

CHILDREN'S BOOKS RECOMMENDER SYSTEM



Blanca Hidalgo Nogales

.....
allWomen May - July 2021

Image credits: Jungho Lee

“Once you learn to read, you will be forever free.”

Frederick Douglass





EXPLORING THE DATA



60004
Books



67843
Users



496634
Reviews



5242
Publishers

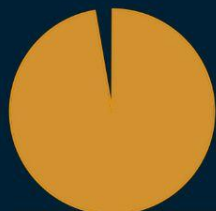


3,876
Avg. Rating



eBooks

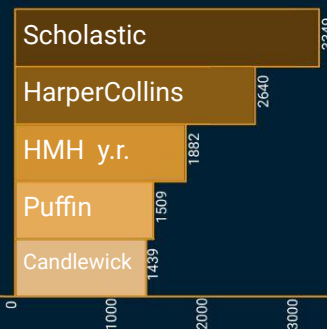
1.62 %



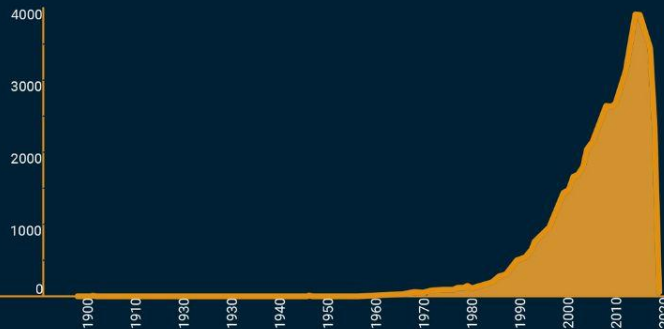
Most Popular Books



Top Publishers



Books published per year



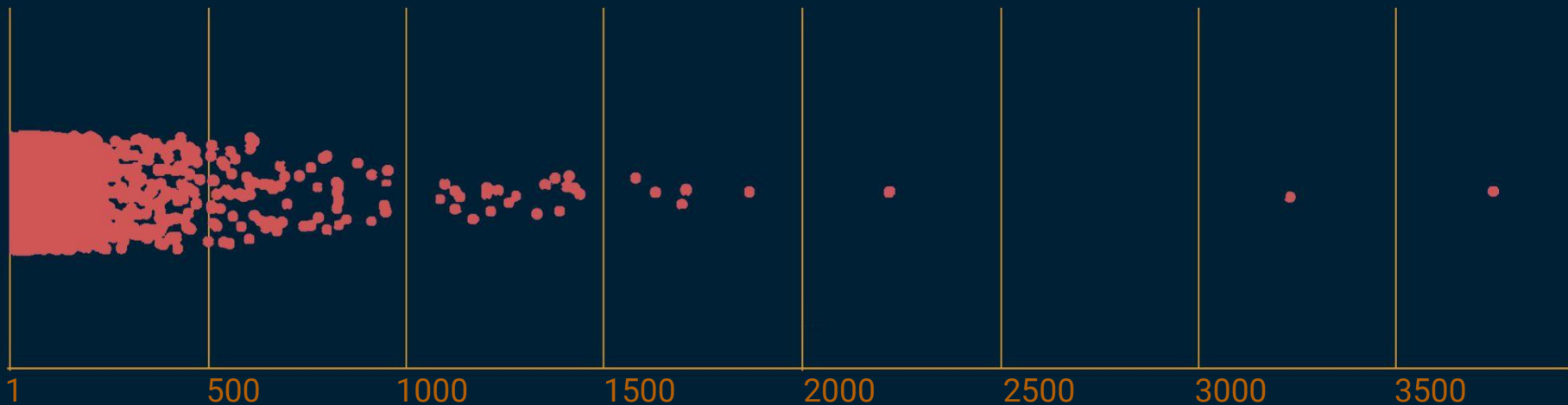
*Harry Potter and the prisoner of Azkaban

Distribution of ratings



Number of reviews for a given user

Average n° of reviews: 7,32



[illegible]

Animals - Life - Classic - Friends - King Family - School - Life - Friends - House House - Family - Life- Boy - Home

Animals - Life - Classic - Friends - King Family - School - Life - Friends - House House - Family - Life- Boy - Home

Animals - Life - Classic - Friends - King Family - School - Life - Friends - House House - Family - Life- Boy - Home

[Bible - Adventures - Boy](#)
[Home - Cat - Adventures](#)
[Nancy - Friends -School](#)

[Bible - Adventures - Boy](#)
[Home - Cat - Adventures](#)
[Nancy - Friends -School](#)

[Bible - Adventures - Boy](#)
[Home - Cat - Adventures](#)
[Nancy - Friends -School](#)



