



Initial Project Planning Template

Date	26 November 2024
Team ID	SWTID1726490119
Project Name	Toxic Comment Classification for Social Media
Maximum Marks	4 Marks

Product Backlog, Sprint Schedule, and Estimation (4 Marks)

Sprint	Functional	User Story	User Story / Task	Story	Priority	Team	Sprint	Sprint End
	Requirement (Epic)	Number		Points		Members	Start Date	Date (Planned)
Sprint-1	Download the dataset	USN-3	Download the dataset from Kaggle. Store it in the project directory for preprocessing.	1	High	Ankita Chavhan	27 September 2024	4 October 2024
Sprint-2	Import required libraries	USN-5	Import necessary libraries such as pandas, numpy, scikit-learn, tensorflow/keras, nltk, and re for text cleaning and processing	1	High	Ankita Chavhan	27 September 2024	9 October 2024
Sprint-2	Read the datasets	USN-6	Load the dataset using pandas.read_csv() to read the data and inspect it using basic head(), info(), and describe() functions	2	High	Ankita Chavhan		
Sprint-2	Text processing	USN-7	Remove special characters, HTML tags, and URLs.	3	High	Saloni Warang		





ectorizing		Convert all text to lowercase and remove stopwords.					
_							
_		Tokenize and lemmatize the text					
data	USN-8	TF-IDF (Term Frequency-Inverse Document Frequency)	3	High	Saloni Warang		
		Word2Vec or GloVe embeddings.					
ploratory ta analysis DA) and cualizations	USN-13	Perform exploratory data analysis (EDA) and create visualizations to better understand the dataset, identify patterns, and gain insights that will guide feature engineering and model selection.	5	Medium	Kanishka Pawar		
propriate odel	USN-10	CNN (Convolutional Neural Network) for handling text as sequences. RNN (Recurrent Neural Network) or LSTM (Long Short-Term Memory) to capture sequential information. Transformer-based models like	3	High	Saloni Warang	27 September 2024	14 October 2024
ta a DA	analysis A) and dizations see the opriate	analysis A) and dizations see the USN-10 opriate	Word2Vec or GloVe embeddings. Perform exploratory data analysis (EDA) and create visualizations to better understand the dataset, identify patterns, and gain insights that will guide feature engineering and model selection. See the Opriate Popriate Popr	Word2Vec or GloVe embeddings. Departory A) and Charactery Bell Word2Vec or GloVe embeddings. Perform exploratory data analysis (EDA) and create visualizations to better understand the dataset, identify patterns, and gain insights that will guide feature engineering and model selection. CNN (Convolutional Neural Network) for handling text as sequences. RNN (Recurrent Neural Network) or LSTM (Long Short-Term Memory) to capture sequential information. Transformer-based models like BERT if you opt for more advanced	Word2Vec or GloVe embeddings. Perform exploratory data analysis (EDA) and create visualizations to better understand the dataset, identify patterns, and gain insights that will guide feature engineering and model selection. See the Opriate USN-10 CNN (Convolutional Neural Network) for handling text as sequences. RNN (Recurrent Neural Network) or LSTM (Long Short-Term Memory) to capture sequential information. Transformer-based models like BERT if you opt for more advanced	Word2Vec or GloVe embeddings. Perform exploratory data analysis (EDA) and create visualizations to better understand the dataset, identify patterns, and gain insights that will guide feature engineering and model selection. CNN (Convolutional Neural Network) for handling text as sequences. RNN (Recurrent Neural Network) or LSTM (Long Short-Term Memory) to capture sequential information. Transformer-based models like BERT if you opt for more advanced	Word2Vec or GloVe embeddings. Perform exploratory data analysis (EDA) and create visualizations to better understand the dataset, identify patterns, and gain insights that will guide feature engineering and model selection. See the opriate of the priate of the priat





Sprint	Functional Requirement (Epic)	User Story Number	User Story / Task	Story Points	Priority	Team Members	Sprint Start Date	Sprint End Date (Planned)
Sprint-3	Build and train the model	USN-11	Build the model architecture in TensorFlow/Keras.	5	High	Kanishka Pawar		
			Train the model using the training dataset, monitor loss, and accuracy metrics					
Sprint-3	Hyperparamet er tuning	USN-12	Experiment with hyperparameters (learning rate, batch size, epochs, optimizers).	5	Medium	Kanishka Pawar		
			Tune parameters to improve model performance.					
Sprint-4	Flask App	USN-15	Set up a Flask environment and build a simple backend API to load the trained model.	5	Medium	Sonal Solanki	27 September 2024	16 October 2024
Sprint-4	Build an HTML page	USN-16	Design a frontend using HTML/CSS to accept user input (comment).	3	Low	Sonal Solanki		
			Provide a button to submit the comment for toxic classification.					
Sprint-4	Execute and test the model	USN-17	Test the Flask app by sending user comments for classification.	3	High	Kanishka Pawar		
			Output the result on the HTML page (toxic or non-toxic).					





Sprint	Functional	User Story	User Story / Task	Story	Priority	Team	Sprint	Sprint End
	Requirement	Number		Points		Members	Start Date	Date
	(Epic)							(Planned)
Sprint-5	Report	USN-19	Report will provide insights into the	2	Medium	Sonal	14 October	18 October
			development process and document			Solanki	2024	2024
			key findings for stakeholders.					

Screenshots:







