



cuvette

Welcome



Recommender System

Recommender System

Recommendation systems, or recommender systems, are software engines designed to suggest items to users depending on previous likes, dislikes, interests, product engagement and interaction, etc.

Recommender systems keep users interested in the site.

We are surrounded with Recommender systems:

Why Recommender Systems :

1. To Increase Sales
2. To decrease load on the system
3. Increasing engagement and Satisfaction

Types of Recommender Systems :

1. Popularity Based Recommender System
2. Content Based Recommendation System
3. Collaborative filtering system
4. Hybrid Recommendation System

Popularity Based Recommender Systems :

1. Popularity Based Recommender System : Using the avg rating a book got from a user we will find the best book rank and using that rank we will suggest that list of books to all universally.

Collaborative filtering system :

1. Collaborative filtering system : Based on the ratings given by different user we will try to find similar books and recommend them based on the choice they make

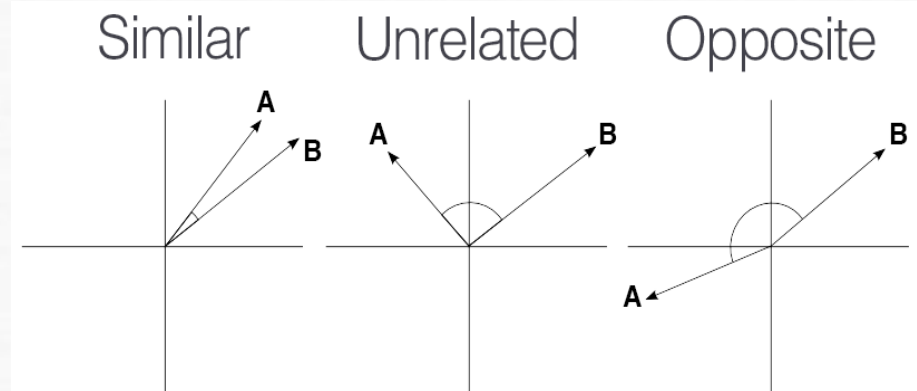
We are using cosine similarity algorithm to find similarity between books.

$$\cos \theta = \frac{\vec{A} \cdot \vec{B}}{|\vec{A}| |\vec{B}|} = \frac{\sum_{i=1}^n A_i B_i}{\sqrt{\sum_{i=1}^n A_i^2 \cdot \sum_{i=1}^n B_i^2}}$$

For each book different user ratings are written as a vector and similarity between each books user vector is calculated using cosine similarity which is the cos value between each vector.

		Users				
		User1	User2	User3	User4	User5
Books	Book 1	4	0	3	5	2
	Book 2	5	2	0	3	0
	Book 3	3	4	2	1	4
	Book 4	0	3	4	2	1
	Book 5	2	5	0	4	3

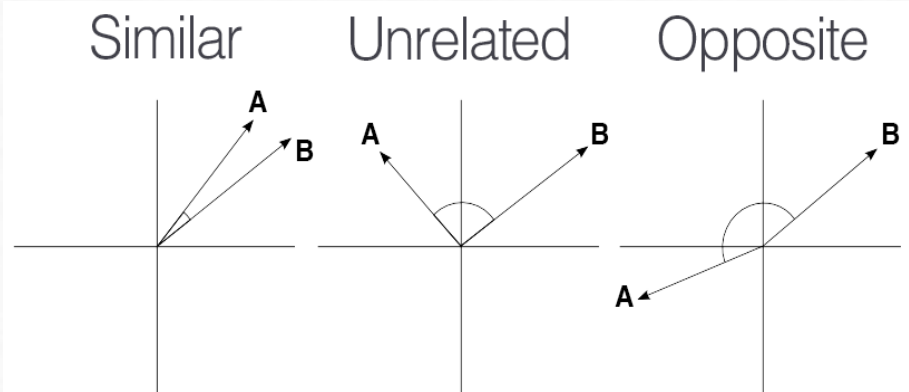
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	Book 3	3	4	2	1	4
	Book 4	0	3	4	2	1
	Book 5	2	5	0	4	3

