

Jeremy Pennycook

App Store Reviews Text Analysis

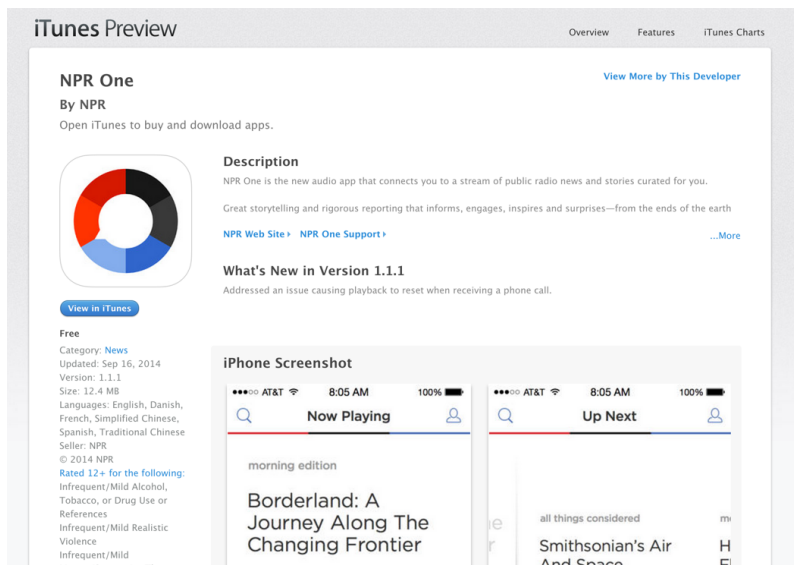


n p r oneSM

public radio made personal



We launched! Now what?




iTunes Preview

Overview Features iTunes Charts

NPR One

By NPR

Open iTunes to buy and download apps.



[View More by This Developer](#)

Description

NPR One is the new audio app that connects you to a stream of public radio news and stories curated for you.

Great storytelling and rigorous reporting that informs, engages, inspires and surprises—from the ends of the earth

[NPR Web Site](#) [NPR One Support](#) [...More](#)

What's New in Version 1.1.1

Addressed an issue causing playback to reset when receiving a phone call.

[View in iTunes](#)

Free

Category: [News](#)

Updated: Sep 16, 2014

Version: 1.1.1

Size: 12.4 MB

Languages: English, Danish, French, Simplified Chinese, Spanish, Traditional Chinese

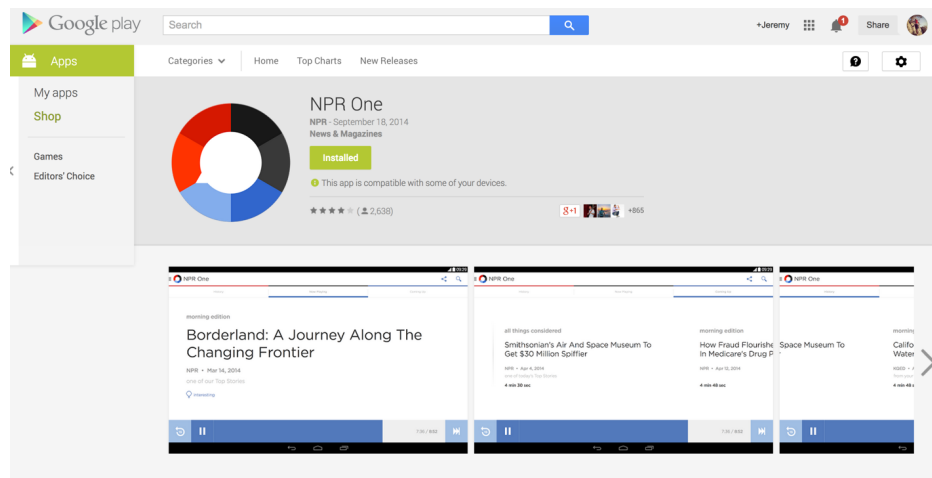
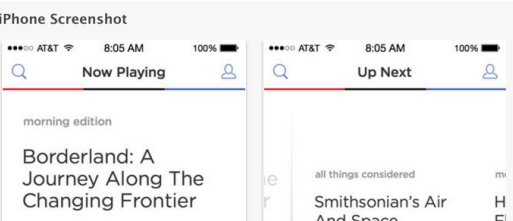
Seller: NPR

