

Review Sentylis

Team Members:

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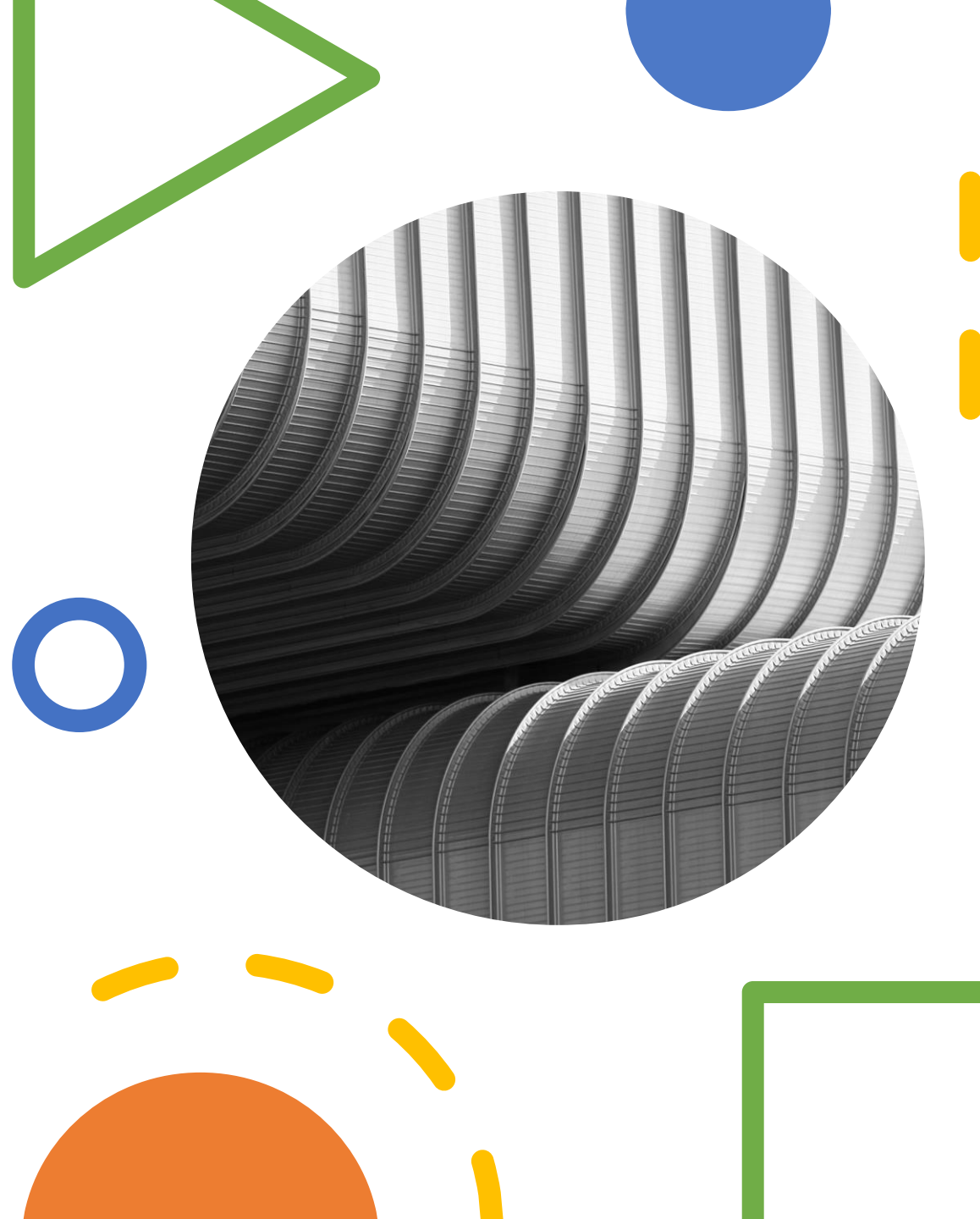
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Introduction

1. Our project is about building a machine learning model which analyses review based on performance thereby generating a score and use sentimental analysis to check the polarity of situation wherein it can be a deciding factor.

