# Movie Recommendation System

A recommender system refers to a system that is capable of predicting the future preference of a set of items for a user and recommend the top items. One key reason why we need a recommender system in modern society is that people have too many options to use from due to the prevalence of Internet. In the past, people used to shop in a physical store, in which the items available are limited. For instance, the number of movies that can be placed in a Blockbuster store depends on the size of that store. By contrast, nowadays, the Internet allows people to access abundant resources online. Netflix, for example, has an enormous collection of movies. Although the amount of available information increased, a new problem arose as people had a hard time selecting the movies they actually want to see. This is where the recommender system comes in.

A recommendation engine can be of three types- collaborative recommendation engine, content based recommendation engine, and hybrid recommendation engine.

Collaborative Recommendation Engine: A recommendation engine which uses collaborative filtering technique is called a collaborative recommendation engine. In collaborative filtering, a recommendation system recommends a user the products on the basis of the preferences of the other users with similar tastes. For instance, if you are listening to music on Spotify, then it is likely that the music liked by the other users with the similar taste will be suggested to you.

Content Based Recommendation Engine: As the name suggests, a content based recommendation engine recommends the relevant content to the users on the basis of their preferred features of other content. For instance, if a user searches for ‘yellow dresses’ frequently on an ecommerce website, a content based recommendation engine will suggest the user other dresses of the same color.

Hybrid recommendation engine: Collaborative filtering and content based filtering both are used widely in the recommendation systems. And most of the online businesses such as Amazon, Xbox, Hotstar, Hulu, and Spotify, to name a few, use one or both. A recommendation engine with both the collaborative filtering and content based filtering is called a hybrid recommendation engine.

For this Project, I will build Content based and Collaborative recommendation engine using movie database. I will be using below datasets from Kaggle.

Dataset Link:

<https://www.kaggle.com/datasets/tmdb/tmdb-movie-metadata>

<https://www.kaggle.com/datasets/rounakbanik/the-movies-dataset>