COMPETITION PROJECT
INF 553

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<u>My Approach :</u>

<u>Model Based Recommendation System</u>

Single Value Decomposition :

Considered model based approach to build the recommendation system . Extracted the user_id , business_id and ratings features from train_review.json . In order to provide sufficient per-user data for models to learn, or to avoid the *cold-start* problem, users who have fewer than 1 review are filtered out.

Performed 5 fold Cross Validation in order to select the best set of parameters for our SVD Model since it utilizes gradient descent approach for training. Selected no of epochs , learning rate and regularization parameter for the model using the same .

SVD Model was fit with the training data and thereafter the predictions were generated which were written into the output file in the expected format . The RMSE on the test and blind set were calculated during the submission period on Vocareum.