

Development of grading tool with GPT: Enhancing Efficiency and Consistency in Education

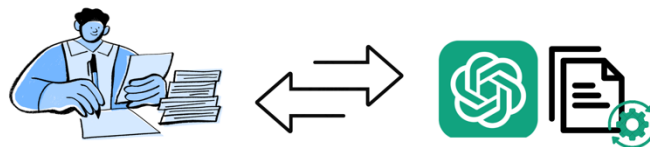
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Project Type: **Semester Project (Spring)** Section: *Micro, Robotics, Computer Science (STI, IC)*
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In the current educational landscape, grading student assignments, especially coding tasks and open-ended responses, is a labor-intensive, subjective, and repetitive endeavor.

Our project aims to leverage GPT models to automate the grading process of student solutions. By comparing GPT-based grading with our current data of traditional human grading, we seek to develop a framework that enhances GPT's capabilities to correct the assessments. This initiative not only aims to improve efficiency but also strives to bring objectivity and scalability to educational assessments.

This project offers you the opportunity to engage in a comprehensive development cycle: conducting a current state of the art of GPT, analyzing existing data from student responses and teaching assistant feedback, and developing an AI-driven grading tool. You will gain hands-on experience in AI applications within education, data analytics, and system development, contributing to innovative solutions that enhance assessment practices and benefit educators.



Your mission:

1. Data Analysis:

- i. Analyze existing methodologies for grading code and text-based responses with GPT.
- ii. Leverage insights from current data to guide the development of an automated grading tool.

2. Development of Grading Tool and Framework with GPT:

- i. Design and develop a tool or framework utilizing GPT to grade student solutions, such as coding assignments or text-based categorization tasks.

This multidisciplinary project bridges AI, Data Science, and Educational Technology. You will have the opportunity to work with people who have experience in similar projects for guidance and brainstorming. You will be given freedom in terms of proposing solutions, designing systems, and conducting analyses.

This project is ideal for students passionate about AI applications (in education) and seeking to make a real-world impact.

Helpful (but not mandatory) prerequisites:

- Interest in AI and machine learning applications
- Programming skills, experience with data analysis, and interested in GPT models.
- Proficiency in English; knowledge of French is a plus