**Abstract:**

One of the most influential virtual learning sources in the present world is YouTube which has been accessed by billions of Internet users. According to this scenario people who create YouTube videos popularly called YouTubers have increased. This project will be useful in analysing the YouTube comments given by users for the videos posted by YouTubers. It helps in knowing the thoughts of users according to the video content and helps YouTubers to post videos with better quality and content. As India has millions of users, the comments of Indian YouTube cookery channels are taken for analysis. Indians mostly use Mix-Code language in commenting i.e., Hinglish which is combination of Hindi and English languages. Different Vectorization techniques using TF-IDF, Term Frequency, Count Vectorizer, Bert Transformers, etc. are to be applied on the datasets to transfer comments to features. Supervised learning models both parametric and non-parametric models are planned to be trained using these vectorized datasets along with labels which include different classes like Questions, Suggestions, Gratitude, etc. This conduction of different combinations is to check the best prediction model based on the different evaluation methods for the Hinglish Mix-code.

**Keywords:**

Natural Language Processing, Sentimental Analysis, YouTube, Internet, Mix-Code, Hinglish, Machine Learning, Vectorization, Evaluation methods.

**Introduction:**

YouTube which is online video sharing social media platforms started from 14th February 2005 which is owned by Google in October 2006. It has billions of monthly users who watch videos billions of hours collectively for their requirements. As it is one of the best learning and research platforms, it has expanded into mobile platforms too. The Videos on YouTube includes short films, movies, documentaries, cooking channels, educational and technological related, etc. As everyone is becoming independent in their food preferences for diet control, cookery channels are very much helpful for learning the food preparation. Due to this reason, many YouTubers started doing videos based on cooking different cuisines in which some channels are very popular for their unique content.