

## ABSTRACT

This research develops an OpenAI Assistant API interactive bot for learning management system (LMS) to develop an artificial intelligence (AI)-based interaction bot that improves interactivity and effectiveness in the learning process at university. The focus is on adding chatbot features to Telkom University's LMS teaching and learning platform, with the aim of supporting the teaching and learning process of students and lecturers.

This study develops the potential of chatbot to support independent and interactive learning through literature review, user needs analysis, and application design. The chatbot is designed to answer questions about courses and provide recommendations on learning content. Requirements analysis and design includes researching user needs through interviews and surveys, developing target user characteristics, and identifying features needed based on user feedback. Application design includes application architecture, use case diagram, application interface design, and database that supports chatbot operation.

The results show that integrating a chatbot into an LMS improves the efficiency of the learning process by providing direct support to students and instructors, facilitating access to learning materials, and increasing interaction between users. This application is expected to provide an innovative solution to overcome the challenges of online learning and enrich the learning experience in the LMS environment.

**Keywords:** Artificial Intelligence, Learning Management System, Chatbot, OpenAI