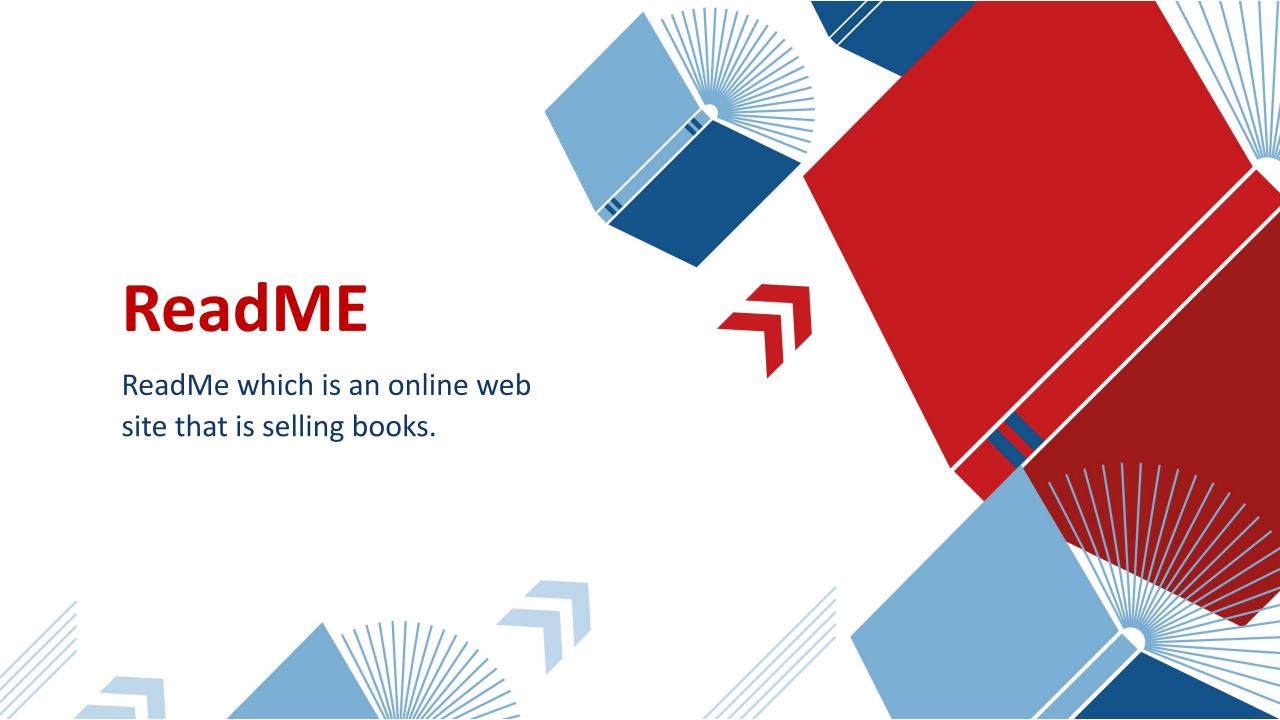
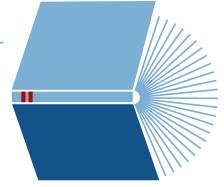


