



MOODLE PLUGIN: STUDENT PERFORMANCE PREDICTION AND CHATBOT
BLOCKS

UNDERGRADUATE THESIS

Submitted as one of the requirements to obtain
Sarjana Komputer (S.Kom.)

By:

FACULTY OF COMPUTER SCIENCE
INFORMATICS STUDY PROGRAM
CIKARANG
AUGUST 2025

SIMILARITY INDEX REPORT



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By:
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ABSTRACT

In the modern educational landscape, Learning Management Systems (LMS) like Moodle are essential. However, they often lack the tools for proactively identifying struggling students and providing timely, personalized support, leading to disengagement and poor performance. This project addresses this gap by developing a Moodle plugin: the Student Performance Predictor. The Student Performance Predictor uses machine learning algorithms to analyze student activity data, proactively identifying at-risk learners before their performance declines. This allows educators to make timely, data-driven interventions. This plugin creates a proactive educational support system within the Moodle environment. The system enhances the learning experience by making it more responsive and personalized, ultimately aiming to improve student engagement, retention, and academic success. Keywords: Moodle, Educational Technology, Student Performance Prediction, Machine Learning, E-Learning, Personalized Learning.

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