Data Collection and Preprocessing Phase

Date	June 2024
Team ID	740107
Project Title	The Language Of You tube: A Text Classification Approach To Video Descriptions
Maximum Marks	6 Marks

Preparation Template

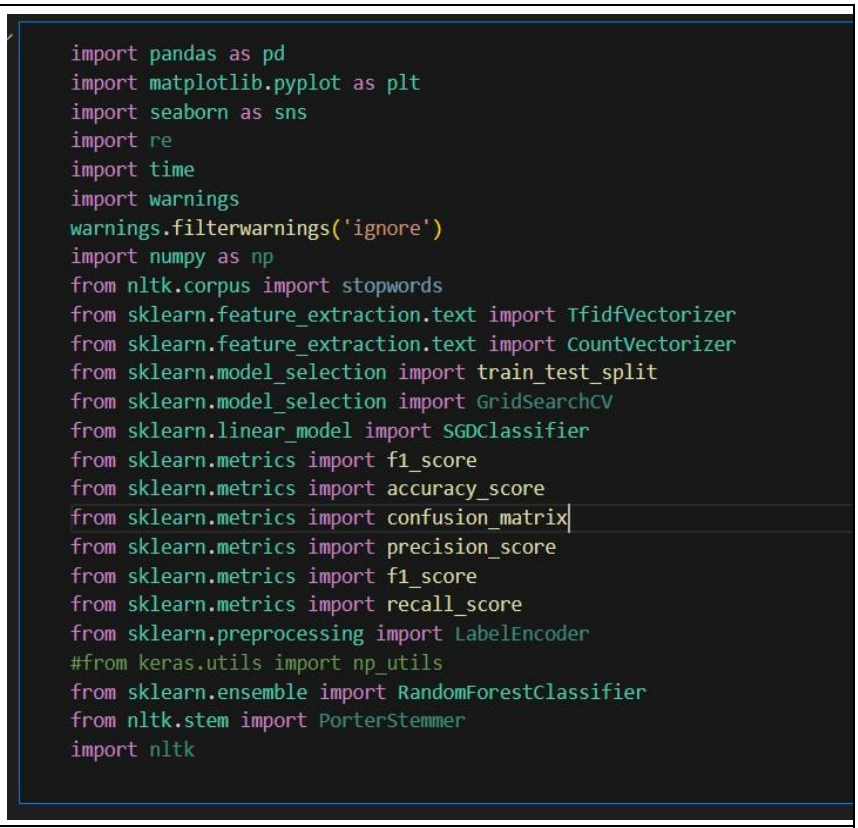
The images will be pre processed by resizing, normalizing, augmenting, denoising, adjusting contrast, detecting edges, converting color space, cropping, batch normalizing, and whitening data. These steps will enhance data quality, promote model generalization, and improve convergence during neural network training, ensuring robust and efficient performance across various computer vision tasks.

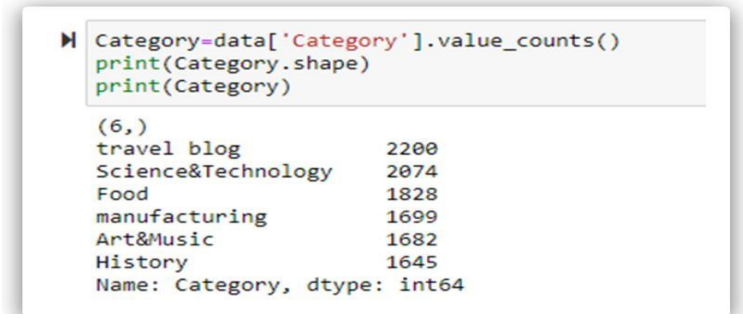
Section	Description
Data Overview	There are many popular open sources for collecting the data. Eg: kaggle.com, UCI repository, etc. In this project we have used .csv data.
Data Preparation	These are the general steps of pre-processing the data before using it for machine learning

