The Great Recommendation Challenge

Week 1

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Preliminary Requirement

There are three bugs in the program that has been found and successfully fixed.

alg.ub.predictor. MeanPredictor.Java

MeanPredictor.java contains bugs in the for loop block where userProfileMap only select the first user profile and does not iterate over all the neighbours so it has been fixed by changing the index from fixed '0' to a variable 'i'

similarity.metric. Cosine.Java

The formula contains minor error. There is a negative sign where is not suppose to be. It has been removed.

alg.ub.neighbourhood. kNearestNeighbourhood

The 'k' variable is not used and not in effect. K Nearest Neighbourhood algorithm needs to specify a number of neighbours which is k so the algorithm must stop when adding more neighbours when it reach the limit of nueghbours.

Minimum Requirements

similarity.metric. Pearson.Java

Pearson algorithm has been added as similarity metric to the similarity metric package.

Similarity improvements

We used significance weighting to improve Pearson algorithm in Pearson. Java.

Prediction generation

alg.ub.predictor.Resnick.Java has been added to alg.ub.predictor and used to improve predictions.