COMP40320 Recommender Systems
Case-based Recommender Assignment
Kushal Mishra
15201718

Task 1:

For executing task 1 have created 4 java file in package alg. The file name are ExecuteMeanOverlap.java, ExecuteMeanJaccard.java, ExecuteMaxOverlap.java, ExecuteMaxJaccard.java to get MeanOverlap, MeanJaccard, MaxOverlap, MaxJaccard respectively.

For getting the Max recommender, I have created a new class in alg.recommeder package named as MaxRecommender.java to implement the max case similarity.

To plot precision vs. recall for all combination of scoring function (mean vs. max case similarity) and feature similarity metric (Overlap vs. Jaccard), I have made four java file in package alg. The file name are ExecuteMeanOverlap.java, ExecuteMeanJaccard.java, ExecuteMaxOverlap.java, ExecuteMaxJaccard.java.To plot graph, I have used Ms-Excel. There are three graph in the excel file, one for mean recommender(overlap & jaccard), one for max recommender(overlap & jaccard), and one containing all four graphs for better comparing – the name this common graph is Graph Precision vs. Recall.

Task 2:

For Executing task 2, run Execute.java for alg package.

For completing task 2, I have changed DatasetReader.java in util.reader package. To get popularity I have used userids to get the id of each user so that I can retrieve each movie's popularity and have for loop for it. For getting meanrating, I have used sumrating and have divided it from the popularity which I got previously.

For completing this task, I have also updated the definition for MovieCase.java from the package alg.cases to add the feature of popularity and meanrating and to retrieve it have added the get method for them respectively.

The popularity and meanrating deals with the integer and hence have added the symmetric and Asymmetric definition with their formuals in it. Have added this in FeatureSimilarity.java file in package alg.feature.similarity.