# PEOJECT 4 - BOOKS RECOMMENDER SYSTEM

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## PROPOSED RECOMMENDER SYSTEM

Recommender System we plan to build is a system which will recommend books to various reader(s) located in different cities having the similar choices of books. In other words, the recommender system will take into consideration the city where the reader(s) resides and will look for other reader(s) residing in the same or other nearby cities having the similar choice/taste of books.

When the system will locate the reader(s) with similar reading choices, the system will then pick books read by other readers in and around the same city and recommend those books to the reader residing in that city.

Collaborative-Filtering/Content-Based recommender system will be designed.

## BUSINESS GOALS

The goal of building this recommender system is to ensure that **location** of each of the 55 readers is taken into consideration before recommending the books to the reader(s) in any city. Finding the location/city of the reader(s) close to the other reader(s) is of prime importance in choosing similar type books to make recommendations.

## TARGET AUDIENCE

Target audience of the recommender system are the book readers based out of different locations to whom the books would be recommended.

## DATA SOURCE

In order to design the recommender system, the books and ratings dataset will be taken from the following data source:

http://nifty.stanford.edu/2011/craig-book-recommendations/

The books dataset contains a list of 55 books with their corresponding authors.

The ratings dataset has a list of 86 readers who have provided various different ratings for each of the 55 books.

The ratings table is provided below:

| Rating | Meaning |
|---|---|
| -5 | Hated It |
| -3 | Didn't like it |
| 0 | Haven't read it |
| 1 | Ok – neither hot nor cold about it |
| 3 | Liked it |
| 5 | Really liked it |

**PROPOSED MODIFICATIONS TO THE ORIGINAL DATASETS**

To implement the recommender system, we would make the following additions to the books and ratings datasets:

1) Books Dataset

Add ISBN number, Category 1 and Category 2 for each book. ISBN number, Category 1 and Category 2 will be new columns in books dataset.

Categories show which type of book it is. Example – Science, Fiction, Adventure, Young Adult, Classic

One book could belong to two categories; hence two categories have been assigned for each book.

2) Ratings Dataset

Add a location for each reader. Location will be a new column in ratings dataset.