Item Collaborative Filtering using Hadoop MapReduce in Java.

Data Analytics Project submitted

by

Aman Chopra

Reg. No. 140911358

Roll. No. 44(A2)

and

Suvimal Yashraj

Reg. No. 140911394

Roll. No. 51(A2)

Department of

Information and Comunication Technology,

MIT, Manipal

MANIPAL INSTITUTE OF TECHNOLOGY

A Constituent Institute of Manipal University, Manipal

October 2017

ABSTRACT

Recommendation system is based on the historical records of user access, purchasing records and relation between items to construct interest model, but in this era of information explosion, in which we always get huge amounts of information, the efficiency of a single common computer will not satisfy the requirement and the super computer will cost too much. In order to solve the problem, we have tried to use MapReduce to implement the recommendation system.

In this project, we have built a movie recommendation system based on **Item Collaborative Filtering using Hadoop MapReduce in Java**. Data comes from the training dataset of Netflix Prize Challenge.

The item-based collaborative filtering recommendation algorithm figure 1 is the most widely used recommendation algorithm . Its principle is based on the users evaluation of items. The purpose is to find the similarity between users, and recommend items to the target user according to the records of the similar users. Based on the users ratings of the movies, our project recommends other movies that the user may be interested in.

Keywords: Item-based collaborative filtering; recommendation; MapReduce.

	Movie 1	Movie 2	Movie 3
Ted	4	5	5
Carol		5	5
Bob		5	?

Figure 1: Item Based Collaborative Filtering Technique