NANYANG TECHNOLOGICAL UNIVERSITY
SINGAPORE

School of Computer Science and Engineering
College of Engineering

Collaborative Filtering for Food Recommendations in NTU

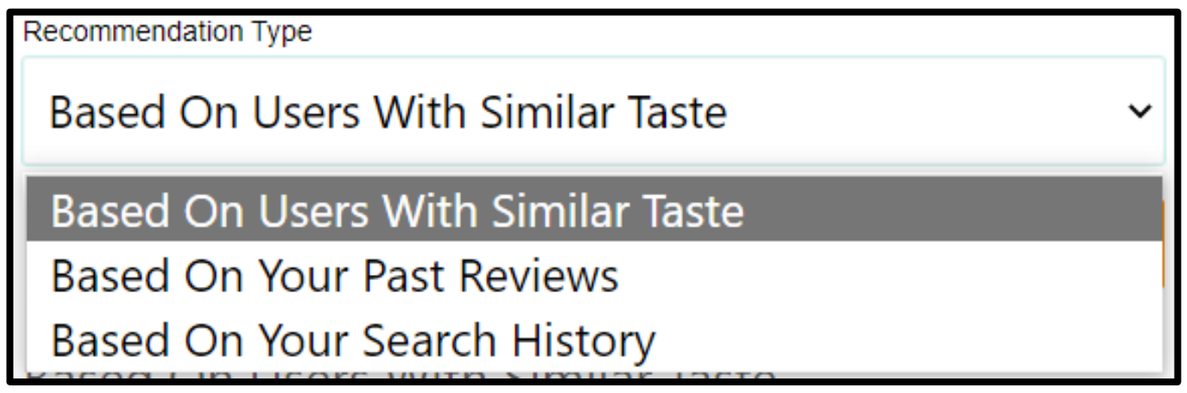
Student: Goh Shing Ling Supervisor: Hui Siu Cheung

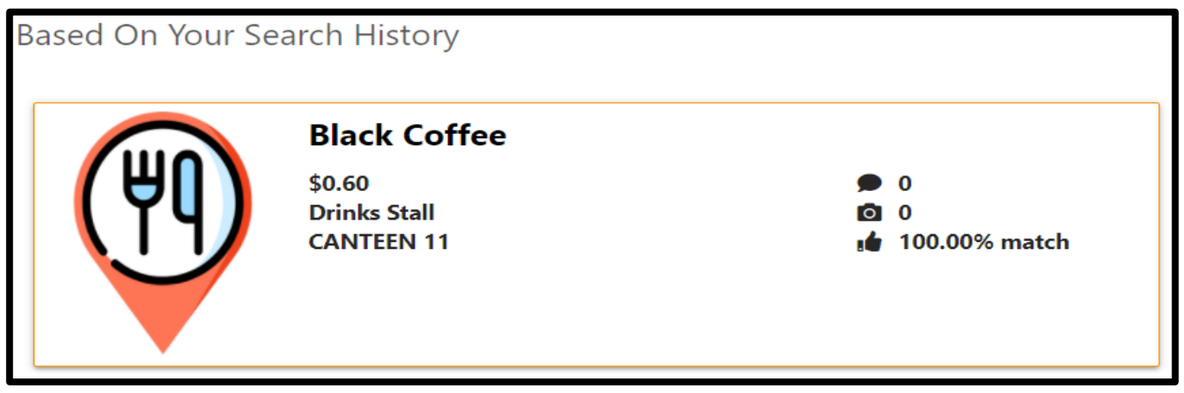
Project Objectives:

This project aims to improve on the existing Food Hunter website by implementing a recommendation page displaying curated canteen or food recommendations for each user, based on their past reviews or search history.

Features:

The recommender system combines Collaborative Filtering with Matrix Factorisation (SVD++) and neighbour similarity threshold to produce the best model for recommendations.

