ABSTRACT

The project titled "AI-Powered Clinical Case-Based Learning Support Tool Using Generative AI" is designed to develop an intelligent educational platform that supports students in improving clinical understanding and healthcare-related analytical skills. The system generates healthcare-related clinical case scenarios and allows students to submit responses or diagnostic observations through a digital interface.

The proposed system uses Generative AI and Natural Language Processing techniques to analyze user input and provide automated educational feedback, explanations, and learning guidance in a structured format. The platform helps students practice clinical reasoning and case-based learning in an interactive academic environment.

The project mainly focuses on supporting healthcare education through AI-assisted learning and improving accessibility to clinical practice scenarios. The developed system is intended only for educational and academic support purposes and does not replace professional medical diagnosis or healthcare supervision.

Overall, the project demonstrates how Generative AI can be integrated into healthcare education systems to provide intelligent academic assistance, improve student engagement, and support digital clinical learning environments.

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