© 2014 NPR

[Rated 12+ for the following:](#)

- Infrequent/Mild Alcohol, Tobacco, or Drug Use or References
- Infrequent/Mild Realistic Violence
- Infrequent/Mild

iPhone Screenshot



Google play

Search

+Jeremy

Share

Categories Home Top Charts New Releases

Apps

My apps

Shop

Games

Editors' Choice

NPR One

NPR - September 18, 2014

News & Magazines

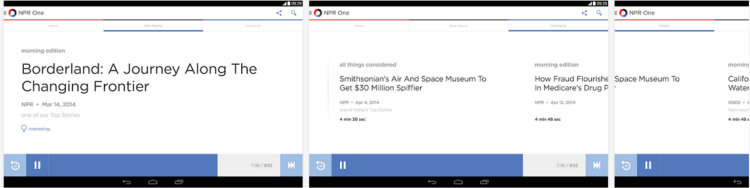
[Installed](#)

This app is compatible with some of your devices.

★★★★☆ (2,638)

8.1 4.4 4.8 4.9

3 screenshots





PRIORITIES

This man knows what's important

User feedback

Shows promise ★★★★★

by - Version - ttcby by - Version - 1.1.1 by - Version - Sep 26, 2014

I have only used it a little bit, but I think it is a promising idea. The things I like are: 1. It plays a stream of audio like the radio, no need to choose stories. You could listen to it on a longer car trip. 2. The stream is customized for me, and localized. Much better than just plain radio. 3. It gets me away from show specific apps, which aren't very scalable. 4. Impressive simplicity, but maybe a little too simple. However: I wish I had more visibility into what it thinks I like, and more control of the order of the stream. We will see if it makes me start listening to npr like radio again. Currently I only listen to specific shows as podcasts.

VS

Useless ★

by - Version - Mbierman by - Version - 1.1.0 by - Version - Aug 28, 2014

Just plays local NPR station. Come on NPR.

Hypothesis

By extracting which terms correlate most with positive reviews, we can identify the features critical to our success.

Conversely, by identifying concepts associated with negative reviews, we can see what needs the most improvement.

Getting the data (from iTunes)

```
- {
  - author: {
    - uri: {
      label: "https://itunes.apple.com/us/reviews/id33158622"
    },
    - name: {
      label: "Rocco617"
    },
    label: ""
  },
  - im:version: {
    label: "1.1.1"
  },
  - im:rating: {
    label: "5"
  },
  - id: {
    label: "1072438776"
  },
  - title: {
    label: "If you love NPR content, you'll love this app"
  },
  - content: {
    label: "Sophisticated content curation and sharing options in a simple design. Finally a mobile listening experience worthy of NPR.",
    - attributes: {
      type: "text"
    }
  },
},
```

