

# SUBMISSION REPORT

**Project Name: Classify Song Genres from Audio Data**

## Highlights of Dataset

- 17734 rows × 20 columns
- Features of the dataset (Independent Variable: Column Name)  
bit\_rate,comments,duration, favorites,interest,listens,number
- Dependent Variable: genre\_top  
Hip-Hop =0  
Rock =1
- Training Dataset =80% & Testing Dataset =20%
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Algorithm Used	Accuracy	Mean Absolute Error	Root Mean Squared Error
Logistic Regression	0.7933464899915421	0.20665351000845786	0.4545915859411147
Linear Discriminant Analysis	0.7927826332111644	0.20721736678883562	0.4552113429922805
K Neighbors Classifier	0.7631801522413307	0.2368198477586693	0.48664139544295787
Decision Tree Classifier	0.7631801522413307	0.2368198477586693	0.48664139544295787

<b>SVM Model</b>	<b>0.7631801522413307</b>	<b>0.2368198477586693</b>	<b>0.48664139544295787</b>
<b>Gaussian NB Model</b>	<b>0.7631801522413307</b>	<b>0.2368198477586693</b>	<b>0.48664139544295787</b>

- From the above data, we observe that **Logistic Regression Algorithm** is the one to deal with this dataset.