

# K3G MUSIC V1:

Music Mood Analyzer

# **Group Members:**

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#### Introduction

K3G Music enterprises is planning a new music station which would enable listeners to listen to music based on how they feel. They plan to use Machine learning to classify songs. Acknowledging there are new songs added to their catalog on a daily basis, they intend to build a machine learning based classifier service which would classify songs as (Happy/Sad).

#### Goal

Hindi song mood classifier, Kabhi Kushi Kabhi Gham music Co. will be launched in India that will take any Hindi songs as input and will return whether the song was happy/sad. 1. Have a text box that can take Hindi songs as an input. See [9] on where to get Hindi songs in Nagari format 2. On the backend, use Google translate API [5] to translate this to English. 3. Use the modeling approach allocated to you to compute the scores

### Modeling Approach:

We have designed REST APIs by using Flask. The user will submit a song from the website. It is allowed to enter song in Hindi or English.

On the backend side, we are using Google Translator to convert Hindi songs to English. Also to analyze the tone of the song we used IBM tone analyzer API to detect the tone of the API. IBM tone analyser is giving us the various mood of the song. As we are supposed to find if the song is happy or sad, we are collecting only the happy and sad score of the analysis result.

# Discuss Model:

We tested our model using 1200 English songs data. And we were able to create the following confusion metrics.

Among 1200 songs 797 songs' mood was guessed right by our model.

Confusion Metrics:

281	270
133	516

F1 score : 0.66

# ScreenShots:

#### Input:





#### Output:



