CMPE-255-03

**Project Report- group-3**

News Article Category Classification

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# Project Overview

In these times there are a lot of sources that generate immense amounts of daily news on the Internet. In addition to that, the demand for information by people has been growing gradually, so it is very important that the news to be classified so that users can access them quickly and effectively. We attempt to understand the current known categories can be used for personalizing news consumer based on past affinity towards certain news domains. In this project we have created an application that is capable of categorizing the news, given its headlines and short descriptions.

## Problem Statement

The goal is to build classifiers that take ‘news headlines’ and ‘short descriptions’ as inputs and provide the category most relevant to the news article. In this way, our classification model for news category classification could be used to identify the category of the current news. It is multi-class classification problem.

**Literature Review**

We came across similar work done in the past which are mentioned below: -

* Using machine learning to classify news article – Bachelor thesis by Jesper Holmström, Eleonor Lagerkrants

Link: <http://lnu.diva-portal.org/smash/get/diva2:1058899/FULLTEXT01.pdf>

* Newspaper Article Classification using Machine Learning Techniques – Ijitee Paper

By Himay Jesal Desai, Bharat Thatavarti, Aditi Satish Mhapsekar

**Metrics**

Accuracy is a common metric for classifiers; it takes into account both true positives and true negatives with equal weight.

accuracy = (true positives + true negatives)/dataset size

# Data Exploration

# Data Cleaning

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# Algorithms and Techniques

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# Implementation

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# Project plan and task distribution

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# Results

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# Justification

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# Conclusion

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