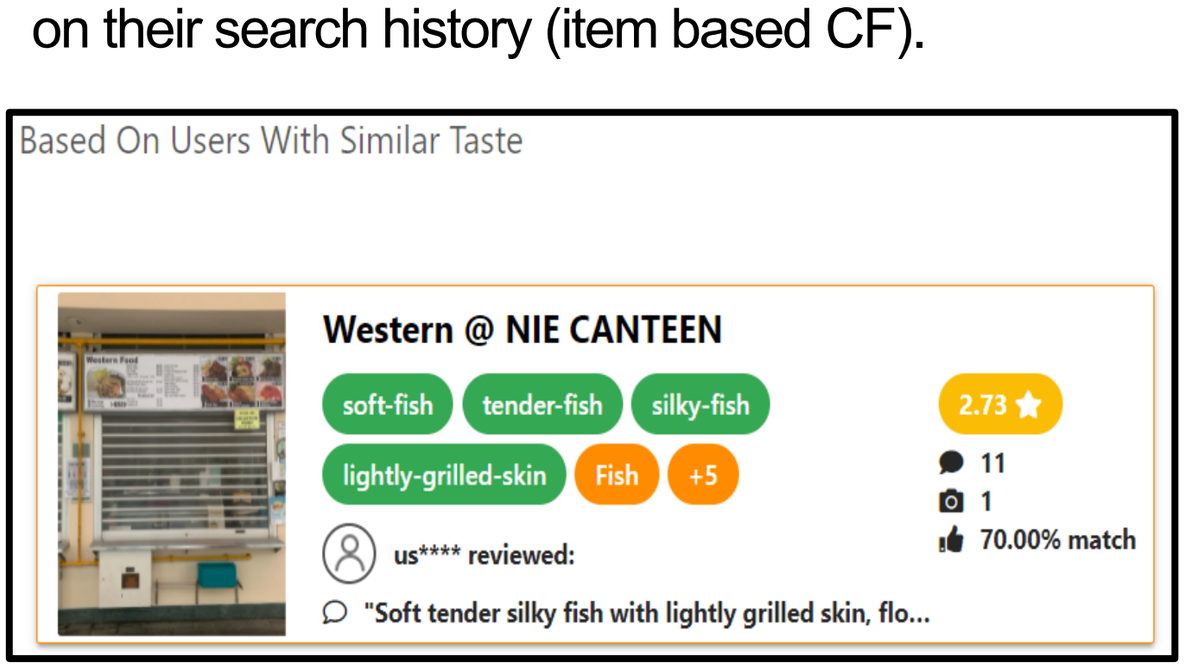


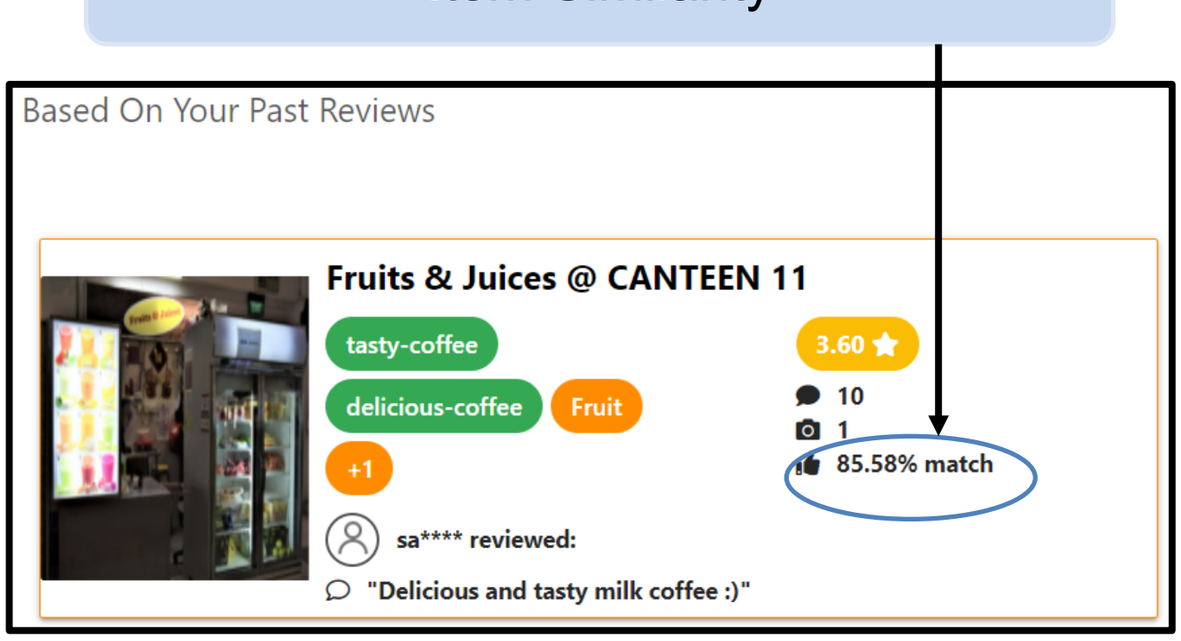


Users can select recommendations based on users with similar taste (user based CF), based on their past reviews (item based CF) or based on their search history (item based CF).

1 Based On User's Search History (Item Based Collaborative Filtering)

Item Similarity





2 Based On Users with Similar Taste (User Based Collaborative Filtering)

3 Based On User's Past Reviews (Item Based Collaborative Filtering)