Section	Description	Points	Grade Breakdown and Requirements			Weightage
		60	What 80-100% looks like	What 60-80% looks like	What <60% looks like	
Define the problem and perform Exploratory Data Analysis	- Problem definition - Check shape, Data types, and statistical summary - Univariate analysis - Multivariate analysis - Use appropriate visualizations to identify the patterns and insights - Key meaningful observations on individual variables and the relationship between variables	**6**	- Problem definition [0.5] - Check shape, Data types, statistical summary [1] - Use appropriate visualizations to identify the patterns and insights [4.5] - Univariate Analysis [1] - Multivariate Analysis [2] - Key meaningful observations on individual variables and the relationship between variables [1.5]	- Problem definition - Check shape, Data types - Use appropriate visualizations to identify the patterns and insights - Univariate Analysis done for some variables but not all - Multivariate Analysis done for 2-3 combination of variables - Few observations listed	- Problem definition - Univariate and Analysis done for some variables	10.00%
Data Pre-processing	Prepare the data for modelling: - Outlier Detection(treat, if needed)) - Encode the data - Data split - Scale the data (and state your reasons for scaling the features)	**2**	Prepare the data for modelling: - Outlier Detection(treat, if needed) [0.5] - Encode the data [0.5] - Data split [0.5] - Scale the data with reason [0.5]	- Encode the data - Train and Test Data split	- Train and Test Data split	3.33%
Model Building	- Metrics of Choice (Justify the evaluation metrics) - Model Building (KNN, Naive bayes, Bagging, Boosting)	**10**	- Justify and choose the metric[2] - Build models [2*4=8]	- Build models or - Justify and choose the metric - 3 models	- 2-3 Build models	16.67%
Model Performance evaluation	- Check the confusion matrix and classification metrics for all the models (for both train and test dataset) - ROC-AUC score and plot the curve - Comment on all the model performance	**8**	- Confusion matrix and Classification metrics[1*4=4] - ROC-AUC score and curve[0.5*4=2] - Comment on the model performance [2]	- Confusion matrix and Classification metric - Comment on the model performance	- Confusion matrix and Classification metrics	13.33%
Model Performance improvement	- Improve the model performance of bagging and boosting models by tuning the model - Comment on the model performance improvement on training and test data	**9**	- Tune the model and find the performance of bagging and boosting model [4*2=8] - Comment on the model performance[1]	- Tune the model and find the performance of bagging and boosting model	- Tune one model and find the performance of bagging or boosting model	15.00%
Final Model Selection	- Compare all the model built so far - Select the final model with the proper justification - Check the most important features in the final model and draw inferences.	**4**	- Compare all models in a dataframe[1] - Justification for choosing the final model [1] - final model feature importance [2]	- Compare all models in a dataframe - final model feature importance	- Compare all models in a datafram - Justification for choosing the final model	6.67%
Actionable Insights & Recommendations	- Compare all four models - Conclude with the key takeaways for the business	**6**	- Compare all four models [1] - Discuss the actionable insights from the analysis [2] - Conclude with the key takeaways for the business [3]	- Comment on the final model - Some actionable insights and recommendations mentioned	- Some actionable insights mentioned	10.00%
Problem 2 - Define the problem and Perform Exploratory Data Analysis	-Problem Definition - Find the number of Character, words & sentences in all three speeches	**3**	-Problem Definition [1] - Find the number of Character, words & sentences in all three speeches [2]	-Problem Definition - Find the number of Character, words in all three speeches	-Problem Definition	5.00%
Problem 2 - Text cleaning	- Stopword removal - Stemming - find the 3 most common words used in all three speeches	**3**	- Stopword removal [1] - Stemming [1] - Find the 3 most common words used in all three speeches [1]	- Stopword removal - Stemming	- Stopword removal	5.00%
Problem 2 - Plot Word cloud of all three speeches	- Show the most common words used in all three speeches in the form of word clouds	**3**	- Plot the word clouds [3*1]	- Plot the word clouds only 2	- Plot the word clouds only 1	5.00%
Business Report Quality	-Adhere to the business report checklist	**6**	Objective, guidance, and data description: 1 point Exclusion of code: 2 points Structure and readability: 1 point Rationale and logic: 1 point Visual clarity and referencing: 1 point	Objective, guidance, and data description Structure and readability Rationale and logic	Objective, guidance, and data description Rationale and logic	10.00%