Grading scale;

Writing of your final report: 2%

Is your report well-organized?

Are your main ideas clearly delivered? Novelty of your project: 2%

Are there any new techniques/methods developed in your project? Clarity of Introduction: 3%

Is the problem well-motivated?

Is the problem well-formulated? Are the challenges well-discussed?

Literature review: 3%

Are the related works well-summarized and well-discussed? Method: 4%

Is your method clearly introduced? Is your method solid?

Is your method effective?

Evaluation: 4%

Is your experiment setting clear and reasonable? Do you compare with proper baselines?

Are your experimental results well-discussed?

Clarity of Code: 2%

Is your code bug-free?

Is your code easy to understand and use?

Does your code include a clear readme file which tells people how to use your code?

Abstract

Introduction

According to [American Heart Association](https://www.heart.org/en/news/2020/07/01/covid-19-pandemic-brings-new-concerns-about-excessive-drinking), when the pandemic started, alcohol consumption overall went up by 60%, with an increase of 500% in online alcohol sales. In these stressful and lonely months of quarantine, a lot of people choose to up their alcohol consumption to cope with this crazy world. However, drinking became much lonelier: breweries, tasting spaces ( taproom or retail stores), bars… are no longer widely safe and available options for many people to try out new options with their friends. When people get sick of their usual drinks, it is now much harder to discover the next new favorite. With the increase in the online sale of beers and alcohol and the difficulties for consumers to try new options - we want to build the future of beer discovery: a beer recommendation system that is your personalized online bartender, “pouring” you your next favorite cold beer.

Recommender system history & selection:

Literature Review

<https://towardsdatascience.com/introduction-to-recommender-systems-2-deep-neural-network-based-recommendation-systems-4e4484e64746>

<https://arxiv.org/abs/1708.05031>

Explanation of the algorithm/models

Baseline Models  
GMF:

MLP:

NeuMF (GMF x MLP):

Solid and thorough experimental evaluation and comparisons with existing approaches

Evaluation metrics & why

Comparison

*[****optional****] A discussion of your work's limitation and how your work can be further extended* A clear conclusion

Division of work

References

https://stackoverflow.com/questions/35393775/how-can-i-ensure-that-the-users-and-items-appear-in-both-train-and-test-data-set

<https://discuss.pytorch.org/t/merging-two-models/45637>

https://towardsdatascience.com/brief-on-recommender-systems-b86a1068a4dd

https://surprise.readthedocs.io/en/stable/FAQ.html

<https://towardsdatascience.com/introduction-to-recommender-systems-2-deep-neural-network-based-recommendation-systems-4e4484e64746>

http://staff.ustc.edu.cn/~hexn/papers/www17-ncf.pdf

Link to code (include ReadMe)