

## **Technical Issue of the Project:**

As doing the project for this course, I have faced several problems in order to deliver it. In exploratory analysis, I have faced an issue in regards to the dataset tags. Tags dataset didn't have correct genre. To resolve the issue, I had to create a function with the help of the professor in order to compute it.

In the machine learning part what I faced the most problems is that as we haven't learned recommendation while doing the project at the time. I had to read several articles in order to deliver the machine learning. While I have found the solution as SVD Model, I have faced problem with the memory as you can see in the technical blog of machine learning. In addition to that the SVD Model was accurate but not in the sense of being fully functional recommendation system. It is because the genre dataset had repetitive similar name with the same book. Which means that the book had at least or more two different genre names as could be fiction or young adult. I had a constrain that I could only deliver the SVD model by rating and not by both rating and genre.

In regards for the clustering, I tried to understand the way of the functionality of it to choose if it's by hierarchical or k-means. At the end of it I have chosen to be by k-means in order to see that the rating is always between 3 – 4.

For the last part is the application. Unfortunately, the application couldn't be delivered as it didn't work for me. I have tried to play with the model with the code was provided by me for the pickle. However while I was trying to generate a result, the result was providing me an error.