CHAPTER 1
INTRODUCTION

1.1   Background

Movie Recommender system is a very important algorithm for streaming services such as YouTube, Netflix, Amazon Prime and many more. The demand for user's to keep using the service is high and to do that the company have to implement a method such that the user's will get a recommendation of preferred movie.

Recommender System is widely utilized in today's standard starting from e-commerce, games store such as Valve Steam and streaming services such as YouTube and Netflix. Streaming services have been a huge popularity for the last 5 years, starting from TV shows to Documentary even a Blockbuster movie. The advancement of technology and internet allows this magnificent works to become a reality where one can watch a movie and then the services will recommend another similar movie keeping the user in the platform as long as they can so the user will keep subscribing and continously enjoying the movie type of their favorite. A prediction algorithm that will correctly guess user's preferences is extremely important.

 Euclidean Distance, SVM and Manhattan Distance are a great example of algorithm to deal with prediction. It has been proven for some researcher's working the algorithm on Spotify's top 50 Global and some ranking system.

The expected result is the accuracy of user's preferences, and which one perform better over one another in many circumstances such as user rating, movie rating and many applicable methods. In this project the author is utilizing a comparison of Euclidean distance and manhattan distance.

Recommendation System are the program in which it performs basic computation of similarities between two entities and on that basis, the returned a target output or desired output. If we were to look at the root level of recommendation system, they are trying to find out level of similarities between two entities. The, the computed result will be used to calculate various kinds of results. In this project the expected end result of this algorithm is to show whether two popular algorithm will display and recommend a movie in similar way, far different, or no correlation

between the two, in order to achieve such goal we need to implement two algorithm with the same similarity metric or recommendation metric to make sure both algorithm perform the right measure and the result is proven correctly against many testing that is to be conducted several times in this project.

Recommendation System famously based on three concepts: 1. Popularity Model 2. Collaborative Filtering (Content based filtering or user-based filtering) 3. Matrix Factorization Techniques.

1.2 Problem Formulation

1. How far is this research will be covered?

ANS: The Research will end when the goal of prediction is reached.

2. How would this technique compare to others in terms of accuracy for the identical topics?

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1.3 Scope

Can this algorithm have an accuracy as accurate as what is happening in reality?

Assuming the prediction of both algorithm result in a good job in accuracy then both algorithm will be analyzed for which one is more accurate under certain condition. The method is said to perform a good job when the expected result returns an expected output during benchmarking or during recommending a movie to specific user Id

1.4 Objective

The objective is to conduct an analysis of Euclidean Distance and see the difference in accuracy to present the user the next recommended movies, see the differences in user's preferences, the distance between two user's in each algorithm and do an analysis on how the algorithm behave between Euclidean Distance Similarity and Manhattan Distance Score.