Project Initialization and Planning Phase

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| Date | 01 October 2024 |
| Team ID | LTVIP2024TMID24828 |
| Project Title | Fake News Analysis In Social Media |
| Maximum Marks | 3 Marks |

**Project Proposal (Proposed Solution) report**

This project proposes a targeted solution to [briefly state the problem] by implementing [describe the main approach or technology]. Our objectives include [list key objectives], with the aim of achieving [mention expected outcomes]. The initiative will be executed within a defined timeline and budget. Ultimately, this effort will significantly enhance [state the impact or benefit].

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| **Project Overview** | |
| Objective | The main objective of fake news analysis in social media is to identify, assess, and mitigate the spread of misinformation by evaluating the credibility of sources, understanding user engagement patterns, and developing effective strategies to promote accurate information.. |
| Scope | The scope of fake news analysis in social media includes identifying and categorizing misinformation, assessing the credibility of sources, and studying user engagement patterns with misleading content. It also involves measuring the impact of fake news on public opinion and behavior while developing strategies for mitigation, such as enhancing media literacy. |
| **Problem Statement** | |
| Description | Fake news analysis in social media involves examining the prevalence and characteristics of misinformation shared on platforms. This analysis focuses on identifying false information, evaluating the credibility of sources, and understanding user engagement with misleading content. By investigating these elements, the goal is to develop strategies that promote accurate information and enhance media literacy among users. |
| Impact | The impact of fake news analysis in social media is significant, as it helps mitigate the spread of misinformation that can distort public perception and influence behavior. By promoting awareness and critical thinking, it empowers users to discern credible information from falsehoods, ultimately fostering a more informed society. Additionally, effective analysis supports social media platforms in enhancing content moderation practices, contributing to a healthier information ecosystem.. |
| **Proposed Solution** | |
| Approach | he approach to fake news analysis in social media involves a multi-faceted strategy that combines automated detection tools, manual fact-checking, and user education. By utilizing machine learning algorithms, we can identify and flag potential misinformation while employing human analysts to verify content accuracy. |
| Key Features | Key features of the fake news analysis include advanced algorithms for real-time misinformation detection and a comprehensive database for assessing source credibility |

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| **Resource Type** | **Description** | **Specification/Allocation** |
| **Hardware** | | |
| Computing Resources | CPU/GPU specifications, number of cores | T4 GPU |
| Memory | RAM specifications | 8 GB |
| Storage | Disk space for data, models, and logs | 1 TB SSD |
| **Software** | | |
| Frameworks | Python frameworks | Flask |
| Libraries | Additional libraries | scikit-learn, pandas, numpy, matplotlib, seaborn |
| Development Environment | IDE | Google colab Notebook, vscode |
| **Data** | | |
| Data | Source, size, format | Kaggle dataset, 4269, csv |

**Resource Requirements**