### **Project Title:**

Youtube video title classification

# **Project Description:**

We will be classifying titles based on categories and will predict category base of input of a title.

#### **Dataset Source:**

- Youtube
- Kaggle

# **Data Scraping Tools:**

Data collection will be performed using the following tools:

- Python Libraries:
  - Selenium: For extracting youtube titles.

# Preprocessing:

Cleaning: Removing irrelevant characters, standardizing format.

Tokenization: Breaking titles into words or phrases for analysis.

Normalization: Converting titles to a standard form (e.g., lowercasing).

### • Classification Model:

#### **Model Selection:**

Exploring different models like Naive Bayes, SVM, Neural Networks.

#### **Training:**

Splitting data into training and test sets.

Training the model on labeled data.

### **Validation and Testing:**

Cross-validation techniques.

Performance metrics (accuracy, precision, recall).