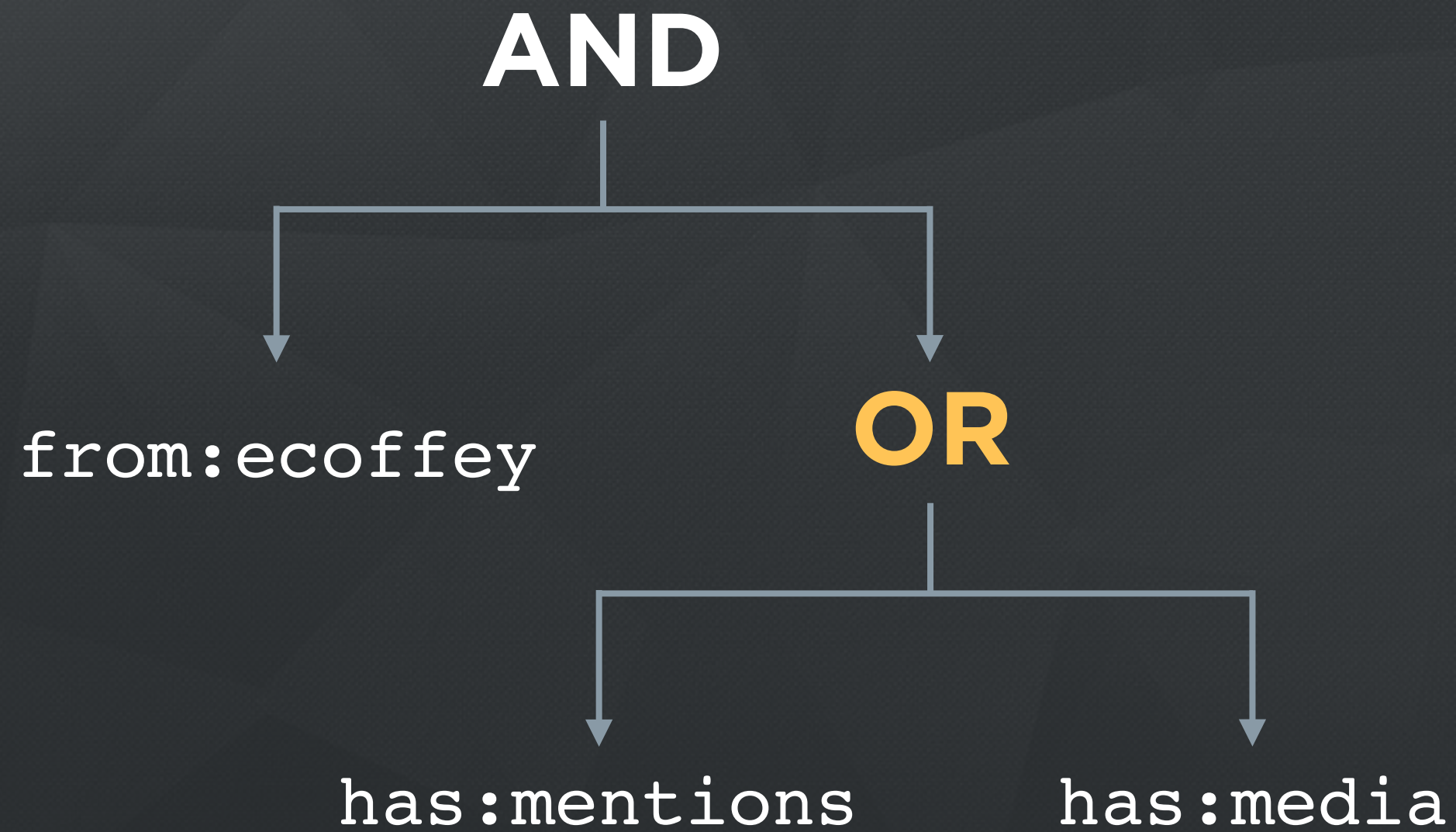
`from:ecoffey (has:mentions OR has:media)`



