MAR ATHANASIUS COLLEGE OF ENGINEERING, KOTHAMANGALAM

DEPARTMENT OF COMPUTER APPLICATIONS

MAIN PROJECT SYNOPSIS

TOPIC: Automated Essay Scoring (AES)

Automated Essay Scoring (AES) is an innovative tool designed for the evaluation and scoring of essays through computer programs. With the potential to significantly reduce assessment time and enhance the realism of scores when compared to human evaluations, AES holds promise for both educators and learners. The proposed project aims to develop an automated essay assessment system utilizing machine learning techniques and neural networks.

The automated essay scoring project demonstrates a holistic approach to enhance accuracy and efficiency in the assessment process. The comparative study initially employs traditional machine learning algorithms such as logistic regression, and gradient boosting on the dataset. The project then extends its capabilities by applying neural network techniques, emphasizing distinct pre-processing steps, including Word2Vec for word embedding and LSTM layers to capture the importance of data sequences. The final Dense layer predicts essay scores. Furthermore, a web application is created using the Flask framework. This comprehensive methodology combines machine learning and neural network approaches to provide a robust solution for automated essay scoring.

In conclusion, the Automated Essay Scoring (AES) project presents a comprehensive and forward-looking approach to essay assessment. By seamlessly integrating machine learning and neural network methodologies, the project addresses the need for efficient, accurate, and user-friendly automated essay scoring. Leveraging the 'The Hewlett Foundation: Automated Essay Scoring Dataset' by ASAP, the project aims to contribute significantly to the realm of educational technology, fostering a more streamlined and effective essay evaluation process.

REFERENCES

Dataset: https://www.kaggle.com/c/asap-aes/data

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