

### MINI PROJECT REPORT

ON

# **Summarize News Articles with Machine Learning**

Submitted in Partial Fulfilment for The Award of Degree Of

## **Master of Computer Applications**



#### **GRAPHIC ERA HILL UNIVERSITY**

www.gehu.ac.in

**Department of Computer Applications** 

**SUBMITTED TO** 

**SUBMITTED BY** 

Manish Singh
MCA 2<sup>th</sup> (Sem) Sec B
Roll No. 26

# Title of the project

"Summarize News Articles with Machine Learning"

# **Problem Definition:**

Reading the newspaper on daily basis is important to get knowledge on the latest happenings around the world. But unfortunately because of our busy work schedule we miss certain updates.

Readers often don't have time to read through entire articles and reading only the headline and sub-heading does not inform them of all the important points discussed in the article. Also, it is not possible for news publications to prepare summaries of every article they publish. So, it may be a good idea for news GUI Applications to have inbuilt features that can summarize articles for them.

To override these problems With the "Summarize News Articles GUI Application" we can attempt to generate summaries of news articles by extracting important sentences from a news article.

This Text summarization is the process of creating a short, accurate, and fluent summary of a long text news article. It is the process of distilling the most important information for new articles. The intention of text summarization is to create a summary of a large corpus having important points describing the entire corpus.

Functionalities provided by Summarize News Articles GUI Appliction.

1. Display the Title.

2. Display the Author Name.

3. Display Publication Date.

4. Display Summary.

5. Display Sentiment.

**Hardware and Software requirements:** 

The project is developed in Python Programming Language by Using the

Visual code text editor. VS Code Software which includes a variety of custom

tools that help us in developing GUI applications.

Required Python Libraries/Modules/GUI Toolkits

• Tkinter Python Tk GUI toolkit.

• NLTK Python ToolKit

• TextBlob Python library

• Newspaper Python module

**Project Category:** GUI Application

## **Scope of the project Summarize News Articles GUI Appliction:**

A vast quantity of text data is generated on the internet, be it social media articles, news articles, etc. Manual creation of summaries is time-consuming, and therefore a need for automatic text summaries has arisen. Not only are the automatic summarization tools much faster, but they are also less biased than humans.

Text summarization is useful in many ways to summarize the textual data. Some of the uses of text summarization are:

- •To reduce the reading time of long documents
- •While researching documents, summaries make the selection process easier.
- •The text summarizes are useful for question-answer systems.

Using a text summarization Application enables commercial abstract services to increase the number of text documents to process. Several news portals such as Google News, Inshorts, etc provide short summaries of the long news article for their readers.

## **Conclusion:**

"Summarize News Articles" GUI application gives you easy access to news throughout the day and keeps you updated. It covers in-depth reporting of the current happenings in the country in summarize way. Due to the growing use of Web Application platforms on cell phones, the need for a new and genuine web GUI application is increasing. This application does exactly what it promises and includes some other useful features as well.