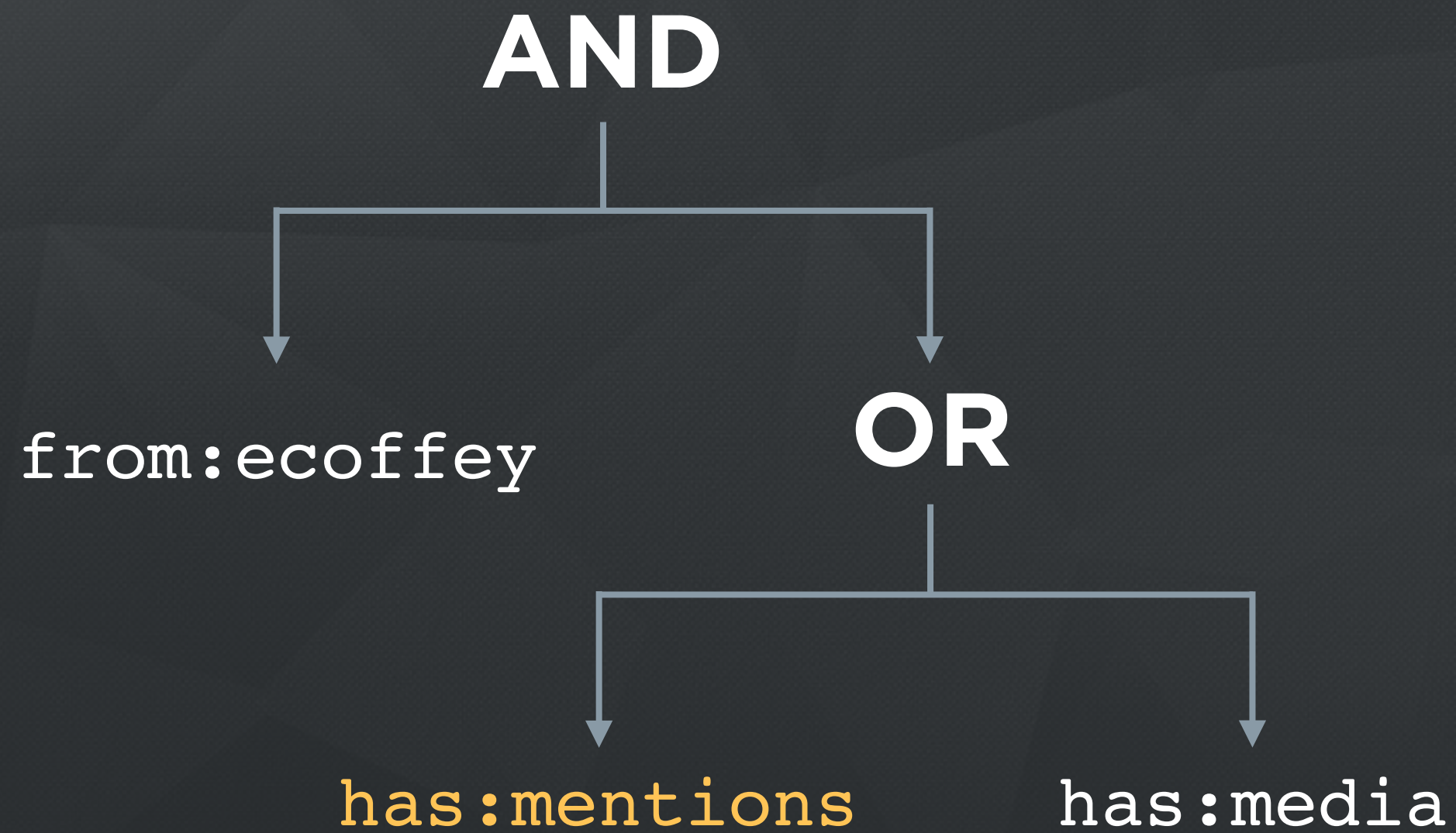
`from:ecoffey (has:mentions OR has:media)`



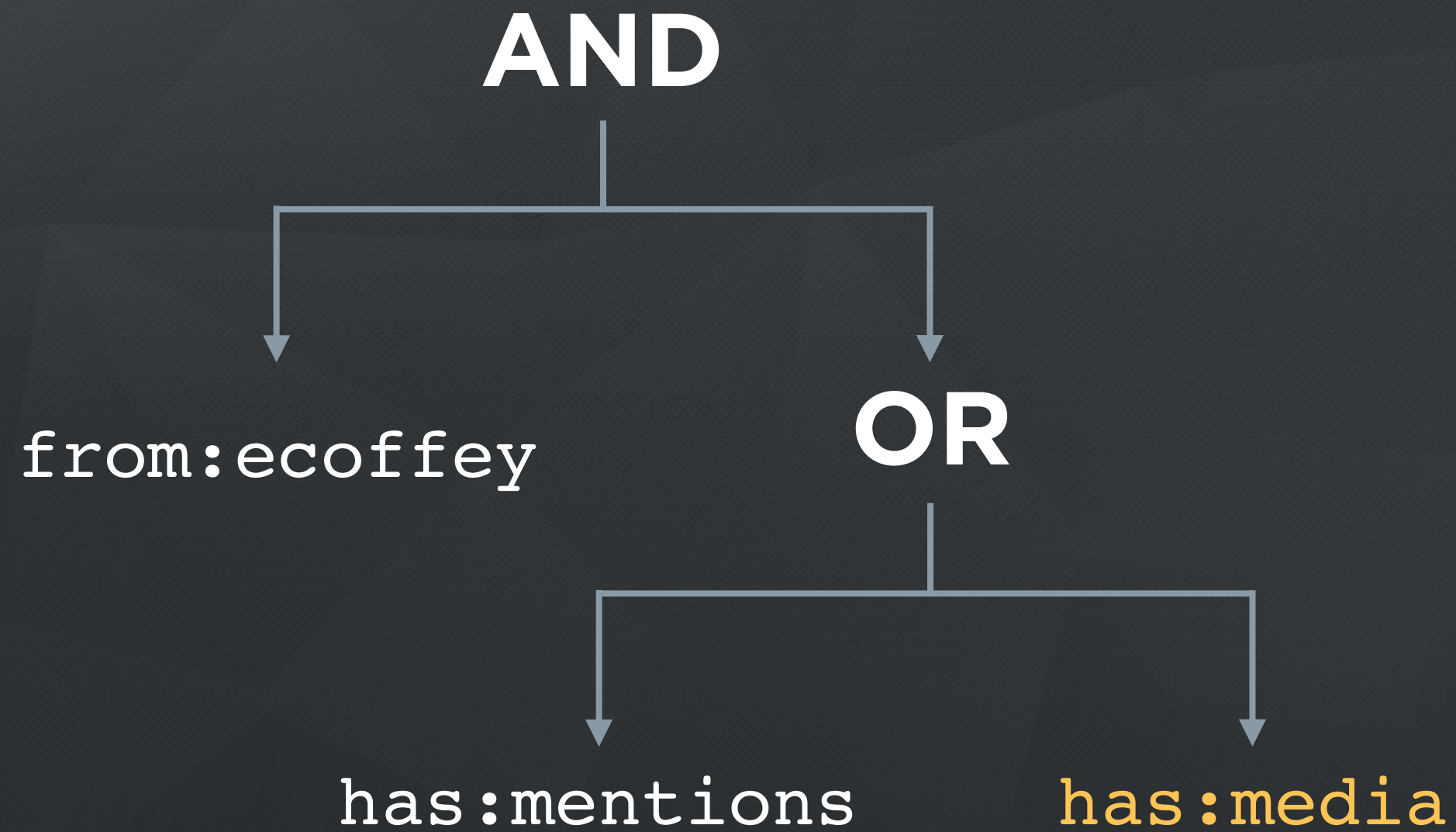
`from:ecoffey (has:mentions OR has:media)`