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3. we tend to remove unpleasant or derogatory terms which affects the mental well-being of users or people who reads the reviews, last but not least we plan on automating this manual label thus reducing the time which the user of the product spends on it and creating a safe and healthy platform for all



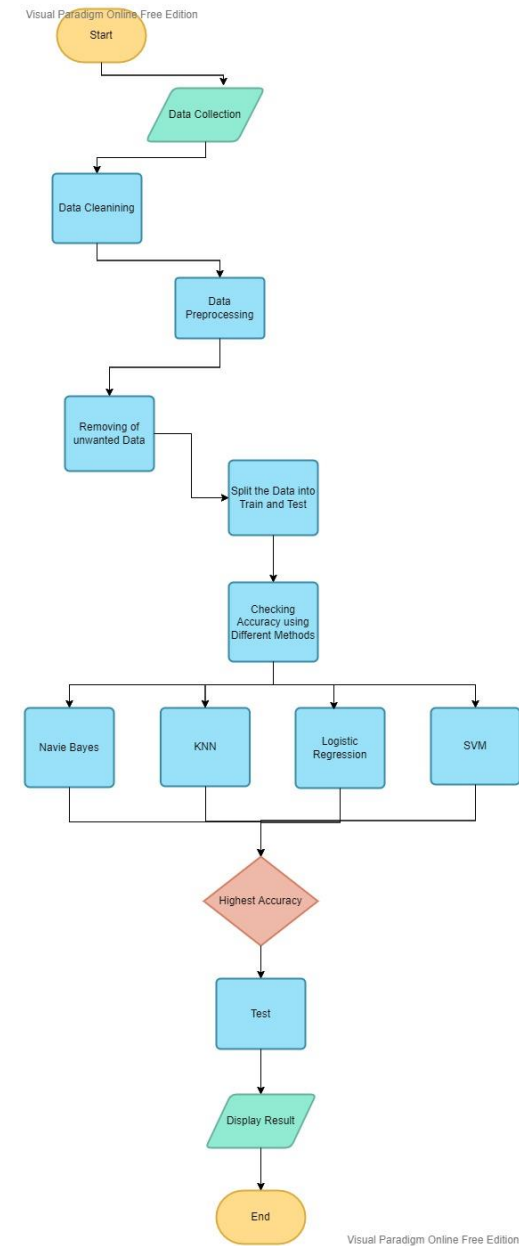


Closely Related Work

- 1.Social Media Monitoring: Sentiment Analysis is widely used in the so many platforms to know the behaviour of person based on their text. Sentiment Analysis is used in the social media monitoring to know the user feeling while using their product.
 - 2.Brand monitoring: Sentiment Analysis is used in brand monitoring. Brand monitoring is a basically know the what people think about their brand.
 - 3.Customer feedback: Sentiment Analysis is used in customer feedback. Basically, the customer feedback is the process of detecting the emotions of a customer interact with the products and services.
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Proposed Methodology

