

The Battle Hymn of Airbnb Guest

Expectation vs Reality

Inspiration



Host Customer

Location GAP Facilities

Clean

Space

~Spacious studio room (PRIVATE) bathroom! Sleeps 4!~



New York

4 guests 1 1 bedroom 2 beds 1 private bath

HOME HIGHLIGHTS

Self check-in · Easily check yourself in with the keypad.

Helpful 🖒 · Not helpful

Spacious studio with private bathroom (rare in Manhattan (! Private entrance, private ving area and private kitchenette. Large futon turns into queen size bed too. Perfect place to get away for a weekend retreat or for a business trip. Great for families with kids (space sleeps four).

Read more about the space >

Contact host

Amenities

TI Kitchen

■ Laptop friendly workspace

€ Wifi

Ď TV

□ Iron

△ Hangers

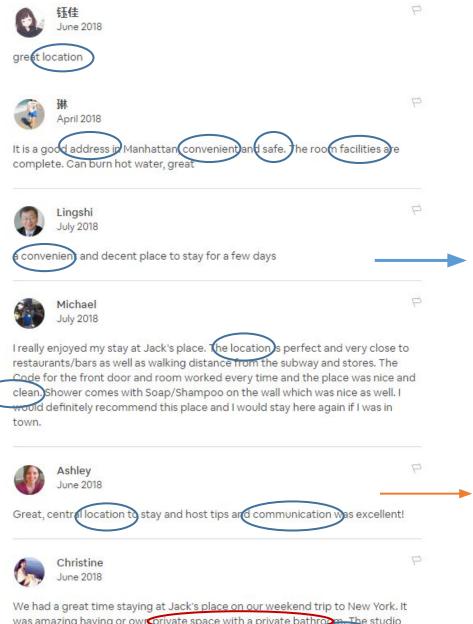
Show all 21 amenities





Private, private, private, and private!

~Spacious studio room-PRIVATE bathroom! Sleeps 4!~ - Apartments for Rent in New York, New York, United States. (n.d.). Retrieved July 26, 2018, from https://www.airbnb.com/rooms/23614741



We had a great time staying at Jack's place on our weekend trip to New York. It was amazing having or own private space with a private bathroom. The studio has everything you need for a comfortable, nice stay and the location is convenient and accessible. The only small nuances were the 4 tail flight of stairs (although it was a good workout) and the loud AC. Would definitely recommend for a short stay!



Location, address, convenient, safe, facilities, clean, communication, accessible...

ONLY ONE of the six newest reviews mentioned PRIVATE!

~Spacious studio room-PRIVATE bathroom! Sleeps 4!~ - Apartments for Rent in New York, New York, United States. (n.d.). Retrieved July 26, 2018, from https://www.airbnb.com/rooms/23614741



In this piece of segment...

Location: location, address, convenient,

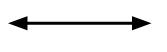
accessible, distance

Safety: safe

Facilities: facilities, water, soap, shampoo

Space: facilities, clean, private

Host: communication, service



It seems the only thing he would like to emphasize is private...

GUESTS' REVIEWS

HOST'S DESCRIPTION





Airbnb@Seattle



Airbnb@Seattle

- > From Airbnb, Kaggle
- > Two CSV files, 51MB in total

listings.csv
 90+ columes:
 id, name, summary, description, space, transit, neighbourhood, price, review_scores_rating...
 Size:
 3818 * 92

reviews.csv
6 columes:
Listing_id, id, reviewer_id, reviewer_name, comments
Size:
84.8k * 6

A. (2018, June 26). Seattle Airbnb Open Data | Kaggle. Retrieved July 26, 2018, from https://www.kaggle.com/airbnb/seattle





"Kelly has a great room in a very central location. Beautiful building, architecture and a style that we really like."

"The place was really nice, clean, and the most important aspect; it was close to everything so we moved across the city easily."

Words make sense: Central, location, beautiful, style, clean, close...

Stop words:
Has, a, in, and, that, was, the, it, so, we...



Preparing the data



Columns

2 Columns



Selecting Columns

```
listings: (id, summary, pic, host_name, abracadabra, ...)
```

listings: (id, summary, description, space, transit)



Selecting Columns

```
reviews: (listings_id, user_id, pics, ...,comments)
```

reviews: (listings id, comments)



Cleanup



Split it, trim it, lower it.



["Split", "it,", "trim", "it,", "lower", "it."]