1980's -1990's

Life - Family - School - World - Friends

Help - Color - House

Girl: 50,70% | Boy: 49,3%



2000's

World - Life - Family - Help - Friends

School - Fun - Love

Girl: 48,40% | Boy: 51,60%



2010's

World - Friends - Help - Life

Life - Fun - Family

Girl: 51,74% | Boy: 48,26%



Image credits: Ahra Kwon

GENDER BASED ANALYSIS

OF THE 1000 MOST POPULAR BOOKS



1000
Books



51809
Users



179321
Reviews



246
Publishers



4,088
Avg.Rating

Books by author's gender

Male
51,3%



Female
48,7%

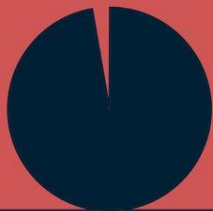
Male
46,4%



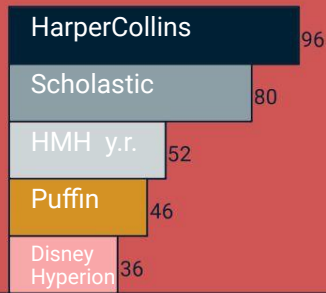
Female
53,6%

554 Authors

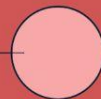
eBooks
0.7 %



Top Publishers



37,62%



2010's

38,39%

2000's

1990's

1980's

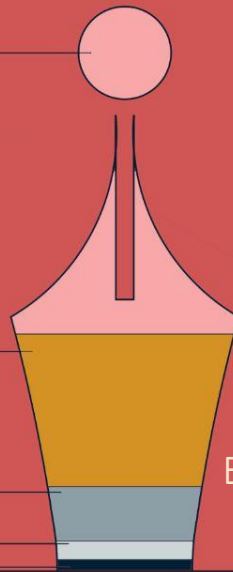
1900's
TO 1970's

43,66%

12,67%

3,90%

2,15%



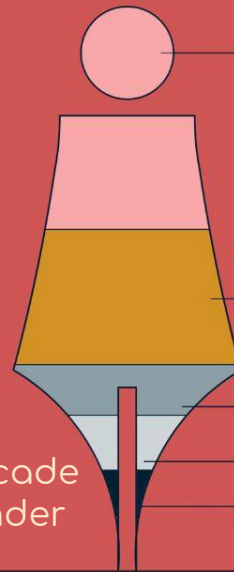
Books per Decade
& Author Gender

41,88%

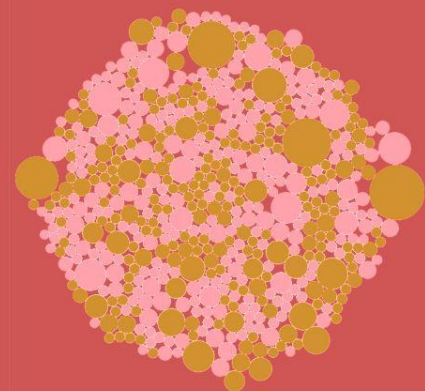
12,94%

5,55%

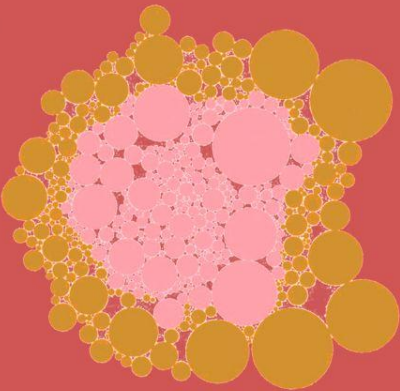
1,24%



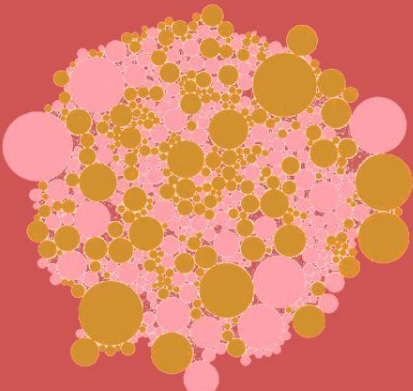
Distribution of ratings



Authors with more books



Most rated authors



Most reviewed authors



ANALYSIS OF THE BOOKS' DESCRIPTION WORDS BY AUTHOR'S GENDER



LIFE

SCHOOL

WORLD

FAMILY

FRIENDS

HELP

CLASSIC

ADVENTURE

BOY

HOME

LOVE

SOME MALE
AUTHORS TOPICS

DRAGONS

BOYS

ADVENTURES

MISTERY

BEARS

PETS

FOREST

CALDECOTT

SOME FEMALE
AUTHORS TOPICS

LOVE

BOYS & GIRLS

MISTERY

MAGIC

PRINCESSES

SECRETS

PETS

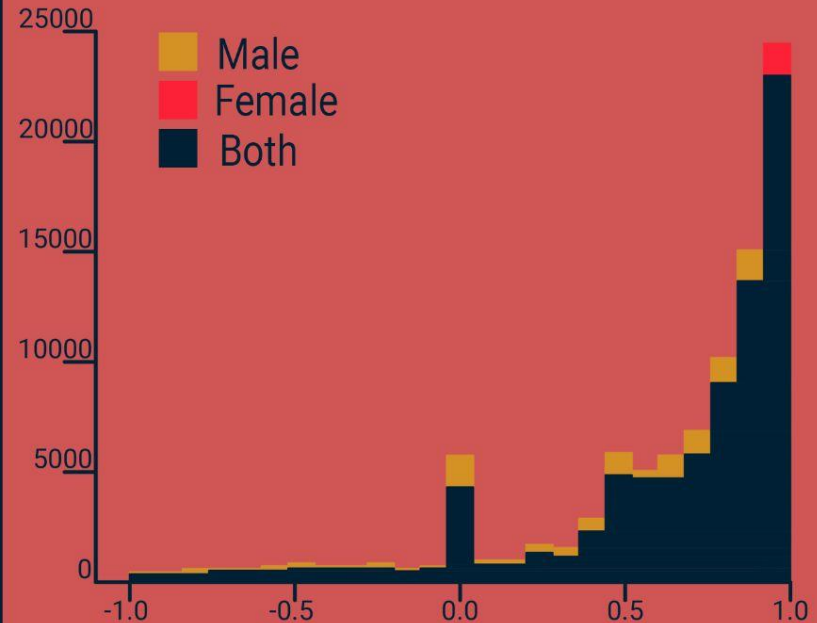
ANIMALS

ANALYSIS OF THE REVIEW WORDS BY BOOK AUTHOR'S GENDER



SENTIMENT ANALYSIS OF THE REVIEWS BY AUTHOR GENDER USING VADER