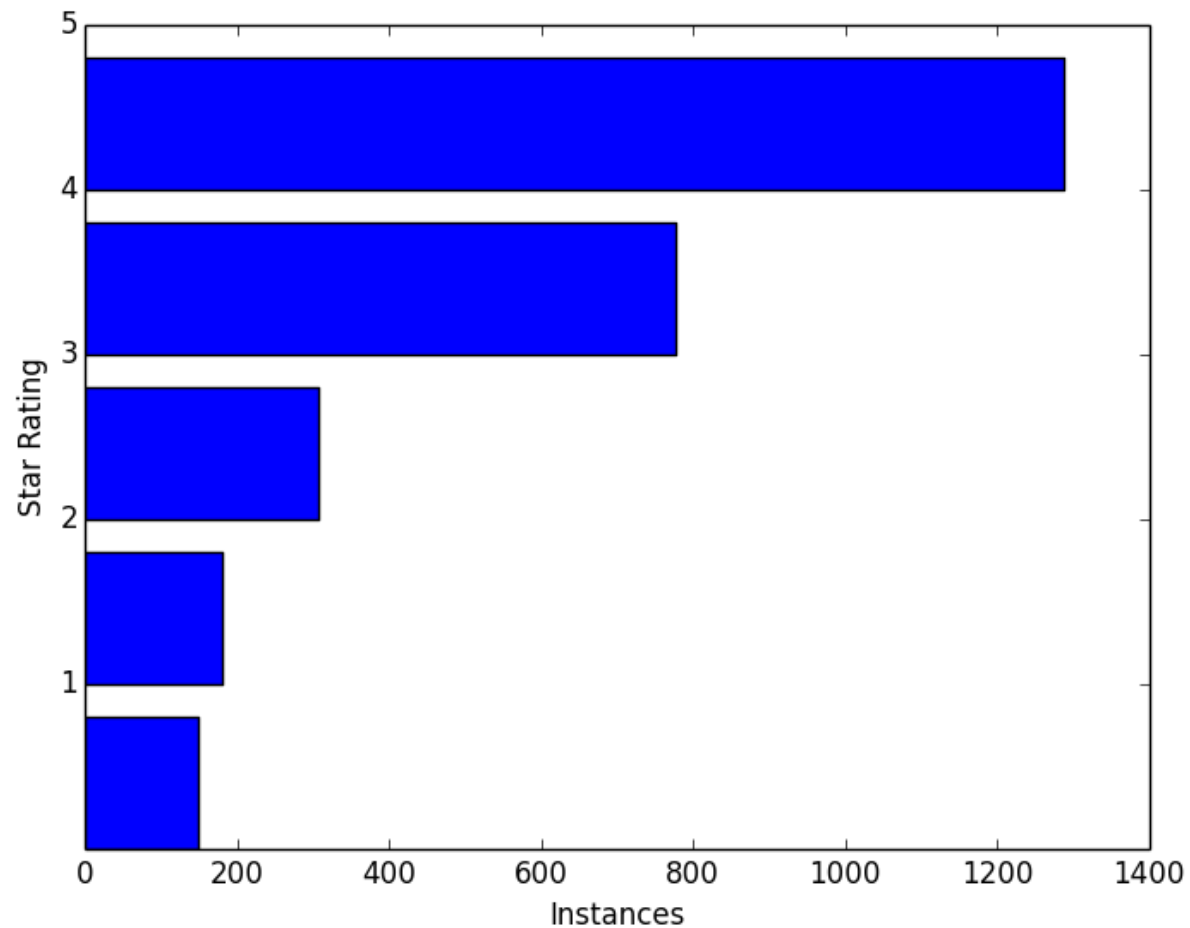

Getting the data (from Google Play)

Star Rating	Review Title	Review Text
5		
4		
5		
5		
5		
5		
4	Needs widget.	Looks good so far, but as an audio-only app, it needs a widget. Can it somehow be combined with the NPR News app? Glad to see a way to donate to local station.
5	Just what we've been waiting for!	Allows you to select your local station and queues up stories automatically. Better yet, it doesn't cut in and out like my local station's app. Nice job NPR.
5		
5		
5		Cool
5	Great start! Now support Chromecast!	What an excellent way to catch up on Radiolab! Now just added support for Chromecast so that I can enjoy it through my television in my office and it will be perfect. U
4	Love the news feed	It would be nice to be able to stream through Sonos.
5		
4	Great now that it's working	On first install, I got as far as signing in (with fb) and it just kept crashing. Reinstalled and signed in with G+ and now it's working great!
5		
5		
1	Wants to spam your facebook friends	This app won't even you login unless you allow it to spam your facebook/google+ friends or give up your email.
5		Great upgrade from the old app!
5		
5		
1	Stuck on the login screen	I clicked Google+ and it's still stuck on the login screen.
3	Add widget	Needs a widget to be 5 stars
1		Uninstall. You don't need all that info.
1	Can't Open	Downloaded and tried twice. Crashes on opening Nexus 5. Would like to try it.
5	NPR read my mind!	I've been using the NPR News app for several months now on my drive to work and would constantly add more stories to the playlist at stoplights just to keep it going.