	Book 1	Book 2	Book 3	Book 4	Book 5
Book 1	1	0.72	0.78	0.58	0.78
Book 2	0.72	1	0.58	0.86	0.78
Book 3	0.78	0.58	1	0.62	0.62
Book 4	0.58	0.86	0.62	1	0.7
Book 5	0.78	0.78	0.62	0.7	1

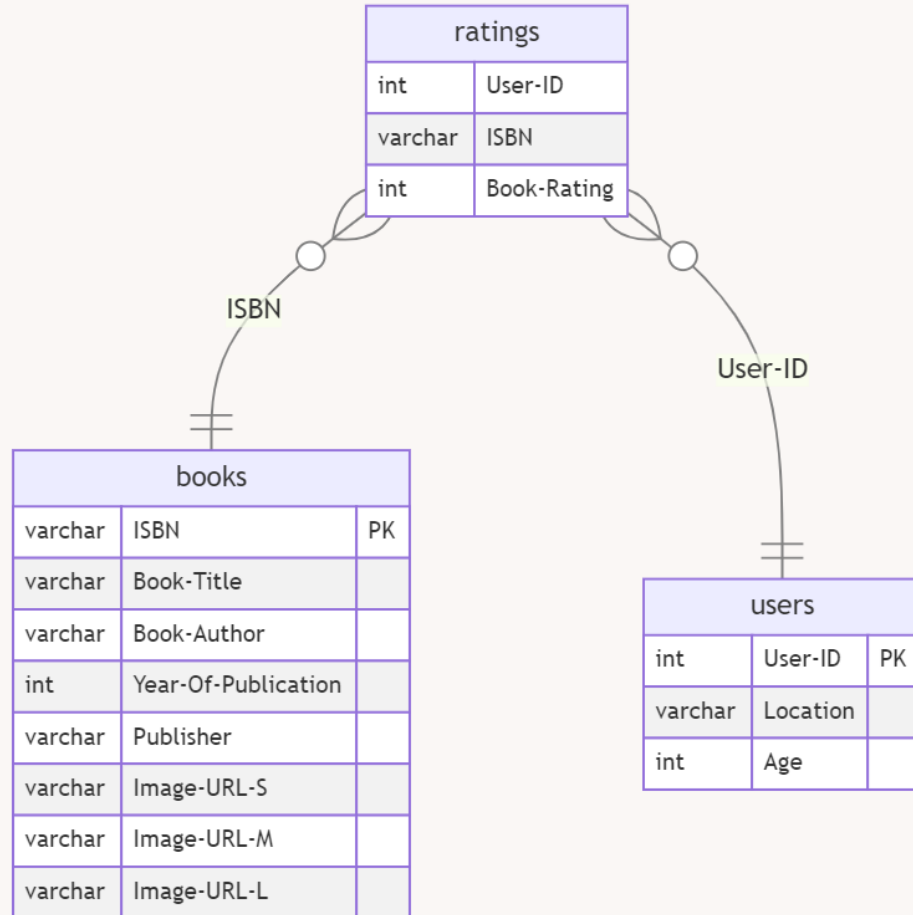
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	Book 1	Book 2	Book 3	Book 4	Book 5
Book 1	1	0.72	0.78	0.58	0.78
Book 2	0.72	1	0.58	0.86	0.78
Book 3	0.78	0.58	1	0.62	0.62
Book 4	0.58	0.86	0.62	1	0.7
Book 5	0.78	0.78	0.62	0.7	1

Data

- 3 Files



Data Used Section

Data Used

Show Data

Top 50 Books

SHOW

Recommend Books

Type or select a book from the dropdown

2nd Chance

Recommend Me

Book Recommender System

This site has the book recomentation system where you can select a book from our catlog and it will suggest books accordingly.

Based on our data we have the top 50 books based on the user feedback.

The Recomender system is based on Colloborative filtering.