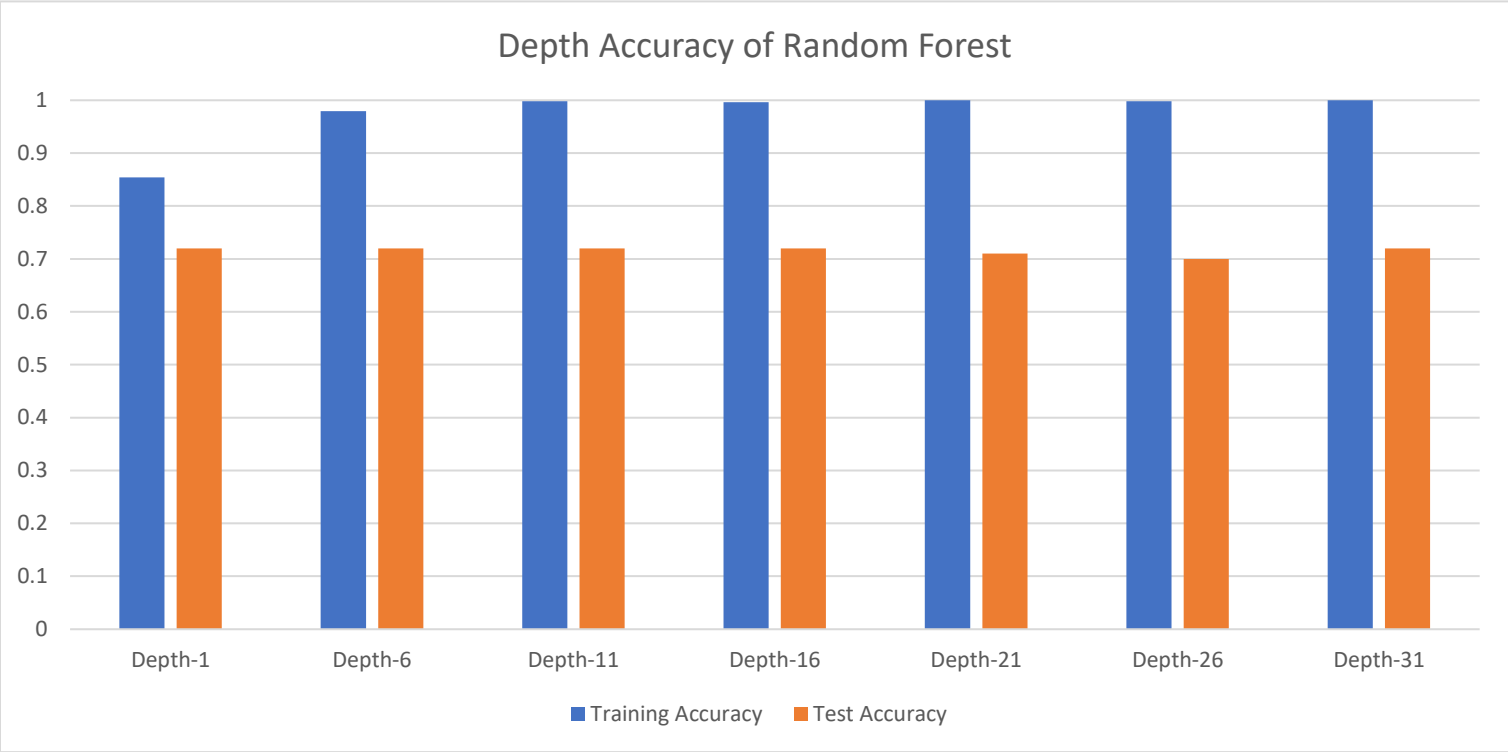
Flow Diagram

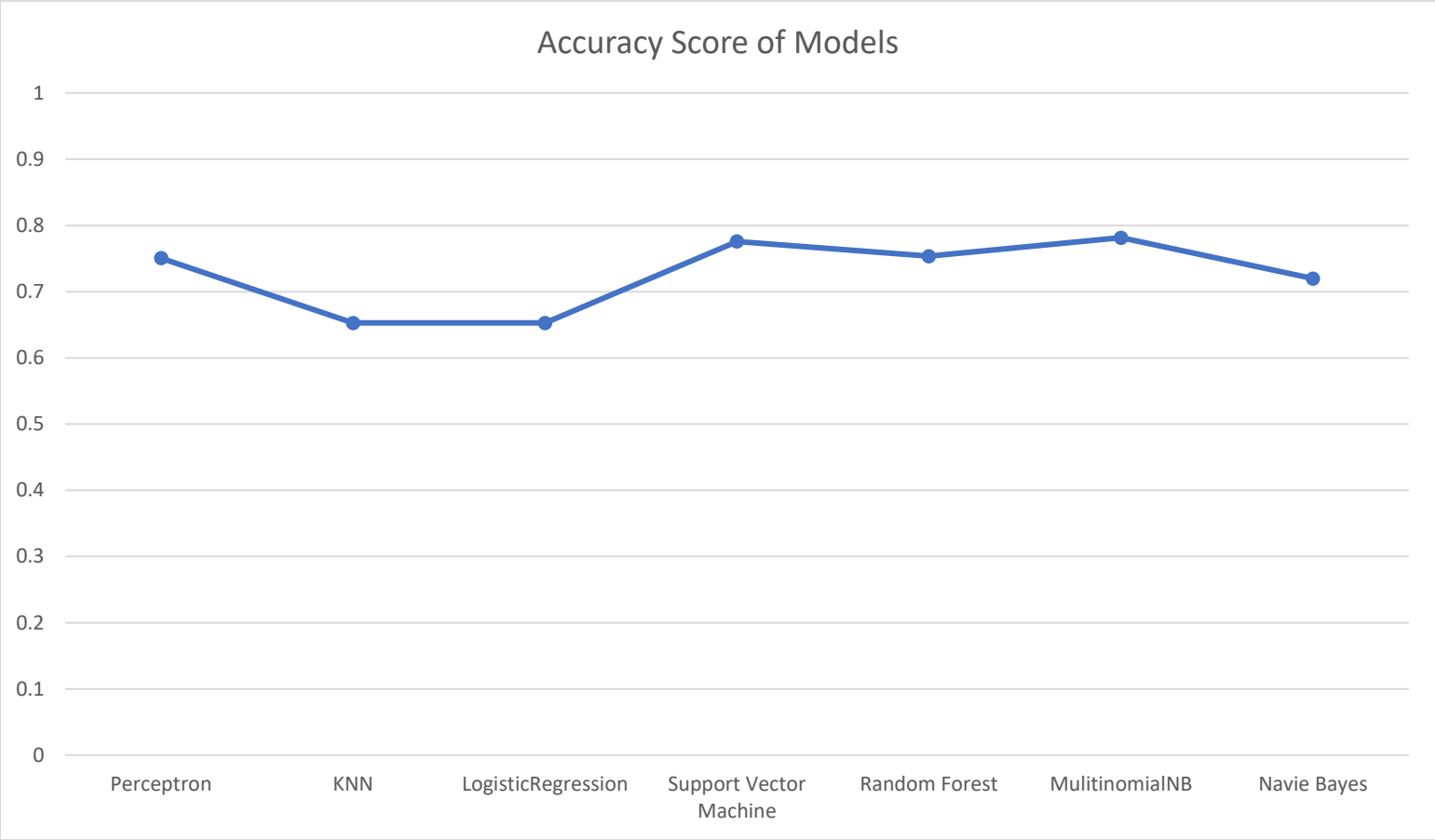




❑ Random Forest Depth Accuracy and Test Report

	precision	recall	f1-score
Negative=0	0.80	0.83	0.82
Positive=1	0.66	0.60	0.63