COMPOUND SCORE GRAPHIC



POSITIVE AND NEGATIVE REVIEWS BY AUTHOR GENDER



'I really enjoyed the book even though it was written for a teen/preteen audience. My daughter really liked it. Fun and clean. Love fairy tales.'



'This reminded me a bit of Lemony Snicket/Series of Unfortunate Events in its style, as many other readers have said. I was disappointed that it never really solved the "mystery." It's clearly set up to be a series, but I didn't find it engaging enough to keep reading. This is probably a 2.5 for that reason.'



'A story about friendship, loyalty, courage, personhood, the importance of learning and honoring truth, this is part fable, part novel and highly recommended for all ages.'



'I really did not like this book at all. Too silly for my tastes, my kids were bored with it and only my OCD made me not abandon it midway through'



BOOK RECOMMENDER SYSTEMS



ITEM - ITEM RECOMMENDER

COLLABORATIVE FILTERING

Users + books

'Similar users like
similar things'

60004 Books

Cold Start Problem

CONTENT BASED RECOMMENDER

CONSIDERING USERS OR ITEMS FEATURES

Descriptions + Reviews

'If a user likes x, he
will also like y '

1000 Books

Quality of content
Problem

ITEM - ITEM

Maybe something
beautiful

Noisy Paint Box

The wheels on the
Tuk Tuk

From the New York Times bestselling authors of
Iggy Peck, Architect and Rosa Renée, Engineer

**ADA
TWIST,
SCIENTIST**

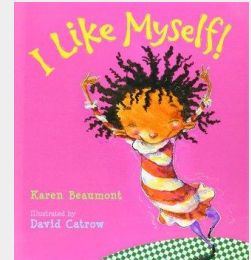
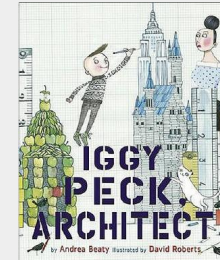
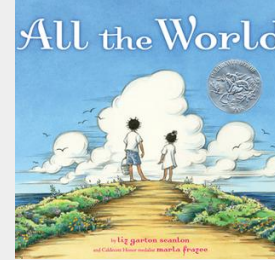
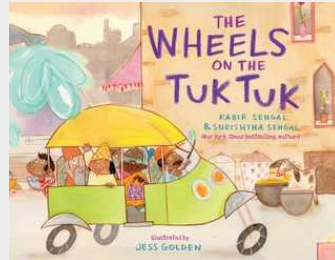
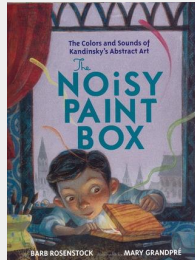
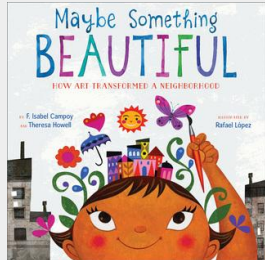
by Andrea Beatty illustrated by David Roberts

