Movie Recommendation System

**Problem description**: There are different genre of Movies, which attracts certain group of individuals. We will be Building a recommendation system and to find out which movies are liked by what kind of Audience.

The Client here will be the general audience who loves to watch movies. Since there are different genres of movies that gets released each week, most of the audience are generally confused which movies to watch. So here we will be doing an analysis of the audience who rated the movies and based on that we will be building a recommendation system. The system will recommend movies to the audience based on their interest and age group.

To achieve this, I will be using the data from MovieLens(<http://grouplens.org/datasets/movielens/>) . I have acquired the data from the website and I have three data files (movies, ratings and users) to play around.

This is a good volume of data and my approach will be to first clean the data. Since each movie has more than one Genre, it’s better if I further classify the Genre to single units. Once the Genre is grouped, I can classify them based on the ratings. So now I have the Movie Genre which are having the highest ratings.

The Second part will be to divide the Users data based on Gender. From this I can find out the Movie Genre liked by opposite sex. I can further divide my findings into different age group and occupation.

So, at the end I have narrowed the data into Gender/Age group/Occupation and the Movie Genre this group likes. In this way, we have a Movie Recommendation System which can be used to Target certain group of Audience. This will help both the General Audience and the Movie Makers. The Movie Makers can check this analysis and can make movies, which can attract a larger group of audience.

My deliverables for the project will be the code (written in iPython Notebook), Abstract and a Slide deck explaining the analysis.