`from:ecoffey (has:mentions OR has:media)`



`from:ecoffey (has:mentions OR has:media)`



5,787 Tweets per second

.000172 Seconds per Tweet

Predicate Indexing

`from:ecoffey (has:mentions OR has:media)`

AND

`from:ecoffey`

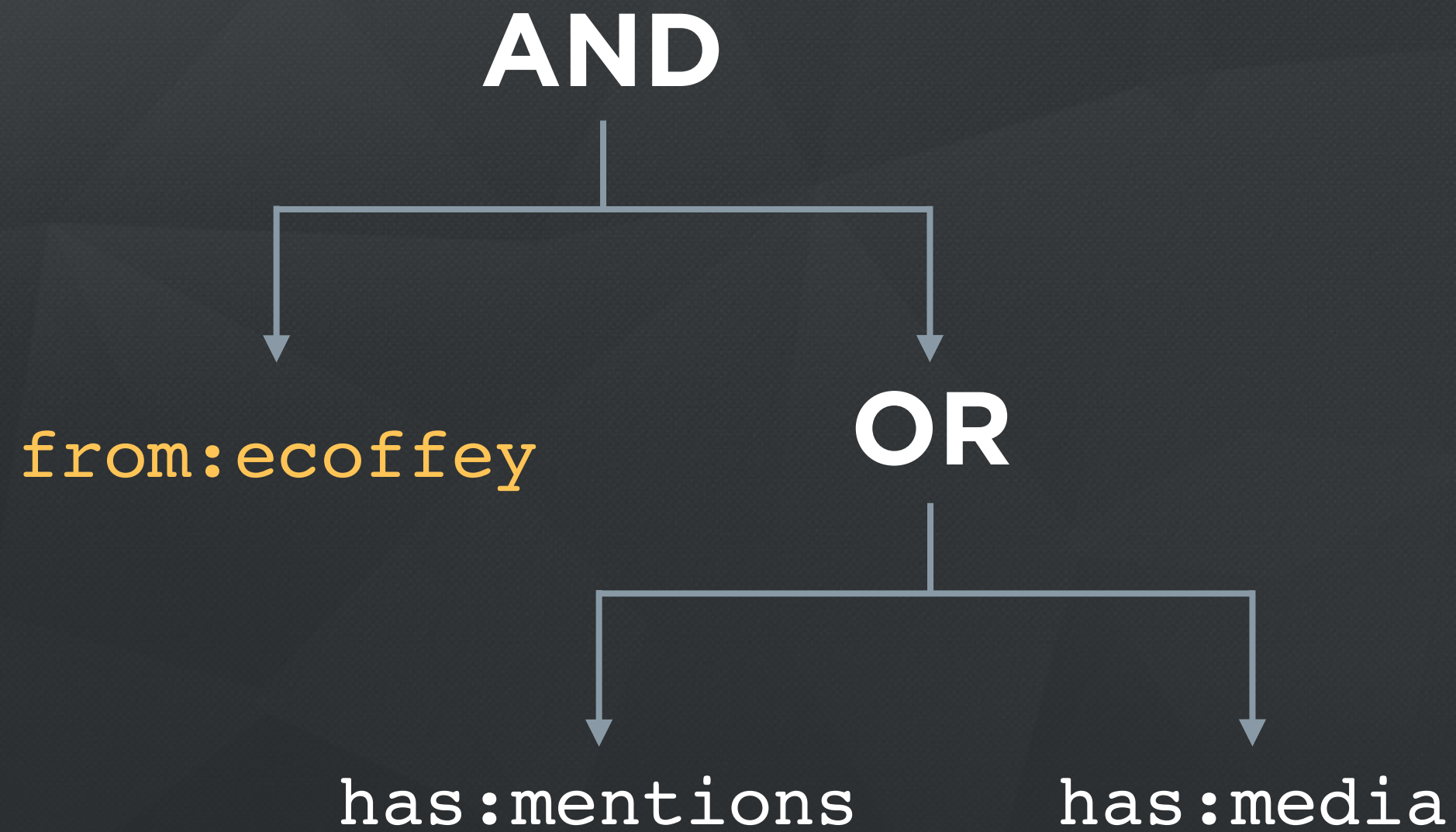
OR

`has:mentions`

`has:media`

What do we index?

`from:ecoffey (has:mentions OR has:media)`



FIREHOSE



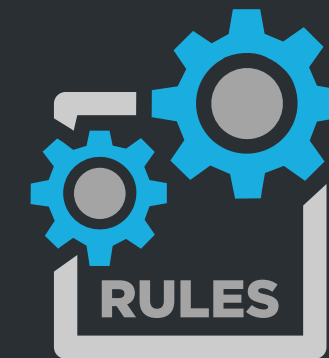
FILTERING



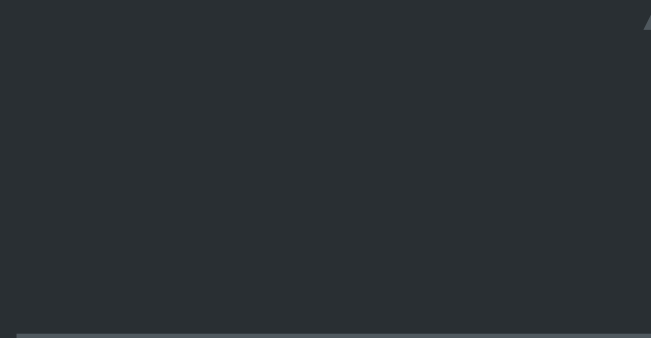
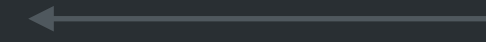
STREAMING

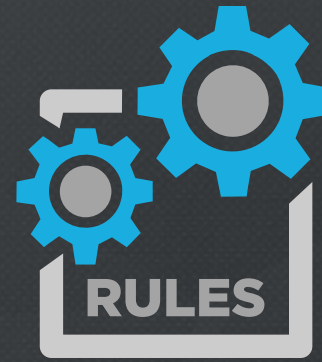


CUSTOMER



RULES



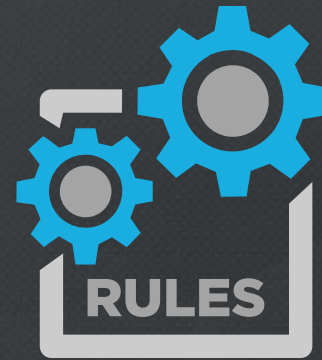


RULES

RULES TEXT

UPDATES

RULES LIST



RULES

RULES TEXT

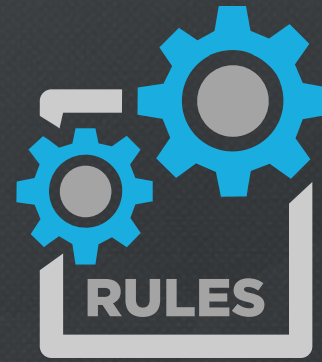
from:ecoffey

UPDATES

RULES LIST

from:ecoffey

add



RULES

RULES TEXT

UPDATES

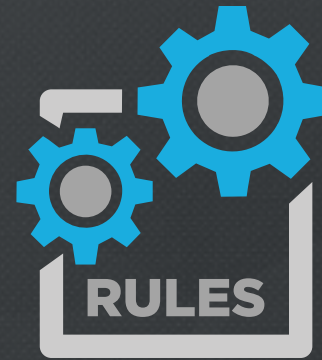
RULES LIST

from:ecoffey

delete

from:ecoffey

add



RULES

RULES TEXT

“twitter fabric”

UPDATES

RULES LIST

“twitter fabric”

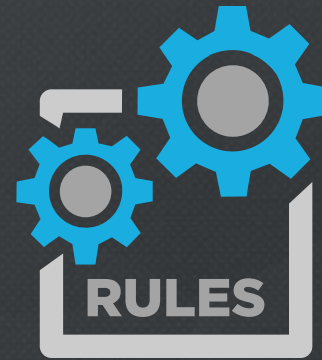
add

from:ecoffey

delete

from:ecoffey

add



RULES

RULES TEXT

“twitter fabric”

from:jack

UPDATES

RULES LIST

from:jack

add

“twitter fabric”

add

from:ecoffey

delete

from:ecoffey

add

FIREHOSE



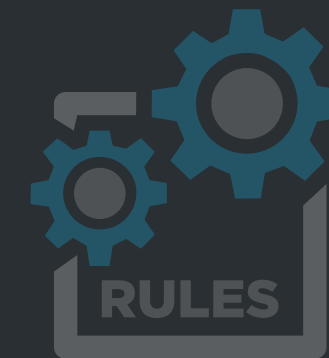
FILTERING



STREAMING



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RULES



Side A



Side B



Bend, Don't Break

Quarantine

FIREHOSE



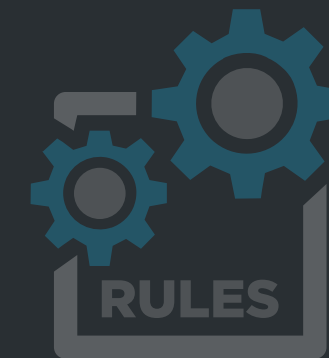
FILTERING



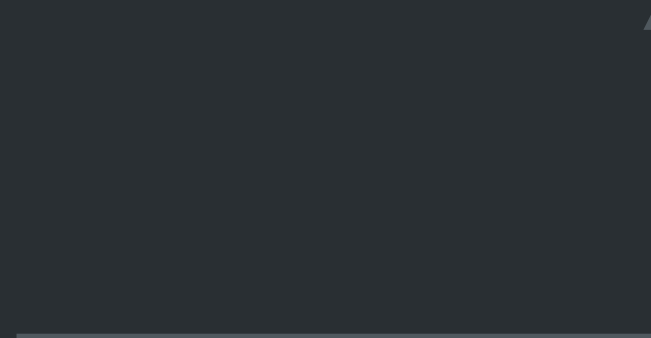
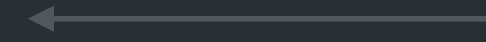
STREAMING