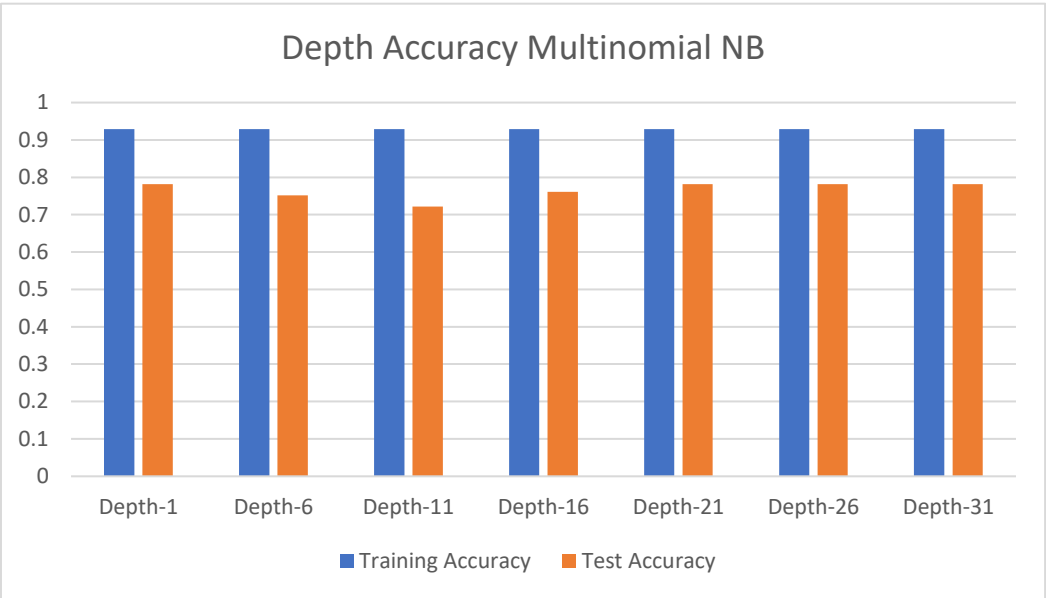
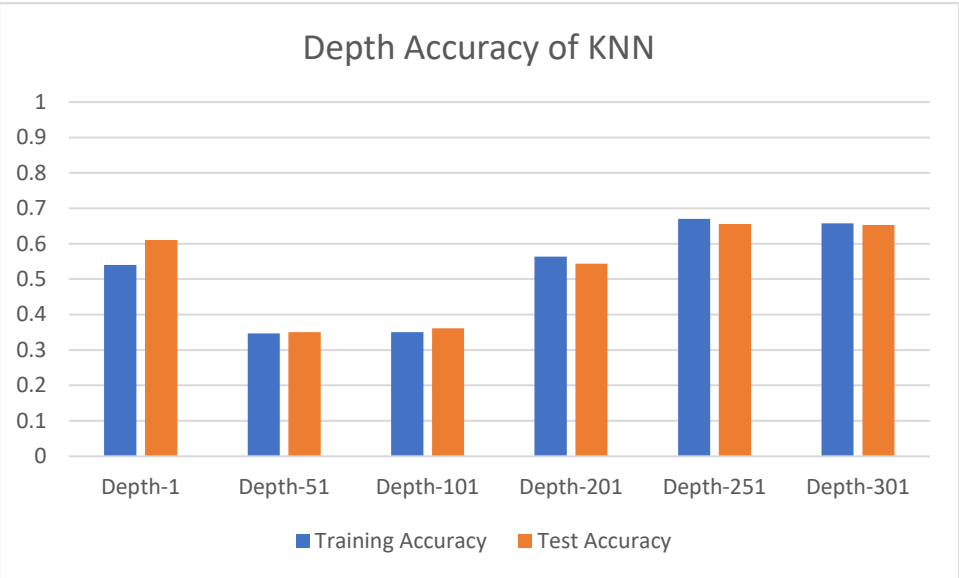


Accuracy of Models

	Random Forest	Multinomial NB	Naive Bayes	Support Vector Machine	Logistic Regression	KNN	Perceptron
Accuracy	0.7535	0.7815	0.7198	0.7759	0.6526	0.6526	0.7507

FINDINGS OF THE PROJECT

- ❑ We have found the MultinomialNB gives the best accuracy when compared to KNN. So, we want to improve the MultinomialNB Accuracy and gives the best results.



