

SMAI Project Proposal

Predict mood of the song from lyrics

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1 Project ID and Title

- **Project ID** : 44
- **Project Title** : Predict mood of the song from lyrics

2 Project Github Link

<https://github.com/manojit32/MusicMoodPrediction>

3 Team Members

- **Manojit Chakraborty** - M.Tech CSIS - 2018201032
- **Sayan Ghosh** - M.Tech CSIS - 2018202002
- **Shubham Das** - M.Tech CSIS - 2018202004
- **Siddhesh Sawant** - M.Tech CSE - 2018201031

4 Main Goal of the Project

Develop a Mood Classification System from song lyrics as well by combining a wide range of semantic and stylistic features extracted from textual lyrics.

5 Problem definition

The primary focus of the project is to develop a model that analyses a song by its lyrics and to detect the mood in the song. A few of such work have been done on English songs, but we are to explore it by also putting Hindi songs to it. The methodology used by far is the translation of songs in other languages to English and then analyse, because a lot of annotated datasets are available in English.

6 Results of the project

The project aims at developing a system to predict songs' mood and clustering them which can be used in a Recommendation System based on users' listening habit and their choice of genres. The project is also based on predicting mood of Bollywood songs by translating their lyrics to Hindi and using approaches of NLP, Polarity based Classification by combining a wide range of semantic and stylistic features extracted from the lyrics.

7 Team members and tasks for each member

- **Manojit Chakraborty**

- Studying project related research papers and literature.
- Data preprocessing and feature selection.
- Improving the model by changing certain parameters.
- Project Report Preparation

- **Sayan Ghosh**

- Studying project related research papers and literature.
- Model Implementation.
- Measuring performance of the model.
- Improving the model by changing certain parameters.

- **Shubham Das**

- Understanding and interpreting the implementations already out there.
- Measuring performance of the model.
- Reporting the results and inferences.
- Project Report Preparation.

- **Siddhesh Sawant**

- Understanding and interpreting the implementations already out there.
- Exploring places from where dataset to be created.
- Model exploration and selection.
- Project Presentation Preparation.

8 Project Milestones and Timelines

- Studying project related research papers and literature.
- Understanding and interpreting the implementations already out there. [*27th March, 2019*]
- Exploring places from where dataset to be created.
- Data preprocessing and feature selection. [*10th April, 2019*]
- Model exploration and selection.
- Model Implementation
- Measuring performance of the model. [*17th April, 2019*]
- Improving the model by changing certain parameters.
- Reporting the results and inferences. [*25th April, 2019*]
- Project Report, Presentation Preparation. [*28th April, 2019*]

9 Online Resources

- <http://www.aclweb.org/anthology/W15-5939>
- <https://github.com/rasbt/musicmood>
- <https://arxiv.org/abs/1611.00138>
- <https://www.slideshare.net/SebastianRaschka/musicmood-20140912>