This is the Books data we used in our model

	ISBN	Book-Title	Book-Author	Year-Of-Publication	Publisher	Image-URL-S	Image-URL-M
0	0195153448	Classical Mythology	Mark P. O. Morford	2002	Oxford University Press	http://images.amazon.com/images/P/0195153448.01.THUMBZZZ.jpg	http://images.ama
1	0002005018	Clara Callan	Richard Bruce Wright	2001	HarperFlamingo Canada	http://images.amazon.com/images/P/0002005018.01.THUMBZZZ.jpg	http://images.ama
2	0060973129	Decision in Normandy	Carlo D'Este	1991	HarperPerennial	http://images.amazon.com/images/P/0060973129.01.THUMBZZZ.jpg	http://images.ama
3	0374157065	Flu: The Story of the Great Influenza Pandemic of 1918 and the Search for the Virus T	Gina Bari Kolata	1999	Farrar Straus Giroux	http://images.amazon.com/images/P/0374157065.01.THUMBZZZ.jpg	http://images.ama
4	0393045218	The Mummies of Urumchi	E. J. W. Barber	1999	W. W. Norton & Company	http://images.amazon.com/images/P/0393045218.01.THUMBZZZ.jpg	http://images.ama
5	0399135782	The Kitchen God's Wife	Amy Tan	1991	Putnam Pub Group	http://images.amazon.com/images/P/0399135782.01.THUMBZZZ.jpg	http://images.ama
6	0425176428	What If?: The World's Foremost Military Historians Imagine What Might Have Been	Robert Cowley	2000	Berkley Publishing Group	http://images.amazon.com/images/P/0425176428.01.THUMBZZZ.jpg	http://images.ama
7	0671870432	PLEADING GUILTY	Scott Turow	1993	Audioworks	http://images.amazon.com/images/P/0671870432.01.THUMBZZZ.jpg	http://images.ama
8	0679425608	Under the Black Flag: The Romance and the Reality of Life Among the Pirates	David Cordingley	1996	Random House	http://images.amazon.com/images/P/0679425608.01.THUMBZZZ.jpg	http://images.ama
9	074322678X	Where You'll Find Me: And Other Stories	Ann Beattie	2002	Scribner	http://images.amazon.com/images/P/074322678X.01.THUMBZZZ.jpg	http://images.ama

This is the Books Ratings data we used in our model

	User-ID	ISBN	Book-Rating
0	276,725	034545104X	0
1	276,726	0155061224	5
2	276,727	0446520802	0
3	276,729	052165615X	3
4	276,729	0521795028	6

Top 50 Recommendation

Data Used

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Harry Potter and the Prisoner of Azkaban

J. K. Rowling

Ratings: 428

Avg. Rating: 5.85



Harry Potter and the Goblet of Fire (I

J. K. Rowling

Ratings: 387

Avg. Rating: 5.82



Harry Potter and the Sorcerer's Stone

J. K. Rowling

Ratings: 278

Avg. Rating: 5.74



Harry Potter and the Order of the Phoenix

J. K. Rowling

Ratings: 347

Avg. Rating: 5.5

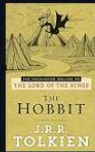


Harry Potter and the Chamber of Secrets

J. K. Rowling

Ratings: 556

Avg. Rating: 5.18



The Hobbit : The Enchanting Prelude to

J.R.R. TOLKIEN

Ratings: 281

Avg. Rating: 5.01



The Fellowship of the Ring (The Lord of the

J.R.R. TOLKIEN

Ratings: 368

Avg. Rating: 4.95



Harry Potter and the Sorcerer's Stone

J. K. Rowling

Ratings: 575

Avg. Rating: 4.9



The Two Towers (The Lord of the Rings

J.R.R. TOLKIEN

Ratings: 260

Avg. Rating: 4.88



To Kill a Mockingbird

Harper Lee

Ratings: 510

Avg. Rating: 4.7

5 Similar Book Recommendation

Data Used

Show Data

Top 50 Books

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1984

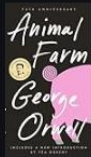
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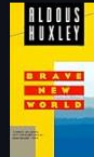
Animal Farm

George Orwell



The Handmaid's Tale

Margaret Atwood



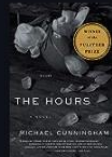
Brave New World

Aldous Huxley



The Vampire Lestat (Vampire Chronicle:

ANNE RICE



The Hours : A Novel

Michael Cunningham



cuvette

ALL THE BEST