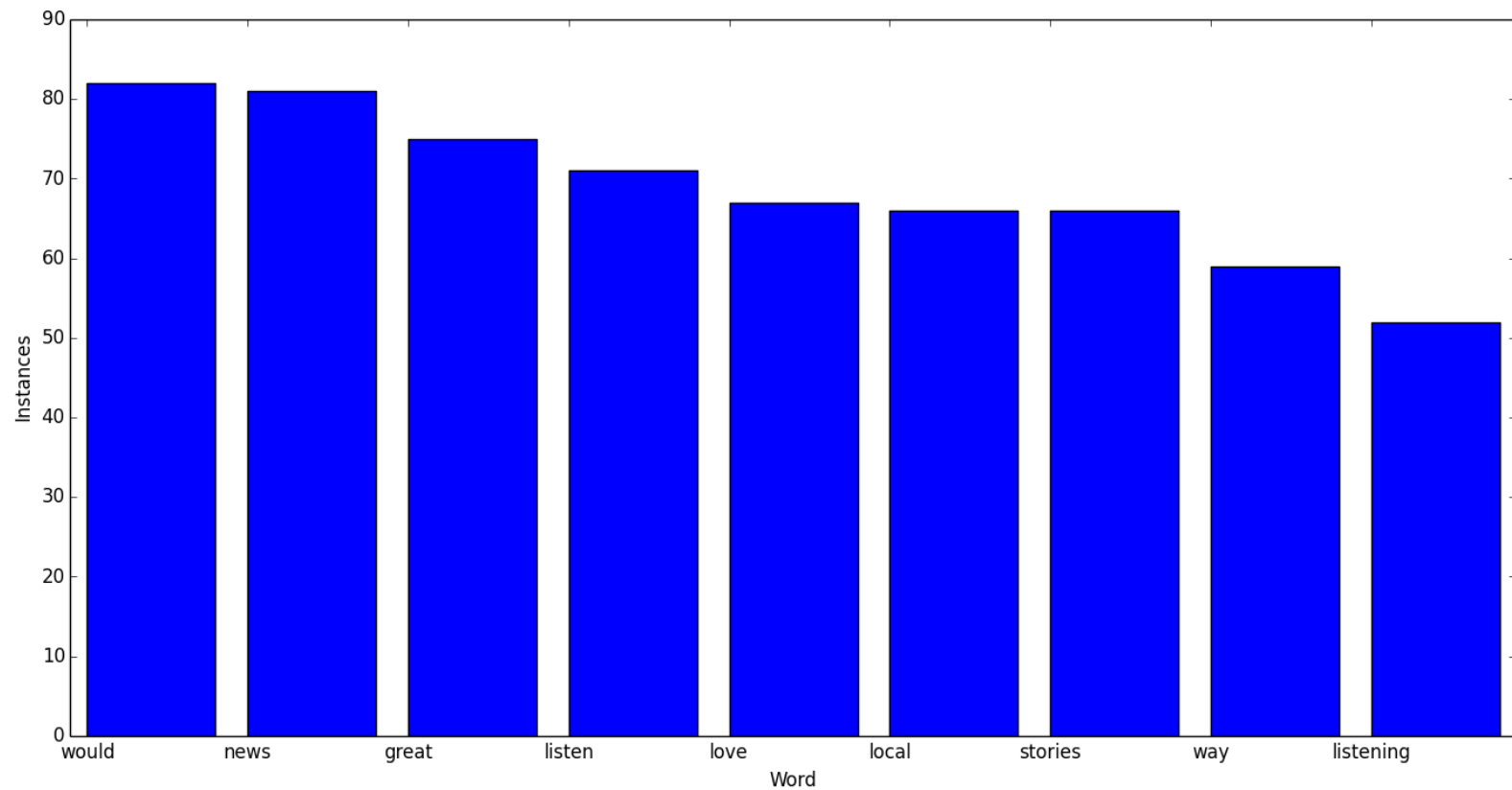
Shape of the data

- number of star ratings = 2699
- number of text reviews = 531
- average number of words in each review = ~32
- total number of words = ~17k

Distribution of star ratings in iTunes and Google Play combined



Word count in iTunes and Google Play reviews combined



An NPR Haiku?

