Research project plan

How does the implementation of recursion in AI using the minimax algorithm improve the decision-making process in a chess game?

Research Method:

a. Literature review: Research existing literature on recursion, minimax algorithms, and their applications in AI chess games.

b. Analyze the code: Examine the given AI class for the chess game, focusing on the recursive implementation of the minimax algorithm.

c. Test different depth levels: Observe how changing depth levels impacts the AI's decision-making process and the overall game outcome.

d. Evaluate the findings: Discuss the implications of the research findings and draw conclusions about the effectiveness of recursion and the minimax algorithm in the AI chess game.

Relevance to the Unit's Learning Outcomes:

This research project is relevant to the learning outcomes of the unit as it demonstrates a deep understanding of object-oriented programming, recursion, and AI algorithms. It also showcases the application of these concepts in real-world scenarios, such as improving AI decision-making in a chess game.