International Journal of Research Publication and Reviews

Online Assignment Plagiarism Checker

[1]Priyanshu Rathore, [2]Rakesh Nagar, [3]Ritik Patidar, [4]Rohit Mandloi

[1,2,3,4] B. Tech, Acropolis Institute of Technology & Research.

Abstract: -

Plagiarism is a significant issue in academia and has the potential to be significant in many areas of the educational system. Plagiarism by students occurs in a variety of contexts, including projects, essays, and homework. Academics are aware that knowledge can promote worthwhile learning experiences, but when students plagiarise by copying assignments and receiving credit for work they have not completed, these experiences are harmed. In this project, we'll create a system for detecting plagiarism that, whenever a student turns in an assignment, determines whether it's been copied or not by comparing it to work from other students. To do this, we will employ natural language processing and data mining technologies.

Key-Words: - Online Assignment Plagiarism Checker, Pyhton , Flask.

I. Introduction

The definition of plagiarism is taking someone else's ideas or words and passing them off as one's own. The plagiarism data is analysed using this grammar and plagiarism checker system. The quality of students' education is impacted by plagiarism, which lowers the nation's economic standing. Plagiarism occurs when sentences are changed from one form to another, which can be detected using WordNet, and when keywords and verbatim overlaps are comparable. The similar text that matches and is measured by our plagiarism detection. Both the student's life and their learning style have altered as a result of the internet. It makes their duty simpler and enables the pupils to go deeper into their approach to learning.

II. Problem Formulation

The definition of plagiarism is taking someone else's ideas or words and passing them off as one's own. The plagiarism data is analysed using this grammar and plagiarism checker system. The quality of students' education is impacted by plagiarism, which lowers the nation's economic standing. Plagiarism occurs when sentences are changed from one form to another, which can be detected using WordNet, and when keywords and verbatim overlaps are comparable. The similar text that matches and is measured by our plagiarism detection. Both the student's life and their learning style have altered as a result of the internet. It makes the task easy for the students and enables them to go deeper into their learning strategy.. Many methods are employed in detecting plagiarism

III. Literature Review

As the tremendous success that social network services have gained during the past few years, it's also regarded as the third revolutionary application of the Internet after search engine and Web 2.0 applications.

IV. Methodology

Web application of Plagiarism Checker using Python-Flask. TF-IDF and cosine similarity is a very common technique. It allows the system to quickly retrieve documents similar to a search query. Similarly, based on the same concept instead of retrieving documents similar to a query, it checks for how similar the query is to the existing database file.

Steps:

1. User enters a query

2. Query gets processed (Uppercase to lowercase, Removal of punctuation marks, etc.)

3. Calculations are done (Term Frequency, Cosine Similarity)

4. The Plagiarism Percentage is returned on the web page

Python-Flask

1. Flask is a light-weight web framework for Python

2. Easy to work with (Same syntax as of Python)

3. While Flask addresses itself as a "micro-framework", it is not lacking in features or power, especially with a clutch of extensions to support features such as authentication, databases and so on

4. Comprehensive documentation available

Rabin-Karp algorithm:

It is a search algorithm that searches for a substring pattern in a text using hashing. It is very effective for multi-pattern matching words. The accuracy level can be adjusted based on this feature. The hash function is a function that determines the feature value of a particular syllable fraction. It converts each string into a number, called a hash value. Rabin-Karp algorithm determines hash value based on the same word.

Some models of our system are:
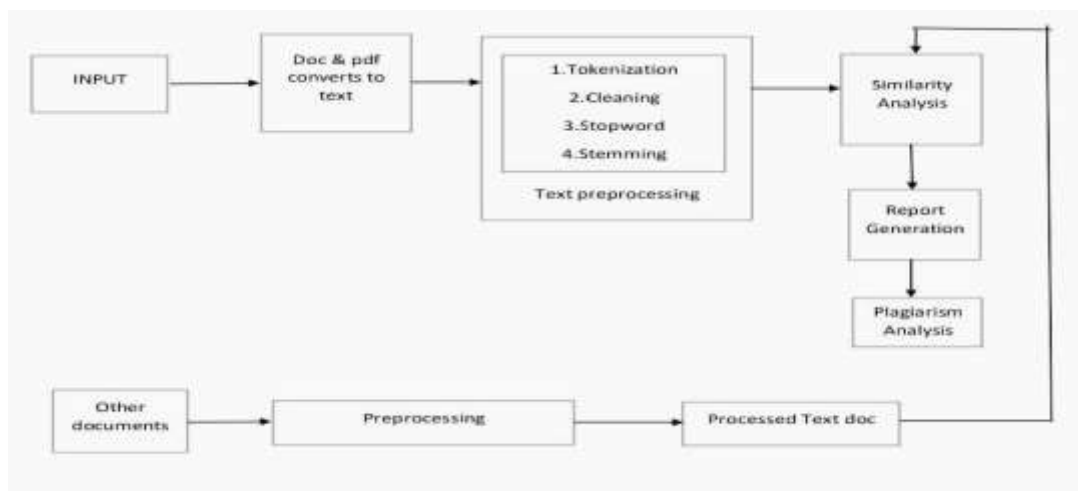
V. Result Discussions

In proposed system, we are going to develop a system to detect the plagiarism in the academic assignment which will help to stop copying the assignment of other student and will improve the quality of education and also will help to improve personal skills of student and student can also check the grammar from the assignment. In this system plagiarism detector measures the similar text that matches and detects plagiarism. As well symantical checking will be also done with respect to assignment. For detecting the plagiarism we will use data mining algorithm and natural language processing.

1. This system can be viewed by students and teachers also.

2. History is available for both students and teachers.

3. Symantical plagiarism checking is also possible.

4. Fast processing of assignments.

VI. Conclusion

Plagiarism involves reproducing the existing information in modified format. Today it is found in almost all fields of human activities so a lot of attention is given to identify and detect plagiarism. Some experimental results show that in general there is improvement performance in the use of hybrid machine learning methods in the case of plagiarism. However, the hybrid method does not always produce better performance. So we have designed a process using machine learning method i.e k-NN which will improve the performance. Comparing all methods in this area, we can conclude that the k-nearest neighbour method is much useful in pattern recognition as well as to find copied dataset to detect plagiarism. Our method provide more accuracy and efficiency to detect plagiarism.

Acknowledgment

References

[1]. Imam Much Ibnu Subroto and Ali Selamat, "Plagiarism Detection through Internet using Hybrid Artificial Neural Network and Support Vectors Machine," TELKOMNIKA, Vol.12, No.1, March 2014, pp. 209-218.

[2]. Upul Bandara and Gamini Wijayrathna ,"Detection of Source Code Plagiarism Using Machine Learning Approach," International Journal of Computer Theory and Engineering, Vol. 4, No. 5, October 2012, pp.674- 678.

[3]. Salah Alzahrani, Naomie Salim, Ajith Abraham, and Vasile Palade," iPlag: Intelligent Plagiarism Reasoner in Scientific Publications," IEEE World Congress on Information and Communication Technologies, 2011.