CONTENT BASED

All the World

Iggy Peck, Architect

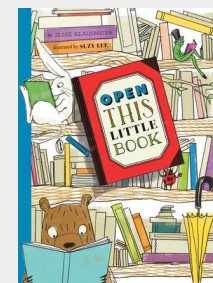
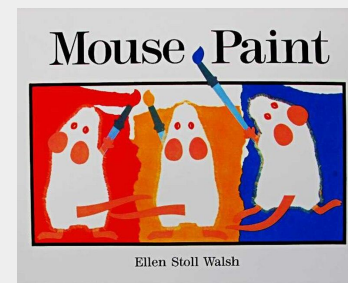
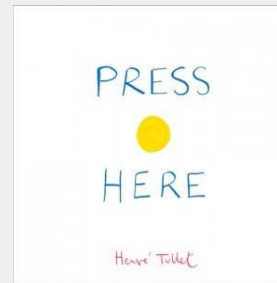
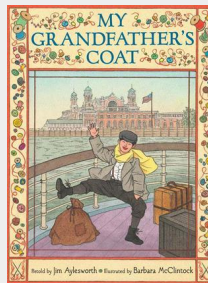
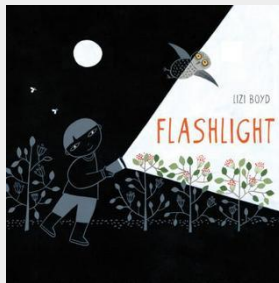
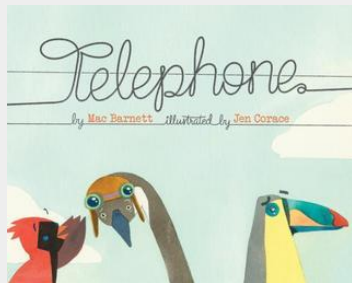
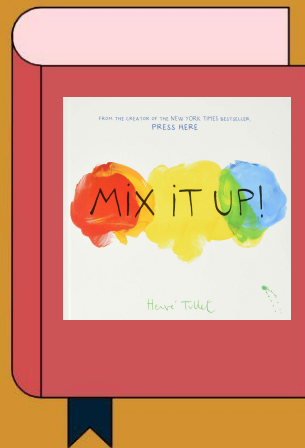
I like myself!



ITEM - ITEM



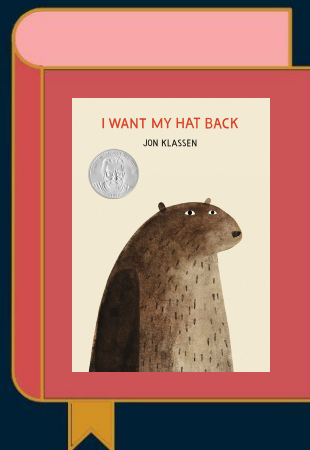
CONTENT BASED



This is not my hat

Extra yarn

The Dark



This is not my hat

We are going
on a bear hunt

Go, Dog. Go!

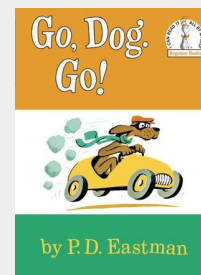
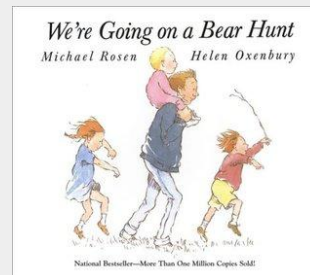
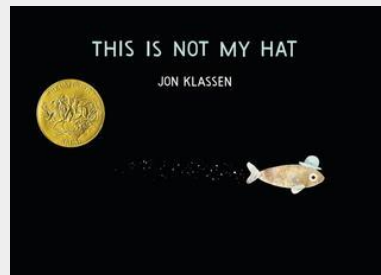
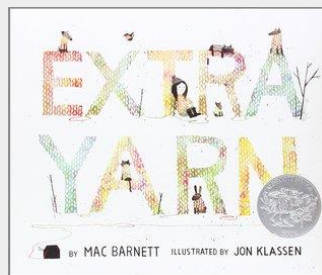
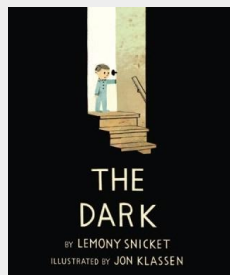




Image credits: Jungho Lee

Thank you!

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