Name: Neural Nexus

Potential Topic *refer to PEAS method:

Performance - The system's primary goal is to assist students in learning mathematics more effectively.
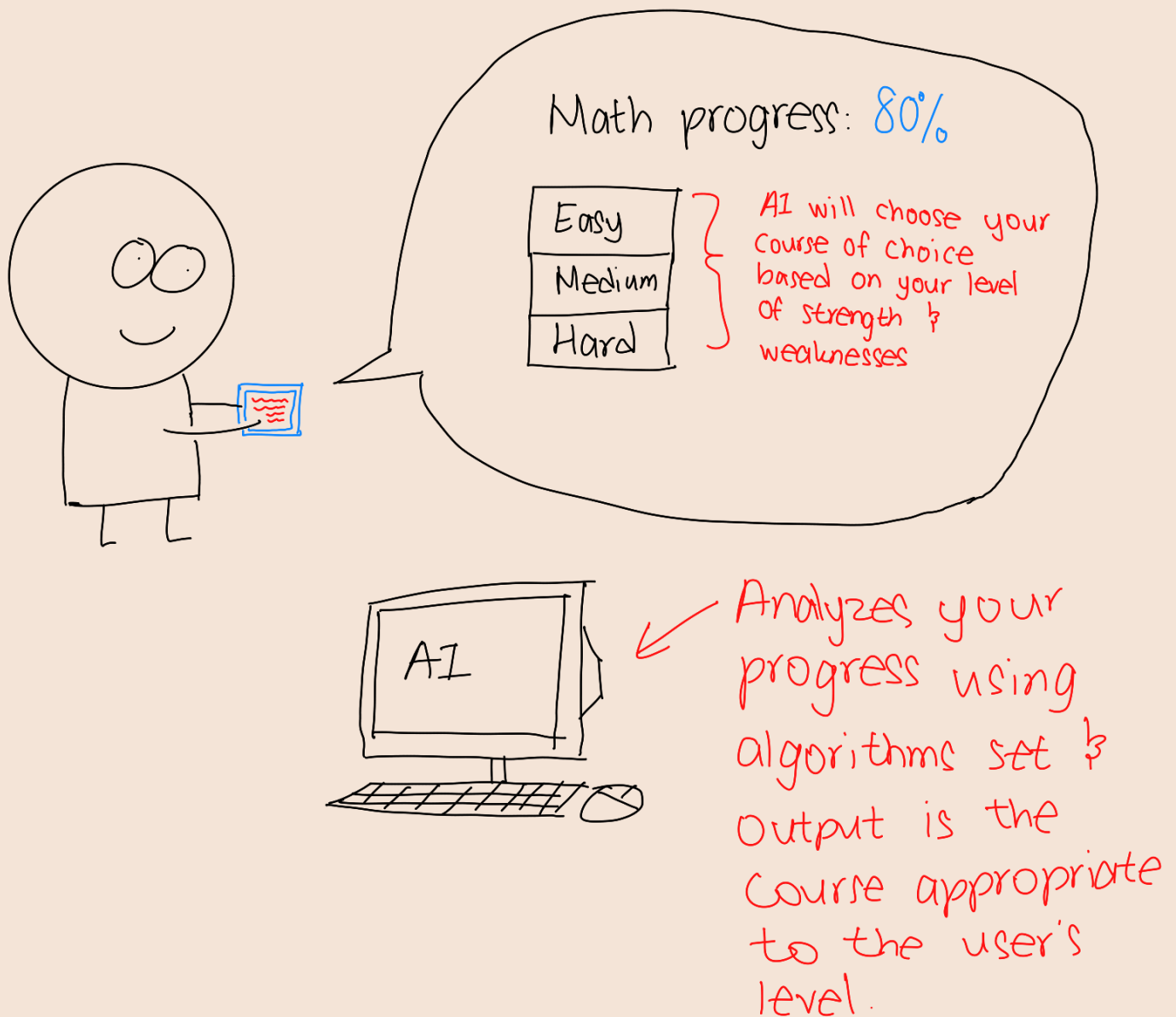
Environment - The system will operate in an online educational environment, where students can access lessons, exercises, and assessments.

Actuators - The system will interact with students through a user interface, providing lessons, quizzes, and feedback.

Sensors - It will receive input from students, such as responses to quiz questions and browsing behavior.

Objectives *at least 3:

1) Adaptive Learning: Develop an AI-based system that adapts to individual students' learning styles and pace. It will assess students' strengths and weaknesses and provide personalized lessons and practice exercises accordingly.

2) Real-time Feedback: Implement a feature that provides instant feedback to students on their answers to math problems. The system will identify errors, explain the correct approach, and offer hints when students struggle with particular concepts.

Question 10

$$x^2 + 2 = ? \quad , \quad x = 3$$
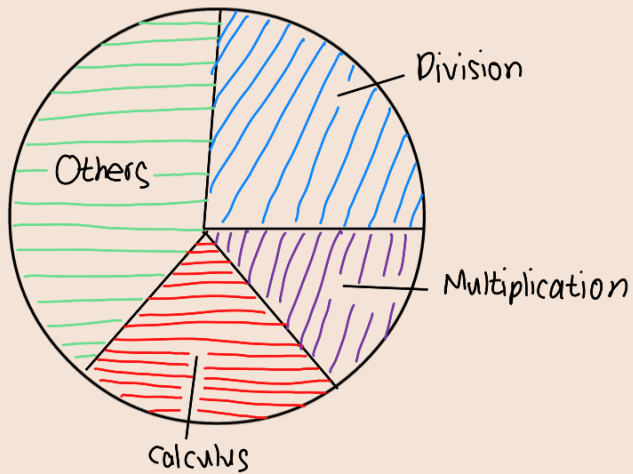
Answer :

$$(3)^2 + 2 = 10 \quad \text{x wrong}$$

Correct answer : 11

Comment : You should always double check your calculation before submitting.

James Charles
Lvl 10

Errors : 10

Correct : 5

Improvement on : Calculus
Chapter

3) Progress Tracking: Create a system that tracks students' progress and provides both students and teachers with comprehensive reports. This will allow for monitoring and evaluating students' performance over time.

Synopsis: The project aims to develop an Intelligent Tutoring System (ITS) for mathematics education, leveraging AI techniques to enhance the learning experience. The system will be designed to adapt to individual students' learning needs, provide real-time feedback, and track progress. By personalizing the learning process and offering immediate guidance, it aims to improve students' mathematical proficiency and provide educators with valuable insights into students' learning journeys. The system will be accessible online, making it convenient for students to engage with mathematics education at their own pace.