



## SONG's POPULARITY PREDICTION

Machine Learning Model

### STEPS INVOLVED

1. Loading Data
2. Finding Null
3. Duplicates
4. Converting date to datetime & extracting Year
5. Fill Na in date column with mode
6. BOX Plot
7. EDA Preformed
8. Correlation check
9. Skewness check
10. Transformation: Label Encoder
11. Label and Feature column selection for model predictions
12. Standardization: Standard scaler
13. Train-Test split
14. Data Balancing: over sampling -> SMOTE
15. Model Training
  - a. Decision Tree
  - b. Random Forest
  - c. Decision Tree + Bagging (Reduce overfitting)
  - d. Random Forest + Bagging (Reduce overfitting)
16. Metrics