news would listen

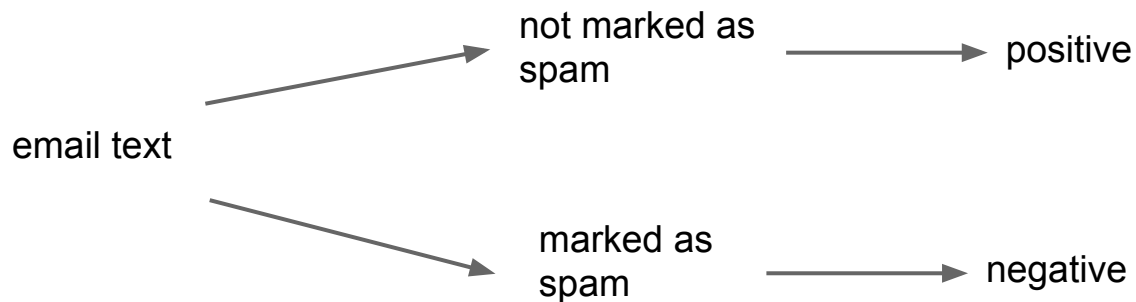
great stories

love way listening local

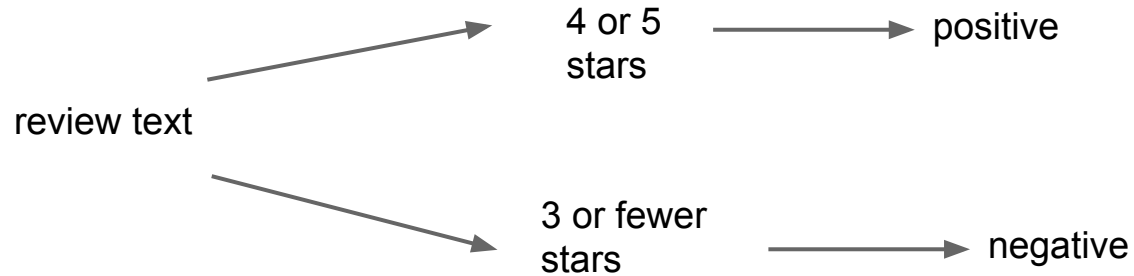
Not so fast, my friends



Naive Bayes for ham vs spam



Naive Bayes for app reviews



Outcomes

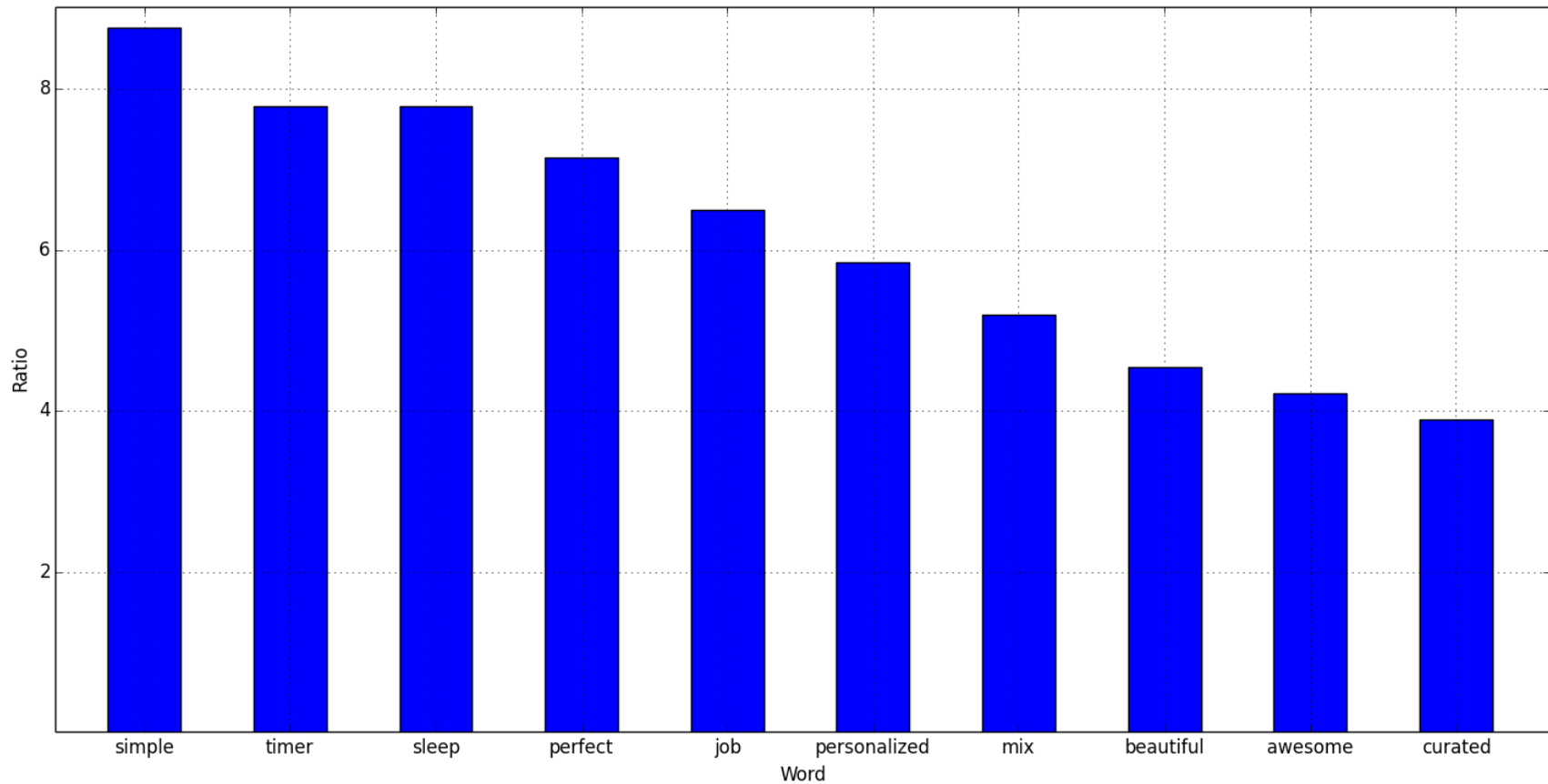
		Prediction outcome		
		p	n	total
actual value	p'	True Positive	False Negative	P'
	n'	False Positive	True Negative	N'
total		P	N	