	precision	recall	f1-score
Negative=0	0.65	1.00	0.79
Positive=1	0.52	0.67	0.45

	precision	recall	f1-score
Negative=0	0.82	0.86	0.84
Positive=1	0.71	0.64	0.67

Depth Accuracy and Test Report of KNN and MultinomialNB

WHAT WE ARE WORKING ON



NumPy

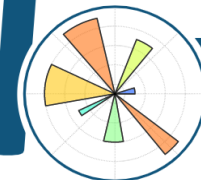


pandas



PyTorch

matplotlib



Conclusion

- By comparison of all the models we achieved the maximum accuracy with the naïve bayes and MultinomialNB model our project's main goal is to create a safe space where reviews can be shared, we review the reviews for you so that you can concentrate on good part , mental health aspect is our main concern while building the model our target is vulgar behaviour.
- Our future extension of this project includes creating a whole website for our university purpose where teachers can get real time feedback with scores based on polarity of texts simple, straightforward and to point.

REFERENCES

- ❑ [1] S. Rani and P. Kumar, "A Sentiment Analysis System to Improve Teaching and Learning," in Computer, vol. 50, no. 5, pp. 36-43, May 2017, Doi: 10.1109/MC.2017.133.\\
- ❑ [2] K. L. S. Kumar, J. Desai and J. Majumdar, "Opinion mining and sentiment analysis on online customer review," 2016 IEEE International Conference on Computational Intelligence and Computing Research (ICIC), 2016, pp. 1-4, doi: 10.1109/ICIC.2016.7919584. \\
- ❑ [3] D. Zimbra, M. Ghiassi and S. Lee, "Brand-Related Twitter Sentiment Analysis Using Feature Engineering and the Dynamic Architecture for Artificial Neural Networks," 2016 49th Hawaii International Conference on System Sciences (HICSS), 2016, pp. 1930-1938, Doi: 10.1109/HICSS.2016.244.\\
- ❑ [4] M. H. Abd El-Jawad, R. Hodhod and Y. M. K. Omar, "Sentiment Analysis of Social Media Networks Using Machine Learning," 2018 14th International Computer Engineering Conference (ICENCO), 2018, pp. 174-176, doi: 10.1109/ICENCO.2018.8636124.\\
- ❑ Available from: {https://link.springer.com/chapter/10.1007/978-3-030-61702-8_23 }
<https://towardsdatascience.com/sentiment-analysis-concept-analysis-and-applications-6c94d6f58c17>

Social Media Post



VAMSI JANGALA

Student at Bennett University

5m · 🌐

Hello everyone...

My self Vamsi [jaswanth yedla](#) worked on "Review Sentysis" as our AIML Semester project. It has been built using the different models which are Naive Bayes, MultinomialNB, Random Forest, KNN, Support Vector Machine, Logistic Regression.

Who doesn't want a review or feedback or appreciation for their work, like a class, taught or performance did, etc.! but given the hectic schedules, we have in our daily lives either we neglect these or sometimes stumble upon some hurtful comments, useless feedbacks or sometimes may even overlook some appreciative lines which we wish we read earlier? In Our projects, our main aim is to build a model which cleans the data, segregate the feedbacks ignore the bad language, and end up giving you perfect data which you can rely upon
1. less time-consuming. 2. removes hate/vulgar abuses3. clean data.4. positive/negative beforehand feedback.

Our project is about building a machine learning model which analyzes reviews based on performance thereby generating a score and using sentimental analysis to check the polarity of a situation wherein it can be a deciding factor. We also aim at building a model which generates a graphical representation of the data generated after cleaning the dataset, we tend to remove unpleasant or derogatory terms which affect the mental well-being of users or people who read the reviews, last but not least we plan on automating this manual labor thus reducing the time which the user of the product spends on it and creating a safe and healthy platform for all

We use the Naive Bayes, MultinomialNB, Random Forest, KNN, Support Vector Machine, Logistic Regression with the help of Bag of Words. These models give the best accuracy.

We would like to thank [Dr. Sridhar Swaminathan](#), [Vipul Kumar Mishra](#) at [School of CSET Bennett University, India](#) for giving constant support and encouragement throughout the project.

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Thank
You