

Proposal for AI Integration into PO Platform

Submitted by: Abishek E

1. Executive Summary

The goal of this project is to enhance the PO platform by integrating AI capabilities, enabling real-time monitoring of global ESG regulations, improving data accuracy, and optimizing operational efficiency. The AI system will be fully automated, providing users with timely and accurate notifications of changes in ESG regulations across various regions.

2. Technical Approach

- **AI Technologies:** We will utilize Natural Language Processing (NLP) along with Generative AI models, incorporating advanced techniques such as fine-tuning using LoRA (Low-Rank Adaptation) and QLoRA (Quantized Low-Rank Adaptation). This approach will ensure the AI models are tailored to the specific requirements of the PO platform.
- **Monitoring System:** The AI system will be fully automated, scanning global ESG databases and sending real-time alerts to users. We will incorporate quantization techniques to optimize the AI models, ensuring they are efficient and effective in handling large datasets. Special attention will be given to how input data is processed and fed into the models, ensuring the highest level of accuracy.
- **Data Integrity and Accuracy:** We will implement AI-driven sanity checks and use mathematical intuition to validate data. Cross-referencing with trusted sources will further ensure the accuracy of the data presented on the platform.

3. Project Management

- **Timeline:** The project is expected to be completed within one year and three months, with key milestones set every three months to track progress.
- **Team Structure:** The project team will include myself as the Team Manager, along with a dedicated team composed of students and family members. Each member will have defined roles, ensuring smooth collaboration and project delivery.
- **Risk Management:** Given the critical nature of data accuracy, we will focus on regular audits and testing to identify and resolve any inconsistencies early. We will also emphasize the importance of secure data handling throughout the project lifecycle.

4. Budget and Resources

- **Budget:** The estimated budget for this project ranges from ₹50 lakhs to ₹1 crore, covering all aspects of development, testing, and ongoing maintenance.
- **Resources:** We will require access to global ESG data feeds and third-party APIs to ensure comprehensive coverage and accuracy of the monitored regulations.

5. Confidentiality and Data Security

- **Data Security Measures:** To ensure data security, we will enforce strict policies such as prohibiting the use of cell phones within the process areas. This will minimize the risk of unauthorized data access or breaches.
- **Confidentiality:** We will implement encryption and access control measures to protect sensitive data. Regular security audits will be conducted to ensure compliance with all relevant regulations.

6. Evaluation Criteria

- **Expertise and Experience:** Our team has successfully completed several projects involving data preparation and AI integration. Our familiarity with the challenges of handling and processing large datasets, particularly in the context of regulatory monitoring, positions us well to deliver a robust solution for this project.
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