Group ID: 23

Students SID: 18103127(Harsh Bansal), 18103125(Rahul Nimesh),

18103002(Sahil Chaudhary)

Supervisor: Prof. Alka Jindal

MOVIE GENRE CLASSIFICATION

Motivation:

As in today's generation everybody is fond of watching movies whether one is children or adult. A lot of movies are released every year so we always try to find movie of our type as different generation can have their own choices. So we are trying to make this project for genre classification so that one can easily find out which type of movie is.

Problem statement:

This project has the aim to achieve movie genre classification based on movie poster images/movie summary. For movie viewers, movie posters are one of the first impressions used to get an idea about the movie content and its genre. Humans can get an idea based on things like colour, objects, expressions on the faces of actors etc to quickly determine the genre (horror, comedy, animation etc). If humans are more or less able to predict genre of a movie only giving a look at its poster, then we can assume that the poster possesses some characteristics which could be utilized in machine learning algorithms to predict its genre.

Proposed solution/Description:

In order to do that a machine learning model will be constructed to classify a given movie poster image/summary into genres. Since a movie may belong to multiple genres, this is a multi-label image classification problem. We will be training the model at data taken from internet then we will test the model and finally predict the genre. In this, training the model will be too crucial as if the trained model would not be accurate then our classification result will not be accurate so training the model more accurately will be the main task.

We will try to make a web platform so that user would be able to interact with a web application, which may be hosted on localhost, where they can enter the plot summary of the movie or poster and then the trained model makes the prediction about the genres of the movie.

Technologies:

As it would be a genre classification so Machine learning, classification algorithm will play major role in implementation, as we will start the project in coming days so maybe that neural network would be used too. For this keras is an opensource neural network library written in python. It is capable of running on top of tensor-flow. For interface we will use

html, css, javascript, php and we will try to use of web-framework flask to provide a better interface.