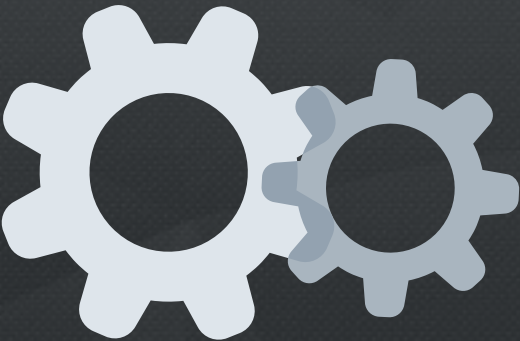
CUSTOMER



RULES



Common Themes In Each Layer



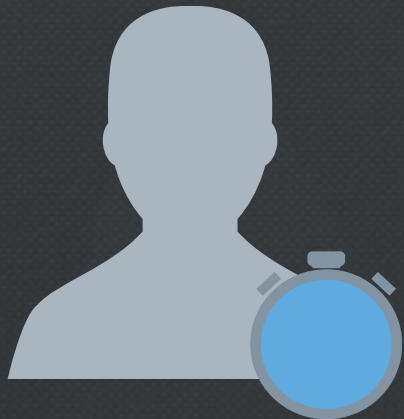
**OPERATIONAL
SIMPLICITY**



**RELIABLE
TECHNOLOGIES**



**DEFENSE IN
DEPTH**



**LIMIT TIME OF
CUSTOMER IMPACT**

Not just about code...
It's about **people**



The **customer** motivates
everything we do



Collective code ownership



Face to face communication
over processes and tools

Introduce or keep code only when
it solves a business problem



Optimizes for the group
over the individual

FIREHOSE



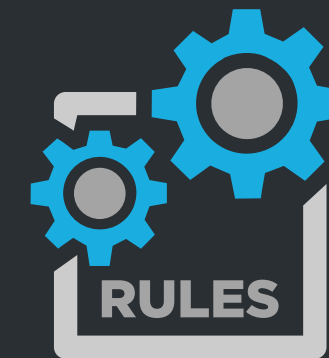
FILTERING



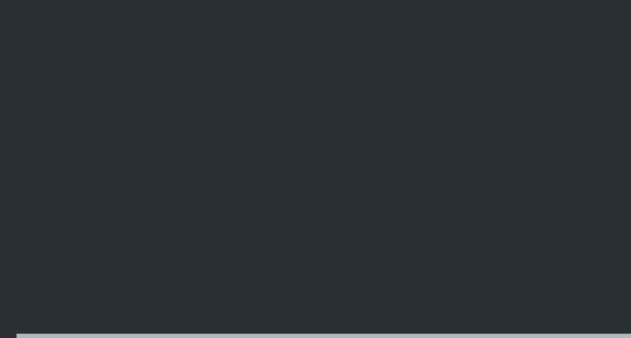
STREAMING



CUSTOMER



RULES



Thank You

@ecoffey

APPENDIX OF TEMPLATE SLIDES

SUBTITLE

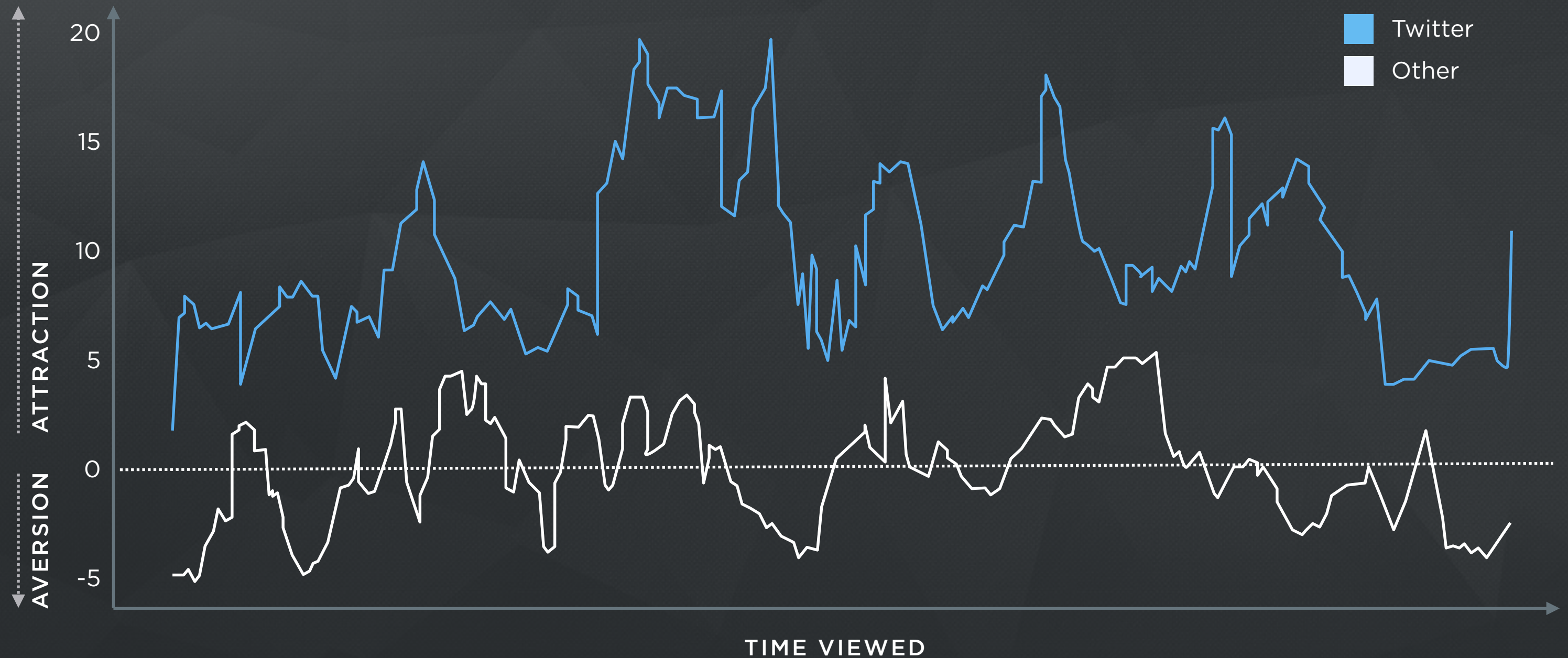
Graph/Chart Examples

BASED ON MASTER SLIDES

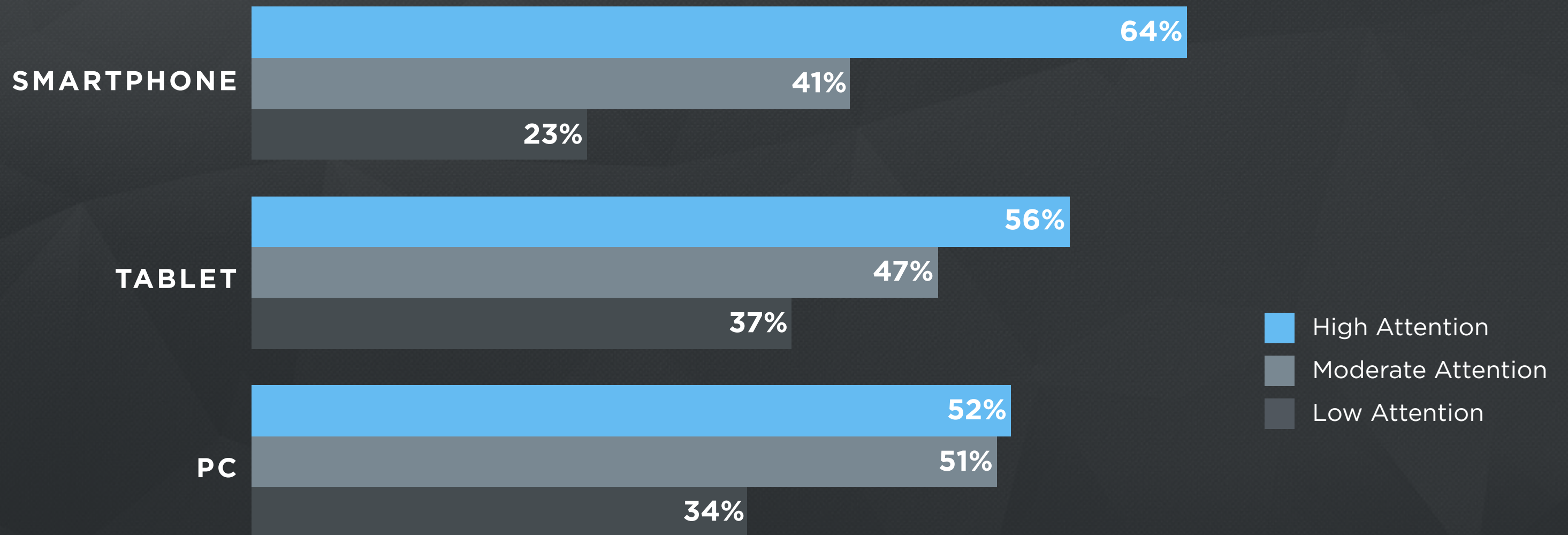


of people are... This is an example of an editable pie chart with a large statement