By: Batoul Alosaimi ,Norah Alqahtani and Shroaq Almutairi

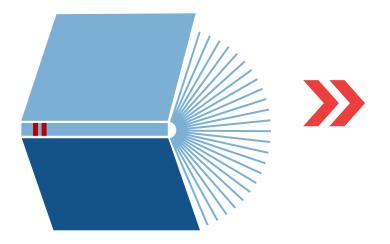


Data Source: >>>

>>>



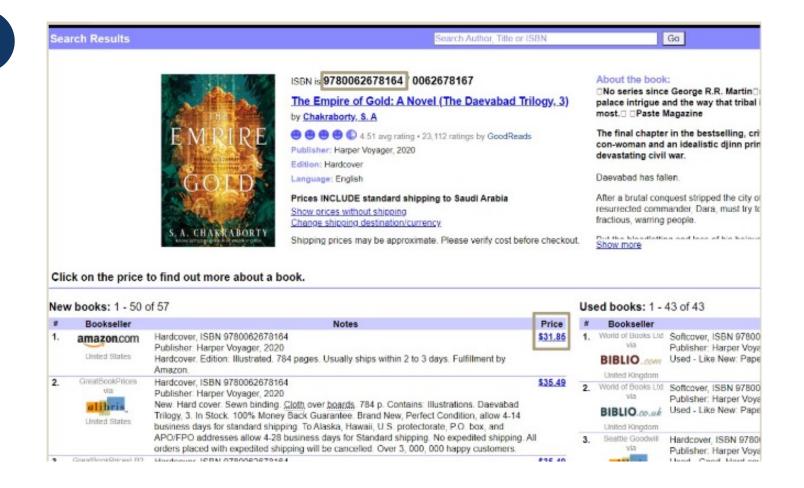
1-kaggle(CSV file)
GoodReads dataset,
11128 books with 11
features.





Book Finder:

Web Scraping (Selenium)
1352 books
with 1 feature.





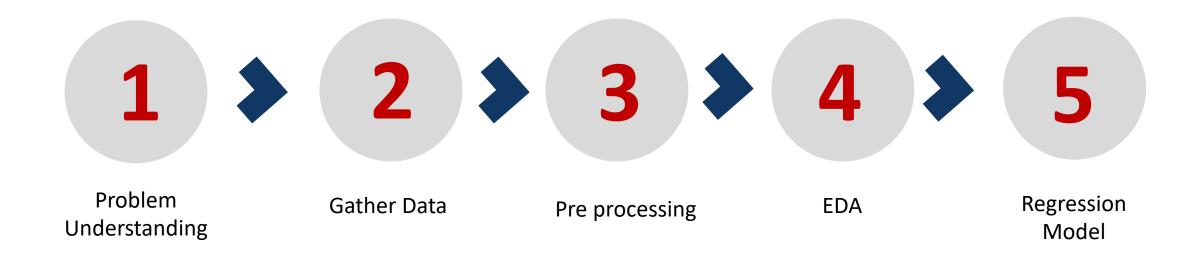
Book dataset:

-1298 books 12 features.

	title	authors	average_rating	isbn	isbn13	language_code	num_pages	ratings_count	text_reviews_count	publication_date	publisher	Price
bookID												
663	For the New Intellectual: The Philosophy of Ay	Ayn Rand	3.68	451163087	9.780450e+12	eng	224	2750	108	12/1/1963	Signet Book	SAR 48.675
2326	Dirk Gently's Holistic Detective Agency (Dirk	Douglas Adams	3.98	1597770078	9.781600e+12	eng	6	58	15	9/30/2005	Phoenix Audio	Not found
3869	A Brief History of Time	Stephen Hawking	4.17	553380168	9.780550e+12	eng	212	239652	5860	9/1/1998	Bantam Books	SAR 48.675
2045	Later Novels and Other Writings: The Lady in $t_{\cdot\cdot\cdot}$	Raymond Chandler/Frank MacShane	4.47	1883011086	9.781880e+12	eng	1076	1107	48	10/1/1995	Library of America	SAR 173.732876712329



Methodology





Pre processing:

-Removing nulls value.

-Removing Duplicates.

