1. Introduction

Background

Watching movies is a big industry [1]. Many people make watching movies as their main activity to banish boredom and entertain themselves. One of the popular movies streaming services platform is Netflix [2]. There are many genres of movies on Netflix hence it's not possible for people to watch all existing movies on Netflix. Hence, this research will develop a recommender system which can ease the Netflix users to determine what kind of movies that they will watch.

Many people want to tell and discuss about the movies that they just watched to other people. Social Media is a place where people can talk about their respective opinions [3]. One of the social Medias that is often used for its user to discuss their opinion is Twitter [4]. This research will use dataset obtained from crawling tweet from Twitter discussing about movies on Netflix. Tweet data will be changed in a form of rating using Polarity Method and will be merged with rating from several websites (IMDb, Rotten Tomatoes, Metacritic). The amount of obtained dataset is 35 users and 643 different titles of movies.

Collaborative Filtering is a recommender system method which is the most popular method for now [5]. There are several kinds of Collaborative Filtering Method, one of which is Memory Based Collaborative Filtering. Memory-Based CF consists of Item-Based CF and User-Based CF [6]. Item-Based CF is a method which is calculating the similarity value between items meanwhile User-Based CF is a method which is calculating similarity value between users [1]. This research will used Person Correlation Algorithm to calculate the similarity value and topN method to take the best n similarity value.

In this research, Memory-Based CF Method will be combined with Decision Tree Learning Classification Method. After getting the best form of Memory-Based CF modeling, Decision Tree Learning Classification modeling will be carried out. This aims to select whether user-based CF or item-based CF that suit better for the dataset. The selection of user-based CF or item-based CF will be determined by which method that has higher precision and recall.

The purpose of this paper is to create a recommender system that provides a feedback in the form of label whether a movie will be recommended to a user or not. It is because to our knowledge, there is no recommender system of movie on Netflix that provides a label as the feedback. Label is better as an output because we can determine easily whether a movie will be recommended to a user or not.

The result of this research will be determined from the value precision and recall produced. If the modeling has the good precision value and recall value, the modeling will be used to get a label of a movie and give a collection recommendation of movie on Netflix to a user.

Purpose

The purpose of this paper is to create a recommender system that provides a feedback in the form of label whether a movie will be recommended to a user or not. It is because to our knowledge, there is no recommender system of movie on Netflix that provides a label as the feedback. Label is better as an output because we can determine easily whether a movie will be recommended to a user or not.

Paper Structure

the paper is structured as follows: Section II Related Work, Section III Method Definition, Section IV Experimental Result, Section V Conclusion.