IDENTIFY SLOW LEARNERS FOR REMEDIAL TEACHING AND CAPACITY BUILDING FOR INNOVATIVE METHODS

A PROJECT REPORT

Submitted by,

NAME	ROLL NO
MEDA SAI SANTOSH	20211CEI0112
SHAIK MAHAMMED SAIF	20211CEI0117
VALIPIREDDY VENKATA SAINATH REDDY	20211CEI0119
PULLALACHERUVU MAHITHA	20211CEI0120

Under the guidance of,

Dr. JOE ARUN RAJA

in partial fulfillment for the award of the degree

of

BACHELOR OF TECHNOLOGY

IN
COMPUTER ENGINEERING
(ARTIFICIAL INTELLIGENCE & MACHINE LEARNING)

AT

GAIN MORE KNOWLEDGE
REACH GREATER HEIGHTS

PRESIDENCY UNIVERSITY

BENGALURU

MAY 2025

PRESIDENCY UNIVERSITY

PRESIDENCY SCHOOL OF COMPUTER SCIENCE AND ENGINEERING

CERTIFICATE

This is to certify that the Project report **"IDENTIFY SLOW LEARNERS FOR REMEDIAL TEACHING AND CAPACITY BUILDING FOR INNOVATIVE METHODS"** being submitted by **"MEDA SAI SANTOSH 20211CEI0112, SHAIK MAHAMMED SAIF 20211CEI0117, VALIPIREDDY VENKATA SAINATH REDDY 20211CEI0119, PULLALCHERUVU MAHITHA 20211CEI0120"** in partial fulfillment of the requirement for the award of the degree of Bachelor of Technology in Information Science and Engineering is a Bonafide work carried out under my supervision.

Dr.JOE ARUN RAJA
Associate Professor
PSCS
Presidency University

Dr. GOPAL KRISHNA SHYAM
Professor & HoD
PSCS
Presidency University

Dr. MYDHILI NAIR
Associate Dean
PSCS
Presidency University

Dr. SAMEERUDDIN KHAN
Pro-Vice Chancellor - Engineering
Dean –PSCS / PSIS
Presidency University

PRESIDENCY UNIVERSITY

PRESIDENCY SCHOOL OF COMPUTER SCIENCE AND ENGINEERING

DECLARATION

We hereby declare that the work, which is being presented in the project report entitled **"IDENTIFY SLOW LEARNERS FOR REMEDIAL TEACHING AND CAPACITY BUILDING FOR INNOVATIVE METHODS "** in partial fulfillment for the award of Degree of **Bachelor of Technology** in **Computer Engineering (Artificial Intelligence and Machine Learning)**, is a record of our own investigations carried under the guidance of **Dr.JOE ARUN RAJA, ASSOCIATE PROFESSOR, School of Computer Science and Engineering , Presidency University, Bengaluru.**

We have not submitted the matter presented in this report anywhere for the award of any other Degree.

NAME	ROLL NUMBER	SIGNATURE
MEDA SAI SANTOSH	20211CEI0112	Santhak
SHAIK MAHAMMED SAIF	20211CEI0117	Saif
VALIPIREDDY VENKATA SAINATH REDDY	20211CEI0119	Vsainath
PULLALACHERUVU MAHITHA	20211CEI0120	P.Mahi

ABSTRACT

In today's diverse educational environments, students exhibit varied learning capabilities, with some struggling to meet standard academic expectations due to differences in cognitive, behavioral, and emotional development. This project introduces an AI-enabled web-based system designed to identify slow learners through a detailed analysis of their academic performance and behavioral traits. By collecting and processing student assessment data — including subject-wise scores, time spent on tasks, topic-wise difficulties, and behavioral inputs such as motivation, attention span, and frustration tolerance — the platform evaluates each learner's strengths, weaknesses, and preferred learning styles.

The core functionality of the system is to recommend personalized teaching and learning interventions that align with the student's unique needs. These recommendations include suitable learning methods (e.g., visual, auditory, kinesthetic), remedial strategies, specialized exercises, and digital resources aimed at bridging conceptual gaps and improving engagement. The solution also tracks progress over time, helping educators monitor improvement in scores, behavioral adaptation, and emotional resilience.

From an institutional perspective, the application supports teachers by offering data-driven insights that aid in modifying curriculum delivery and identifying students who need early intervention.Long-term, the system aims to reduce dropout rates, enhance academic consistency, and build scalable intervention models that can be replicated across schools and learning institutions.

The strategy not only improves academic achievement but also supports emotional resilience, motivation, and learner independence. Scalability across multiple levels of education makes the system a strong candidate for future, data-driven, and learner-focused education.