# YOUTUBE DATA SCRAPING AND ANALYSIS "Insights through API Integration and Data Visualization"

#### OUR GUIDE

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## TEAM MEMBERS



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Innovative Engineer

# **ABSTRACT**



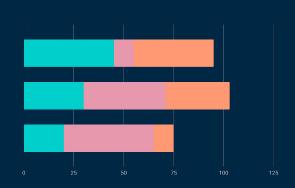
With the exponential growth of content on YouTube, understanding viewer behavior and content trends is crucial for content creators and marketers. This project addresses this by extracting data from YouTube using the YouTube API, analyzing it with Python libraries like Pandas, and visualizing the findings with Seaborn and Matplotlib. The data includes video metadata (titles, descriptions, tags, publish dates), engagement metrics (views, likes, dislikes, comments), channel information (names, subscriber counts), and video statistics over time. By analyzing this data, we aim to uncover actionable insights into viewer preferences, content performance, and trends. These insights will help content creators optimize their strategies and enhance viewer engagement, contributing to more effective content strategies and improved audience interaction.

## BASE PAPER

Title: Extracting Sentiments from YouTube Comments

YouTube is the most used social media platform, and it has been the most popular website where users can post the video. The public generally does comment, like or dislike, video-sharing on a YouTube video. Comment plays a vital role in expressing opinions and mindset, and it is used as an expression of public opinion. The massive amount of comment comes mainly on famous channels where challenges arise to analyse public opinion or behaviour regarding that particular video.

## **MOTIVATION**



#### **IMPORTANCE**

Understanding YouTube data can reveal significant insights into audience engagement and content effectiveness, which are vital for content creators and marketers.

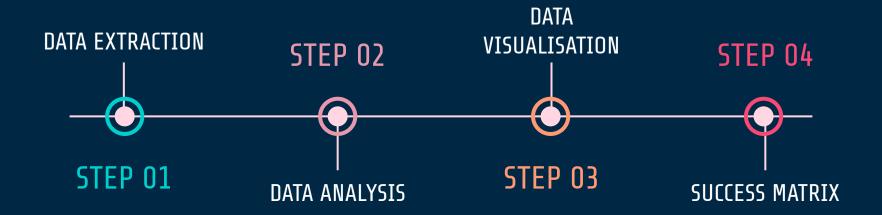
#### **OBJECTIVES**

The project aims to uncover trends and patterns in YouTube data, providing valuable information for optimizing content strategies and improving viewer engagement.

#### INSPIRATION

Personal interest in data science and the growing impact of video content on digital marketing inspired the project.

# GOAL



# OUTCOMES AND BENIFITS

This project will extract data from YouTube, including video metadata, engagement metrics, channel information, and video statistics over time. Analysing this data will help identify content trends, understand engagement patterns, evaluate channel performance, and gauge audience sentiment. The insights will enable content creators to make data-driven decisions about video length, publish times, and keyword usage, optimizing their content strategies and improving viewer engagement.

