Project Initialization and Planning Phase

Date	20 Sepetember 2024
Team ID	739894
Project Title	Toxic Comment Classification for social media for Social Media using NLP
Maximum Marks	3 Marks

Project Proposal (Proposed Solution) template

Develop an NLP-based system to accurately detect and classify toxic comments in real-time on social media, enhancing user experience by promoting healthier interactions and reducing harmful content.

This solution involves data collection, preprocessing, model development, and real-time implementation, with continuous evaluation and improvements to adapt to evolving language trends**.**

Project Overview	
Objective	To develop an accurate and real-time NLP-based system for detecting and classifying toxic comments on social media, thereby fostering a safer and more respectful online environment.
Scope	To accurately detect and classify toxic comments on social media in real-time, enhancing user safety and fostering a respectful and inclusive online community
Problem Statement	
Description	Toxic comment classification for social media involves using advanced NLP techniques to detect and mitigate harmful comments in real-time, fostering a safer and more respectful online environment
Impact	Effective toxic comment classification significantly improves user safety and experience on social media by fostering a respectful and inclusive online environment
Proposed Solution	
Approach	Utilize advanced NLP techniques to develop a real-time system for detecting and classifying toxic comments, ensuring a safer and more

	respectful online community
Key Features	Key features include real-time detection, high accuracy, language and context sensitivity, and adaptability to evolving toxic behaviors to ensure a safer and more respectful online community

Resource Requirements

Resource Type	Description	Specification/Allocation
Hardware		
Computing Resources	CPU/GPU specifications, number of cores	e.g., 2 x NVIDIA V100 GPUs
Memory	RAM specifications	e.g., 8 GB
Storage	Disk space for data, models, and logs	e.g., 1 TB SSD
Software		
Frameworks	Python frameworks	e.g., Flask
Libraries	Additional libraries	e.g., Numpy , Pandas, Matplotlib, Seaborn.
Development Environment	IDE, version control	e.g., Jupyter Notebook, Google Colab, VSCODE.
Data		
Data	Source, size, format	e.g., Kaggle dataset.