Recommender System using Collaborative Filtering

**The tar package consists of the below files.**

* User User and Item Item CF.ipynb
* ALS.ipynb
* NMF\_implementation.ipynb
* Visualisations.ipynb
* NMF Latent Features calc.ipynb

**The dataset used has been taken from mk-100 dataset.**

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**1.User User and Item Item CF.ipynb**

This file runs the implementation of user user and item item colloborative filtering.

**2.ALS.ipynb**

ALS contains the alternating least squares method using Pyspark.

Also some information about the dataset using spark frame

Pyspark for jupyter notebook requires the following installation which is summarised neatly in this website.

**Please choose spark 2.3.3 . Spark 2.4.3 is having issues.**

<https://medium.com/@naomi.fridman/install-pyspark-to-run-on-jupyter-notebook-on-windows-4ec2009de21f>

**3. Visualisations.ipynb**

Contains the visualisations of the dataset

**4 NMF\_implementation.ipynb**

The implementation of Non – Negative Matrix factoristion.

**5. NMF Latent Features calc.ipynb**

Calculation for the NMF Latent features. Is done seperately as the work was done by different team members.