Practice Quiz

1. For the User Profile-based Recommender System Lab, did you generate course recommendations based on user profiles and course genre vectors?
2. For the User Profile-based Recommender System Lab, did you answer the question, “On average how many new/unseen courses have been recommended to each user?”
3. For the User Profile-based Recommender System Lab, did you find the top-10 commonly recommended courses across all users?
4. For the Content-based Recommender System Lab, did you find the courses that are similar to the enrolled courses?
5. For the Content-based Recommender System Lab, did you generate course recommendations based on course similarities for all test users?
6. For the Content-based Recommender System Lab, did you answer the question, “On average how many new/unseen courses have been recommended to each user?”
7. For the Content-based Recommender System Lab, did you find the top-10 commonly recommended courses across all users?
8. For the Clustering-based Recommender System Lab, did you perform K-means clustering on the user profile feature vectors?
9. For the Clustering-based Recommender System Lab, did you apply PCA on the user profile feature vectors to reduce dimensions?
10. For the Clustering-based Recommender System Lab, did you perform K-means clustering on the PCA-transformed feature vectors?
11. For the Clustering-based Recommender System Lab, did you generate course recommendations based on the popular courses in the same cluster?
12. For the Clustering-based Recommender System Lab, did you answer the question, “On average how many new/unseen courses have been recommended to each user?”
13. For the Clustering-based Recommender System Lab, did you find the top-10 commonly recommended courses across all users?

Answer for above questions is ‘yes’

Quiz

1. For the user profile matrix you generated in the User Profile-based Recommender System Lab, what does each row represent?
   1. User profile vector
2. For the User Profile-based Recommender System Lab, which of the following best describes a user profile vector?
   1. ???
3. For the User Profile-based Recommender System Lab, how is each value calculated in the user profile matrix you created?
   1. The dot product of a user’s course ratings vector by a course’s associated genres vector
4. For the User Profile-based Recommender System Lab, what does each cell value represent in the recommender score matrix you created?
   1. A course recommendation score for a given user
5. For the Content-based Recommender System Lab, why are the values along the diagonal equal to 1 in the course similarity matrix?
   1. Because the similarity measurement of a course compared to itself is equal to 1
6. What information does the course similarity matrix discussed in Content-based Recommender System Lab convey?
   1. Displays the bag of words similarity measurements between all courses to all other courses
7. What do the indices in the course similarity matrix from Content-based Recommender System Lab represent?
   1. Courses
8. In the following code, sim\_df represents a course similarity matrix.
   1. The similarity measurement between the courses with indices 200 and 158
9. In the Clustering-based Course Recommender System Lab, which of the following ranges contains the point that indicates the optimized number of clusters in order to apply the K-means algorithm to generate the cluster label for all users?
   1. 11-20
10. In the Clustering-based Course Recommender System Lab, which of the following pairs of course genres are the most highly correlated according to the covariance matrix?
    1. Python and DataAnalysis