AI Educational Chatbots Development with MathWorks Integration

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This project aims to develop AI Educational Chatbots that integrate MathWorks software, enhancing the AI for Education Project at Northeastern University. Our goal is to leverage Generative AI and Chatbots to create personalized learning experiences, making education more adaptive, interactive, and tailored to individual student needs. This is in collaboration with an AI for Education effort with the Northeastern Provosts office.

The development of AI Educational Chatbots will heavily utilize MathWorks products, particularly MATLAB and Simulink, for algorithm development, data analysis, and the creation of interactive educational content. This project directly aligns with MathWorks' interest in supporting innovative educational methodologies and the use of its tools in cutting-edge research and curriculum development.

Expected Outcomes:

- Development of AI Educational Chatbots that can be customized for different educational needs using MathWorks tools.
- Increased engagement and improved learning outcomes through personalized and interactive learning experiences.
- Dissemination of developed materials through MathWorks File Exchange, professional conferences, and open-source platforms, extending the impact beyond Northeastern University.

Budget and Spending Plan:

The total expense of $25,000 will be allocated 100% towards hiring students and recent graduates as engineers to develop the AI Educational Chatbots.

Conclusion:

This proposal for the AI Educational Chatbots Development with MathWorks Integration project seeks to leverage the power of MathWorks software to enhance the AI for Education Project at Northeastern University. By focusing on the development of AI-powered educational tools, we aim to foster a more engaging and personalized learning environment, driving forward the future of learning in harmony with AI advancements.