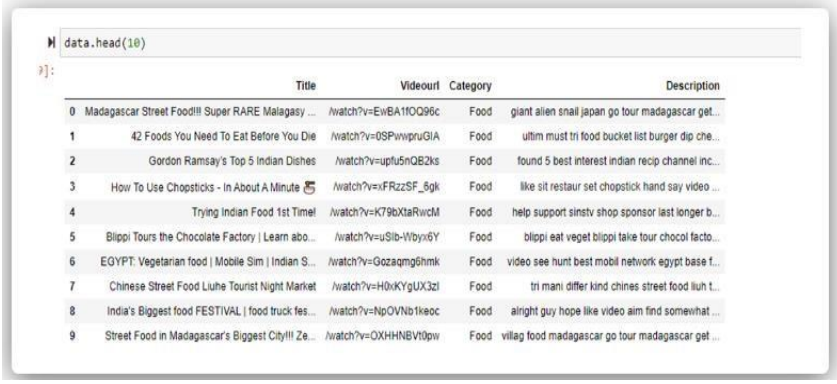
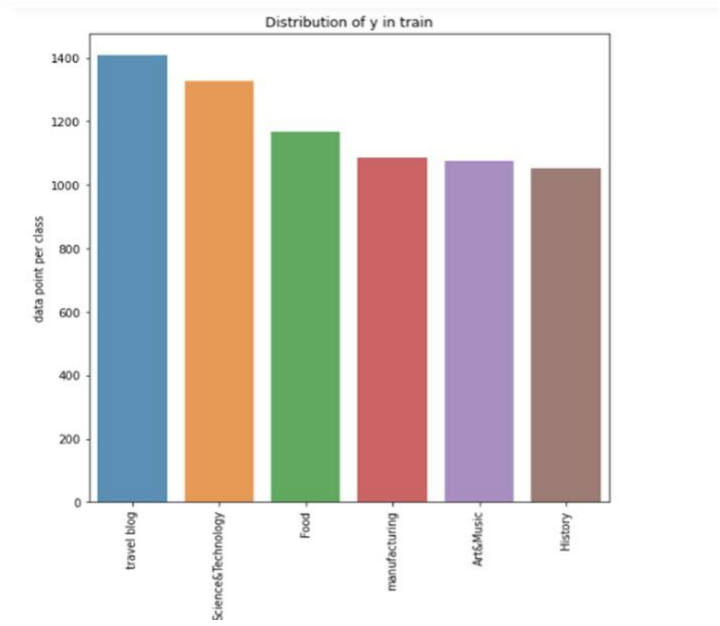
Handling missing values	We use Handling missing values For checking the null values
Handling categorical data	As we can see our dataset has categorical data we must convert the categorical data to integer encoding or binary encoding
Handling Outliers in Data	With the help of boxplot, outliers are visualized. And here we are going to find upper bound and lower bound of numerical features with some mathematical formula.

Preparation

Collect the dataset	Please refer to the link given below to download the dataset. Youtube Videos Dataset (~3400 videos) (kaggle.com)

Importing the libraries	
Loading Data	We use the code Data =pd.read_csv('YoutubeDataSet.csv') For reading the dataset

Handling missing values	

Preprocessing of Description	
Visualizing the distribution of target variable in the test dataset	

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data.head(10)
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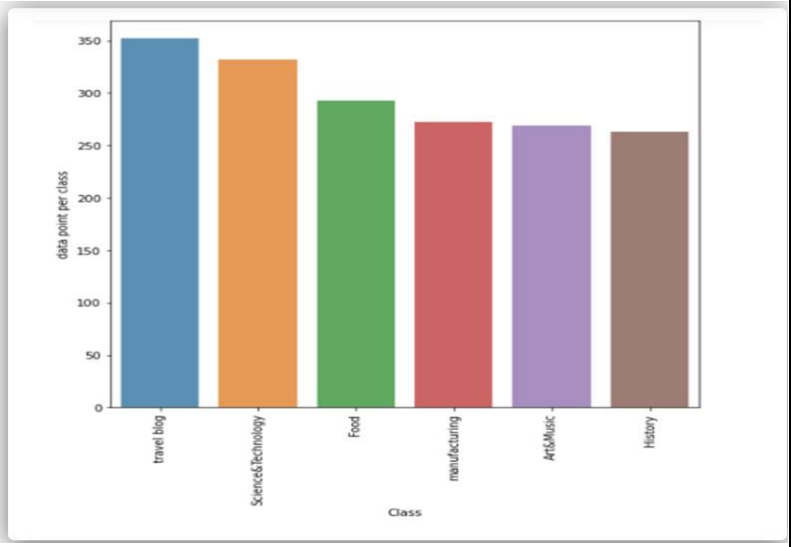
	Title	Videourl	Category	Description
0	Madagascar Street Food!!! Super RARE Malagasy ...	/watch?v=EwBA1fOQ96c	Food	giant alien snail japan go tour madagascar get...
1	42 Foods You Need To Eat Before You Die	/watch?v=0SPwwpruGIA	Food	ultim must tri food bucket list burger dip che...
2	Gordon Ramsay's Top 5 Indian Dishes	/watch?v=upfu5nQB2ks	Food	found 5 best interest indian recip channel inc...
3	How To Use Chopsticks - In About A Minute	/watch?v=xFRzzSF_6gk	Food	like sit restaur set chopstick hand say video ...
4	Trying Indian Food 1st Time!	/watch?v=K79bXtaRwcM	Food	help support sinstv shop sponsor last longer b...
5	Blippi Tours the Chocolate Factory | Learn abo...	/watch?v=uSlb-Wbyx6Y	Food	blippi eat veget blippi take tour chocol facto...
6	EGYPT: Vegetarian food | Mobile Sim | Indian S...	/watch?v=Gozaqmg6hmk	Food	video see hunt best mobil network egypt base f...
7	Chinese Street Food Liuhe Tourist Night Market	/watch?v=H0xKYgUX3zI	Food	tri mani differ kind chines street food liuh t...
8	India's Biggest food FESTIVAL | food truck fes...	/watch?v=NpOVNb1keoc	Food	alright guy hope like video aim find somewhat ...
9	Street Food in Madagascar's Biggest City!!! Ze...	/watch?v=OXHHNBVt0pw	Food	villag food madagascar go tour madagascar get ...

350
300
250
200
150
100
50
0
data point per class
travel blog
Science&Technology
Food
manufacturing
Art&Music
History
Class