Line Chart Editable Example



Bar Chart Editable Example



Code Examples

BASED ON THE CODE MASTER SLIDE

```
DGTAAuthenticateButton *digitsButton =
[DGTAAuthenticateButton buttonWithTypeWithAuthenticationCompletion:

^(DGTSession *session) {
    // Inspect and/or store session
    object
}];

[self.view addSubview:digitsButton];

DGTAAuthenticateButton *digitsButton =
[DGTAAuthenticateButton buttonWithTypeWithAuthenticationCompletion:
^(DGTSession *session) {
}];
```

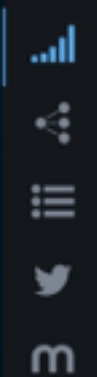
Web Screenshot Examples

BASED ON MASTER SLIDES



Cannonball 2.3.1
io.fabric.example.cannonball

Jeff Seibert
Twitter, Inc.



ACTIVE USERS

2,019
RIGHT NOW



DAILY ACTIVE USERS

77.9k
▲ 8.7%



DAILY NEW USERS

7.1k
▲ 11.4%



MONTHLY ACTIVE USERS

2.1M
▲ 3.8%



CRASH-FREE USERS

96.5%
▼ -2.6%



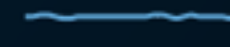
SESSIONS

248.2k
▲ 10.2%



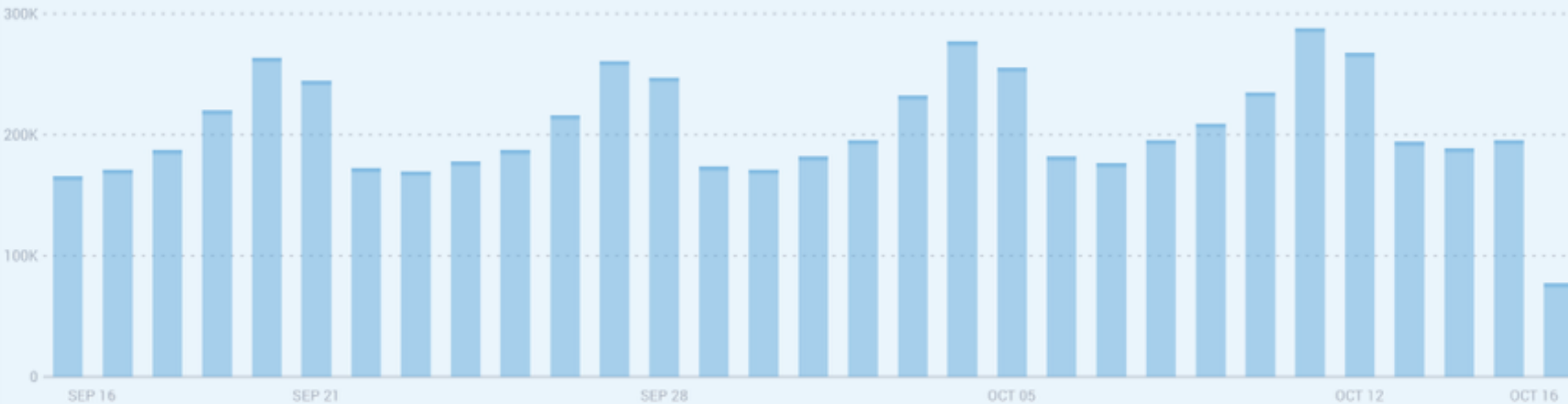
SESSION LENGTH

0:35 SEC
0.0%



DAILY ACTIVE USERS

77.9k
TODAY



Feature Name



Tweet Examples

COPY AND PASTE THESE TWEETS TO CREATE YOUR OWN



The Barista Bar

@baristabar

Visit our site to see the full Barista Bar menu and specials! [#LoveCoffee](#)



 41

 68





The Barista Bar

@baristabar

Visit our site to see the full Barista Bar menu and specials! [#LoveCoffee](#)



41



68



Special Examples

BASED ON BLANK MASTER SLIDES

This is a blank slide for use
in a variety of scenarios

“Nowadays, **Crashlytics** is a normal part of our development and production lifecycle, and we’re **very happy with it.**”

–Justin Morgan
Senior iOS Developer | Starbucks