[[112 18]
[37 46]]

$(112 + 46) / 213$

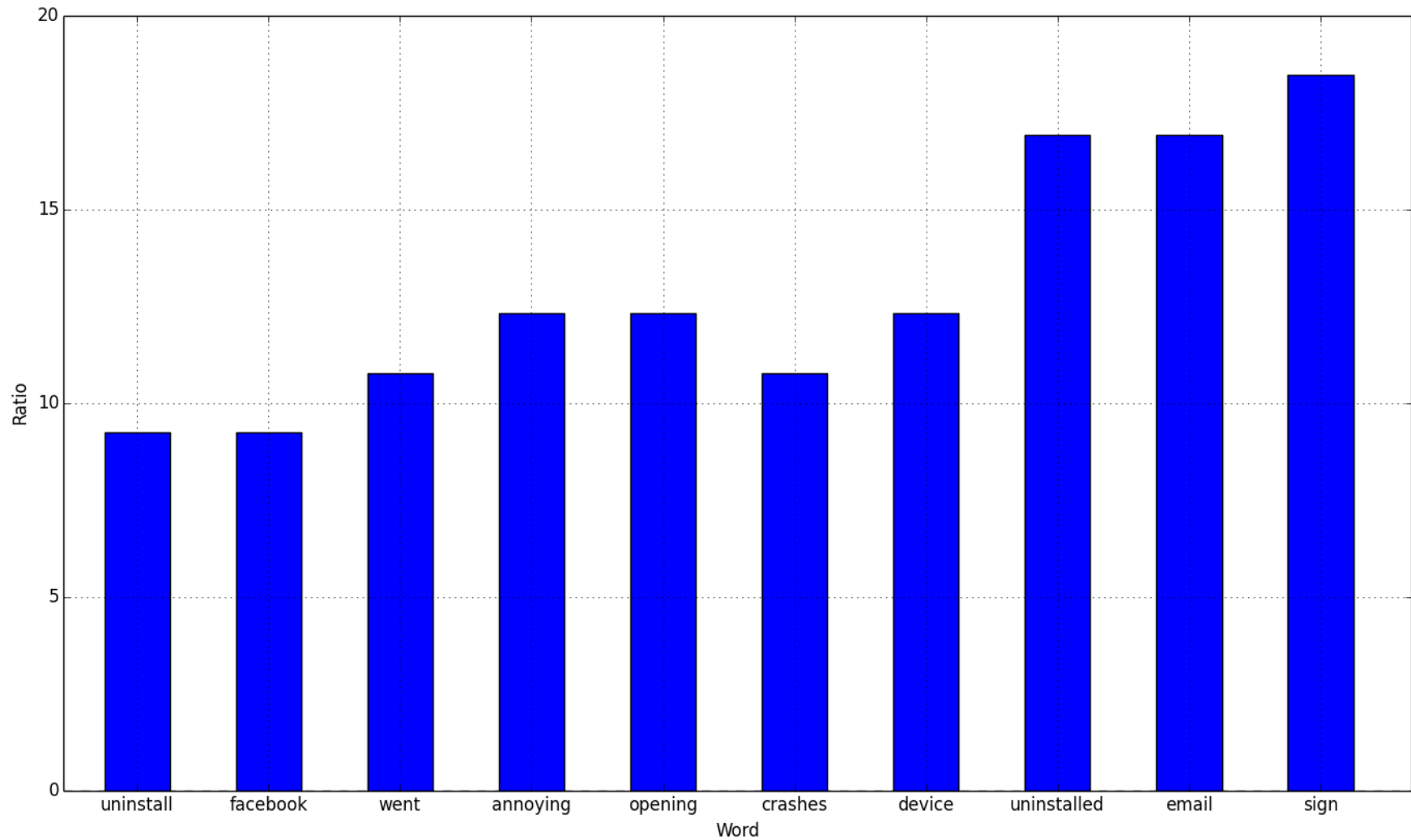
74% accuracy

Words Most Correlated With Positive Reviews



Analysis

- **Simplicity** is critical
- **Sleep timer** is the most requested feature of people who already love the app
- User enjoy the mix of **curated** and **personalized** content



Analysis

- **Sign in** presents the largest barrier to use
- What percent of users never make it past the login screen?
- Adding the ability to use the app without an account might lower the abandonment rate

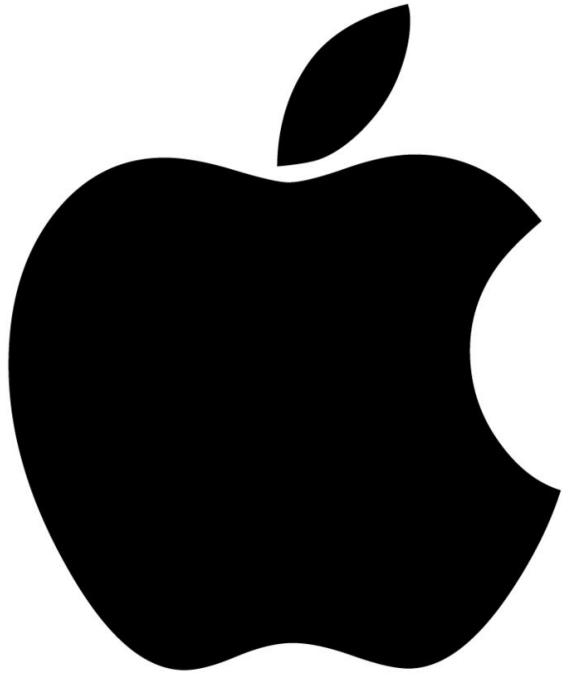
Hurdles



Character encoding

I'm sooo stoked about how epic this app is! From
the moment you open it, it feels like it's
personalized and tailored for you! I'm in 😍!
Definitely going on my home screen!

Apples and Androids



Review titles

review_title
I love this app!
Shows promise
Love it
Love this app
No and no.
Pretty, modern, limited to 1x
So sad
Easy, its really easy to use
The best of npr
Great combo of national & local
Love this app!
Love NPR, but this App can be infuriating
Has become one of my most used apps
Great idea, poor execution
Interesting idea but a bit disappointing
Great, minimal design... Until you try to use it.
Great alternative
Can't even log in

radio
promising idea
microphone
privacy settings
NPR News
cumbersome interface
gravitational pull
microphone
public radio
personalized radio station
frustration
Facebook
personal info
hourly news summary
NPR News apps
iPhone and iPad
NPR station
Facebook
Google

Topic analysis

The image shows the classic Yahoo! logo in a vibrant purple color. The letters are bold and have a slight 3D effect with a darker purple shadow. The exclamation mark is also purple and has a dot. The logo is centered on a light gray rectangular background.

Conclusions

- Obvious and distinct priorities
- Can apply to other forms of feedback like email, facebook, and twitter.
- Better than just reading them all?

Thanks.

@jypyk