Enhancing Essay Feedback with Chat-GPT

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Funko figure of a male, smiling, called Rob Treharne, wearing a light blue work shirt, a navy blue cardigan and beige chinos, a laptop under his arm closely shaved, black rimmed glasses. The Funko is displayed inside and outside a limited edition red Funko box with dunno what this is text, allowing visibility of the figure, typography, 3D render. blue background

INSPIRED BY DAVID CALLAGHAN (LSTM)!

Generated using Bing Image Creator

Problem

- Grading essays/reports efficiently and providing meaningful, timely feedback is challenging.
- Consistency across large marking groups is poor.
- Are there aspects of the grading that can be automated?

Solution Overview

- Python, CanvasAPI, Chat-GPT Integration.
- Automated processing of student submissions.
- Efficient, consistent feedback generation for reference sections.

The Prompt

You are a University lecturer tasked with providing feedback to students on reference sections of student essays.

Specifically, you need to ensure that the reference list adheres to the Harvard referencing style. Make sure that the references are in the correct format: author name, (year), title, journal, volume, pages, doi/url.

Check that the reference list should be organized according to ascending alphabetical order of first author suranme. If they are organised correctly then give positive comment. If they are not organised correctly then provide recommendation to correct.

Author names for a single reference DO NOT need to be organised by ascending alphabetical order.

The reference list should include multiple references from multiple peer-reviewed sources. Permit references that are books. Identify any references that are not peer-reviewed sources and which are not?

Insist that students find primary sources to cite. If any identified, ask "did you forget to include volume and page numbers, doi/url?"

Do not comment on the essay.

Do not suggest that the student should provide a summary or critique of the reference list. Do not criticise for the sake of doing so. If it's all good, then provide positive feedback.

Provide no more than 100 words of feedback to the student. Make sure the response uses UK English.

Live Demo

- GitHub
- Prompt
- Run program
- Example Feedback

 https://youtu.be/mD_gXdbsuAM?si=FZ9im5Sa0 rSFwoG0&t=637

Does it work?

BMC, 2021. [Online]

Available at: https://genomebiology.biomedcentral.com/articles/10.1186/s13059-019-1720-5 [Accessed 01 12 2021].

cambridge, u. o., 2018. how reliable or clinically useful is the genomic information. [Online]

Available at: https://www.phgfoundation.org/blog/should-we-sequence-babies

[Accessed 02 12 2021].

Genes, O. Y., 2021. Whole genome sequencing costs. [Online]

Available at: https://sequencing.com/education-center/whole-genome-sequencing [Accessed 02 12 2021].

Institute, N. H. G. R., 2016. DNA sequencing costs. [Online]

Available at: https://www.genome.gov/about-genomics/fact-sheets/Sequencing-Human-Genome-cost

[Accessed 02 12 2021].

MD, D. C., 2021. Whole Genome Sequencing. [Online]

Available at: https://sequencing.com/education-center/whole-genome-sequencing

[Accessed 02 12 2021].

The references provided are not in the correct Harvard referencing style. The format for the references should be: author name, (year), title, journal, volume, pages, doi/url. Additionally, the references are not organised in ascending alphabetical order of the first author's surname. Please ensure that the references are properly formatted and organised alphabetically by the first author's surname. Also, it's important to use peer-reviewed sources for academic work. Did you forget to include volume and page numbers, doi/url for some of the references?

Does it work?

Butler D. 2019. Sequence and destroy: the quest to eliminate the last stocks of deadly rinderpest virus. [online] Nature, 572(18). Available at: https://www.nature.com/articles/d41586-019-02098-2 [Accessed 5 January 2022].

Centre for Disease Control and Prevention. 2021. Cdc.gov. History of Smallpox | Smallpox. [online] Available at:

https://www.cdc.gov/smallpox/history/history.html [Accessed 5 January 2022].

Centre for Disease Control and Prevention. 2021. Cdc.gov. Research | Smallpox. [online] Available at:

https://www.cdc.gov/smallpox/research/index.html [Accessed 5 January 2022].

Centre for Disease Control and Prevention. 2019. Cdc.gov. Vaccination Strategies | Smallpox. [online] Available at:

https://www.cdc.gov/smallpox/bioterrorism-response-planning/public-health/vaccination-strategies.html [Accessed 5 January 2022].

Corona A. 2020. Disease Eradication: What does it take to wipe out a disease?. American Society for Microbiology. Available at: https://asm.org/Articles/2020/March/Disease-Eradication-What-Does-It-Take-to-Wipe-out [Accessed 5 January 2022].

Ochmann S, Behrens H. 2020. How rinderpest was eradicated. Our world in data. Available at: https://ourworldindata.org/how-rinderpest-was-eradicated [Accessed 5 January 2022].

Roeder P, Mariner J, Kock R. 2013. Rinderpest: the veterinary perspective on eradication. Royal Society, 368(1623).

Slifka M, Hanifin J. 2004. Smallpox: the basics. Science Direct, 22 (3).

The references are generally well-formatted in the Harvard style, with the necessary elements included. However, the reference list is not organised in ascending alphabetical order of the first author's surname. Please arrange the references accordingly. Additionally, the reference from Science Direct is not a peer-reviewed source. Please ensure that all references are from peer-reviewed sources, and if not, provide the volume, page numbers, doi, or URL. Overall, good effort, but some adjustments are needed for accuracy and completeness.

More Info

- Link Checker
- Example: LIFE223 Essay (Oct 2023).
 - 336 out of 418 submissions processed.
 - Average time per student: 22.5 seconds (~ 2 hrs in total).
 - Total cost: \$0.36.

Next Steps

- Design study
- Implement in low-stakes situation
- Web application

Contact Me

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