["Split", "it", "trim", "it", "lower", "it"]



```
["split", "it", "trim", "it", "lower", "it"]
```



Stop, stopwords

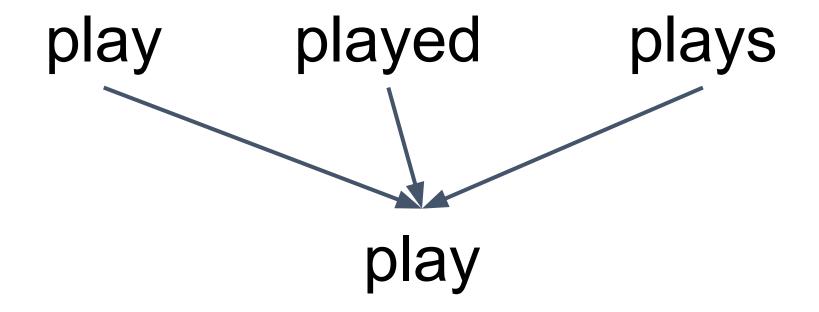


```
this
       to
that
                  you
and
   as
           The
  am
       is
             are
```



Stemming







Let the bullet flies



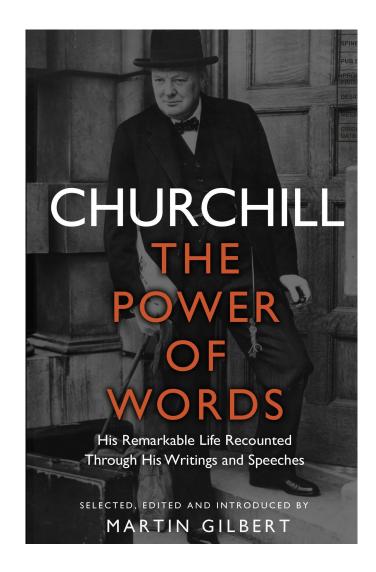
We need a standard

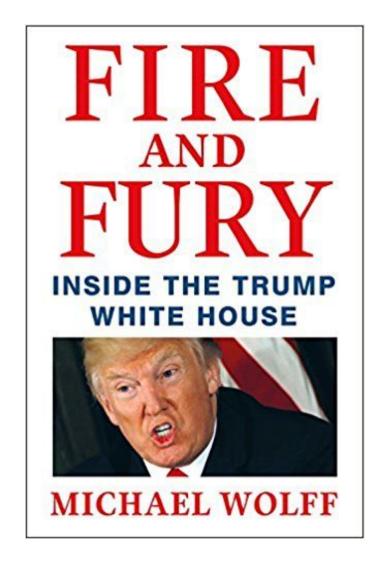
to define the

Importance of Word



What mankind has







What computer has

TF

IDF



Term Frequencies

*within the same document

The more you see it, the more important it is. (*Terms and conditions apply)



Inverse Document Frequencies

*across all documents

The more you see it, the less important it is. (*Terms and conditions apply)



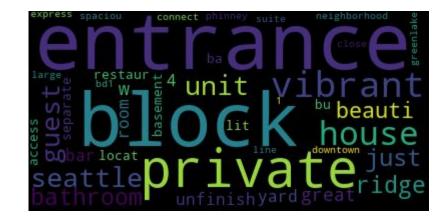
TF

IDF



The result

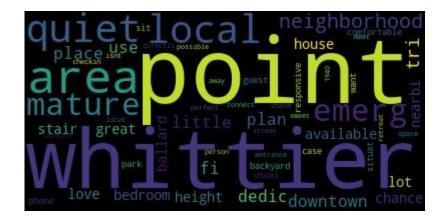




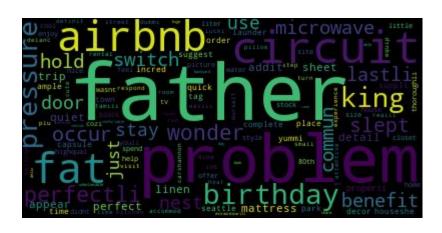
Host description







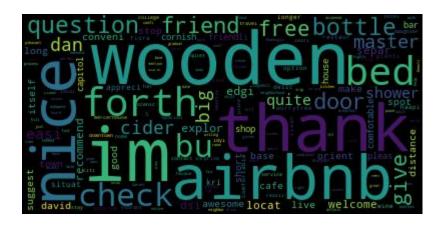
Host description



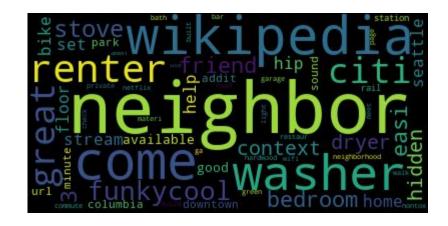




Host description







Host description





Result

Frequency (Document occurences & Total occurences)



Host and Customer both cares the location the most!



Result

Frequency (Document occurences & Total occurences)



But other orders do not match with each other!



```
bathroom
                    apartment great kitche house market block unit enjoy full stav kill directe
                    nts ballard city blocks easy locat free Application in Business of the start of the city blocks and the start of the city blocks.
restaurants
            floor
                            downtown quiet light stance light
               access
                 lake lake please room private please walking please walking please walk space
                              bedroom coffee
                                neighborhood
```



THANK YOU!

Q&A