## **Advanced Lecturing Assistance and Student Guidance System**

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**Abstract.** Learning Management System (LMS.) is a common platform used in universities for distance learning activities. Most of the universities use free and open-source platforms. like Moodle and Learn Press in their Systems Those are common solutions for worldwide usage, but they are lacking some important features such as adaptive learning, auto-answer marking, identification of weak students, etc. This survey involved the undergraduates and lecturers of different study areas in Sri Lanka to analyze the effectiveness of the existing system and provides recommendation for a new enhanced, smarter, more user friendly, and more useful functions to increase the usability and effectiveness of the system. This survey was helped to identify the drawbacks of an existing system, and identification of most necessary features, and difficulties in the current system, and implement the new functions according to the requirement of users. This research looks towards the future requirement to suggest developing a new advanced learning management system for the betterment of learning.

**Keywords:** Natural Language Processing, Adaptive Learning, Data Science