Data Scientist Practical Exercise

You are provided the browsing behavior of website users looking at hotels within a city. You know which continent each user is from, each user's gender, and the star rating of each hotel in the city. The identifiers of users, hotels, and continents have been anonymized for privacy reasons.

Predict for each user the next hotel they will look at which is not already in their browsing history. Your predictions should be in a tab-delimited file with a column for user and a column for hotel. Your results will be evaluated in terms of predictive accuracy against a test dataset.

Justify your choice of approach to the problem and why you chose it over other possible approaches. Provide your interpretation of the problem and the dataset.

In addition to your predictions, please include the code you used to produce them. The code should work in an open source environment. Include any details required to make it run.

Included files:

activity.txt - what hotels each user looked at (the order is arbitrary and can be ignored)

users.txt - users, home continents, and gender

hotels.txt - all hotels and their star ratings

Please feel free to ask any questions to: George Bezerra (gbezerra@tripadvisor.com)