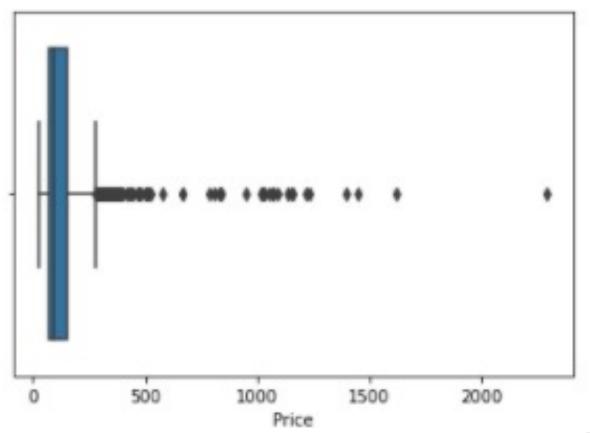
- Removing the currency (SAR).





Pre processing:

- Removing outliers.







EDA Plots:

- Book pages vs. Price





EDA Plots:

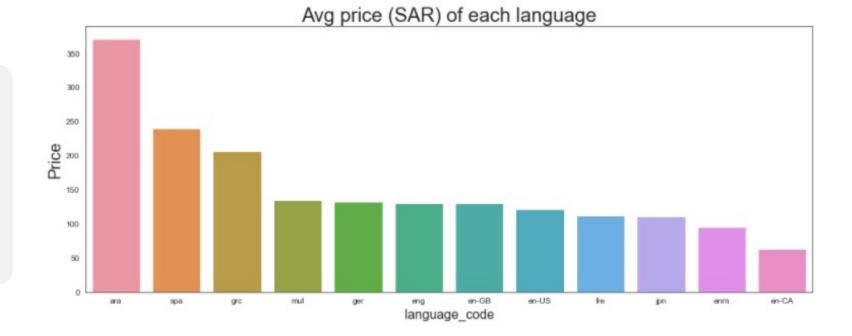
- Book prices count





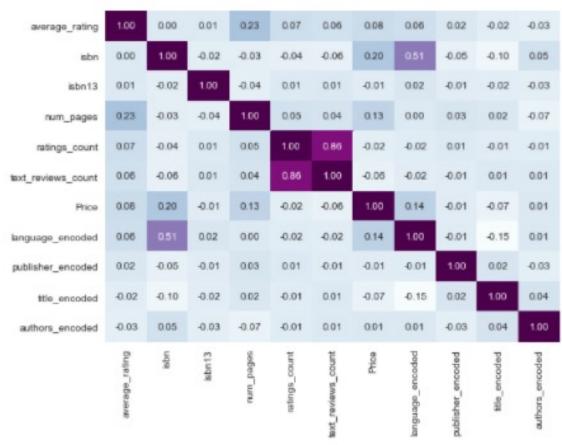
EDA Plots:

Avg price(SAR) of eachlanguage





correlation between feature:



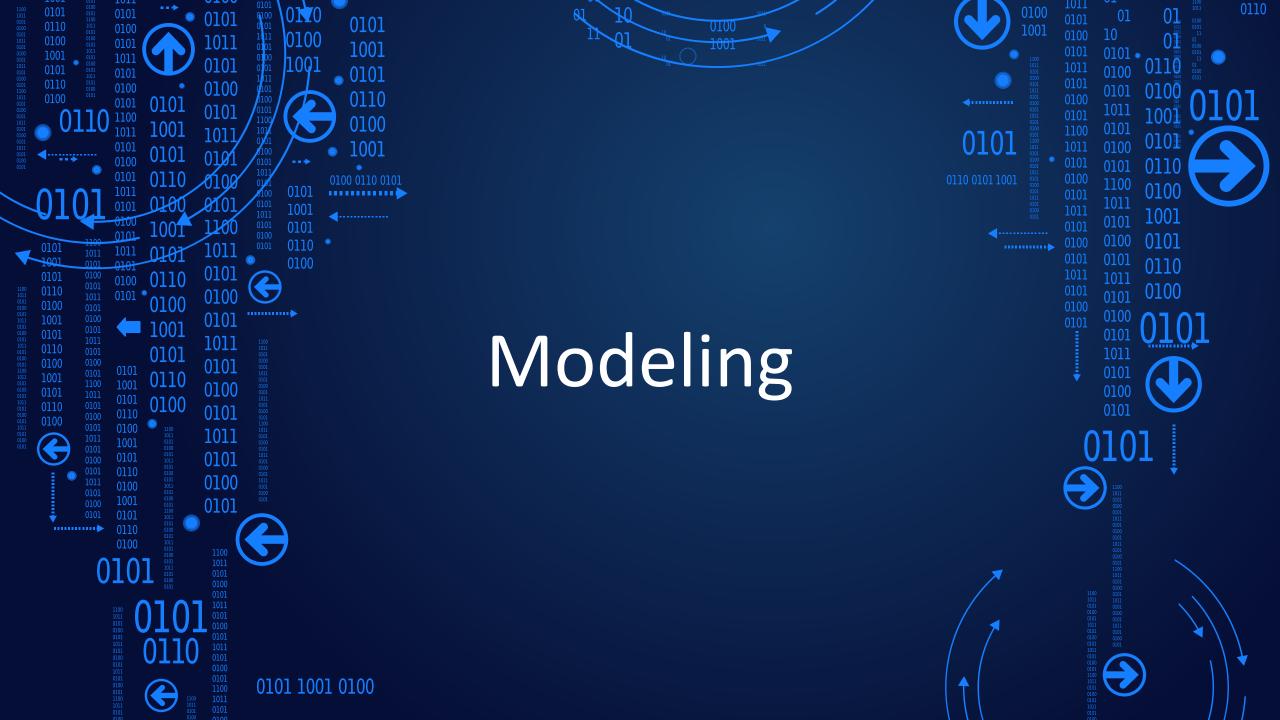


-0.6

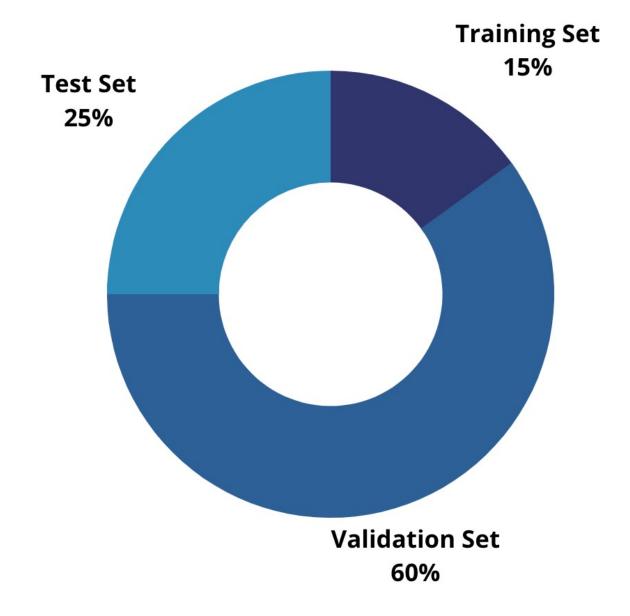
-0.4

-0.2

-0.0



Splitting the data to Test (25%) and Train-Validation (75%) sets



Modeling:





Cross Validation

Regression Algorithm			Polynomial Regression (degree = 2)	Lasso Regression	
Training Score	0.075843	0.044664	0.068357	0.066383	
Validation Score	0.029533	0.00066	0.006979	0.002216	





Modeling After feature Engineering:

• Score 0.119

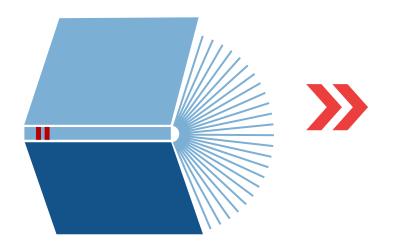




Conclusion & future work:

1. Data obtained via scraping websites are not reliable enough to validate a model's performance.

2. In future work we will co more effort to obtain more related features to reduce Bias





thank you

