**STANDARDIZED GRADING SYSTEM FOR TEXT CONTENT USING LARGE LANGUAGE MODELS**

DEVELOPMENT PHASE

GRADUATE DIPLOMA IN DATA ANALYTICS

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Contents

[Abstract (300 words) 3](#_Toc185500010)

[Keyword 3](#_Toc185500011)

[Introduction (400 words) 3](#_Toc185500012)

[Project Questions (250 words) 3](#_Toc185500013)

[Project Design (900 words) 3](#_Toc185500014)

[Project Development (600 words) 4](#_Toc185500015)

[Discussion (400 words) 4](#_Toc185500016)

[Conclusion and future directions (400 words) 4](#_Toc185500017)

[References 5](#_Toc185500018)

# Abstract (300 words)

Summarize the key objectives: developing a content grading system for audiences under 15 using LLMs.

Briefly explain the technical design, including the integration of language models and criteria like cultural sensitivity and explicit content.

Highlight the main findings and how they support ethical decision-making on online platforms.

# Keyword

Large Language Models (LLMs), Natural Language Processing (NLP), Text Classification, Content Grading, Age-appropriate Content, Explicit Content Detection, Violence Detection, Child Protection, Parental Control, and Artificial Intelligence (AI).

# Introduction (400 words)

Introduce the problem: the need to protect young users from inappropriate content on digital platforms.

Mention the project’s focus on integrating ethics and technology using LLMs.

Define the general and specific objectives, such as identifying patterns and proposing innovative solutions.

Preview the report structure.

# Project Questions (250 words)

The following questions are intended to address the needs of the project for its development and also guide the exploration of existing literature concerning the topic in question.

* **What is the role of NLP and LLM in text analysis?**

Explore through literature review how advanced Natural Language Processing (NLP) and Large Language Models (LLM) techniques have been used in text analysis, what their role is, and how they can be applied to the classification of inappropriate text.

* **Which LLM models have the best performance in text classification in previous studies?**

Identify through previous studies or academic articles which model(s) present the best performance in the implementation of text analysis, which will provide a solid basis for selecting the most appropriate model for the project.

# Project Design (900 words)

Frame your industry project question(s) well. Ensure they are clear and aligned with questions in the project proposal. Also, it is required to make sure the project's scope is matched with the project proposal. You should provide a breakdown of the project questions in detail and make the connection to the business needs or problems. The degree of complexity of the business needs should be evident.

Describe each design component:

* **Data Sources**: Explain the use of APIs or existing datasets.
* **Preprocessing**: Detail text cleaning and normalization.
* **LLMs**: Define their configuration and training.
* **Schematic Diagram**: Include a visual representation showing the interaction between data, model, and outputs.

# Project Development (600 words)

Explain the implementation stages:

* **Source Code**: Include screenshots with detailed descriptions.
* **Testing**: Discuss examples used to validate the model.
* **Maintenance and Scaling**: Provides a reference for future modifications, scaling the system, or debugging issues that may arise after deployment (if it is applicable).

# Discussion (400 words)

Discuss challenges related to your design and development and technical items. Align the discussion with the design and development undertaken, highlighting the practical application of the coding phase. Cover the knowledge gaps that must be closed to execute this project competently. It should also give details on the limitations of the project. *(Testing part limitations):  
- Lack of AI Models*

* *Text -> is recommendable testing with several examples (more than 100)*

# Conclusion and future directions (400 words)

Conclude with a summary of the project, highlighting key findings, achievements, and practical implications, and **make recommendations** for the project. Include the unique contribution to data analytics or the industry, emphasising innovative aspects and potential impact. Finally, outline any future issues and directions to consider.

* Conclusion: Summarize achievements, such as model accuracy and relevance to the industry.
* Future Directions: Suggest improvements, such as expanding evaluation criteria or including continuous monitoring.

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# References

**(using APA-v7 style)**

* **OpenAI API Documents**
* **Metric Selection**