Development of an Intelligent Math Tutor

**Background**
Personalizing education is the way forward, as each child learns at their own pace, possesses unique abilities and may encounter their own set of challenges. In order to provide equal opportunities for all students, it is important to offer easily accessible resources. Our objective is to assist children in learning mathematics by creating an intelligent math tutor that utilizes the latest advances in generative artificial intelligence. This tutor will be friendly, helpful, and patient, with no question considered foolish. Children can ask as many questions as they require and will receive a pleasant response. Our ultimate goal is to personalize the tutor to cater to the individual needs of each child over time.

**What you'll gain**
- Background knowledge about generative AI, in particular large language models
- Practical experience applying recent research to real-world challenges
- The opportunity to develop a tool that will be utilized by a multitude of students

**Requirements**
- Programming background (ideally Python)
- Keen interest in educational challenges
- Motivation to conduct a study with students / children

**Focus Areas**
- Large Language Models / Transformer Models
- Generative AI
- Text Data
- Educational application

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