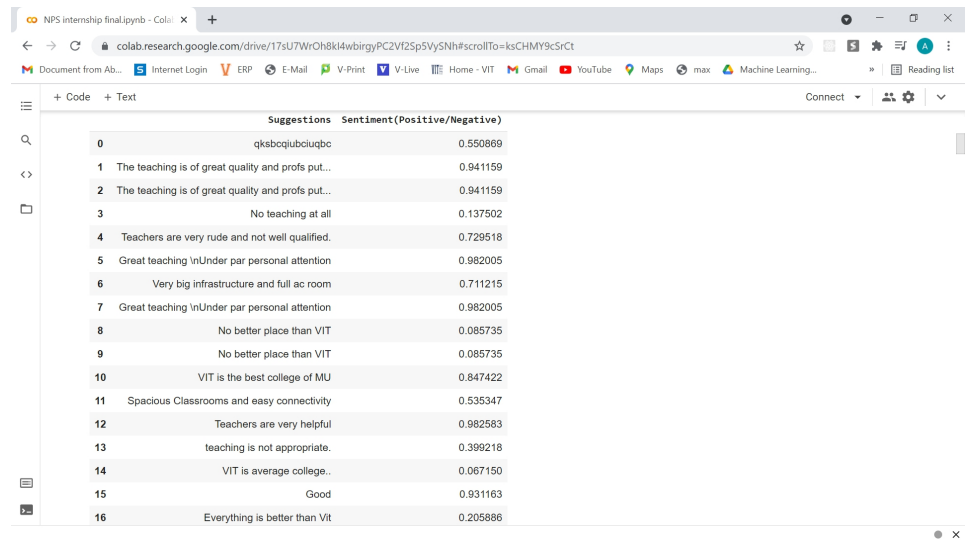


Internship Report

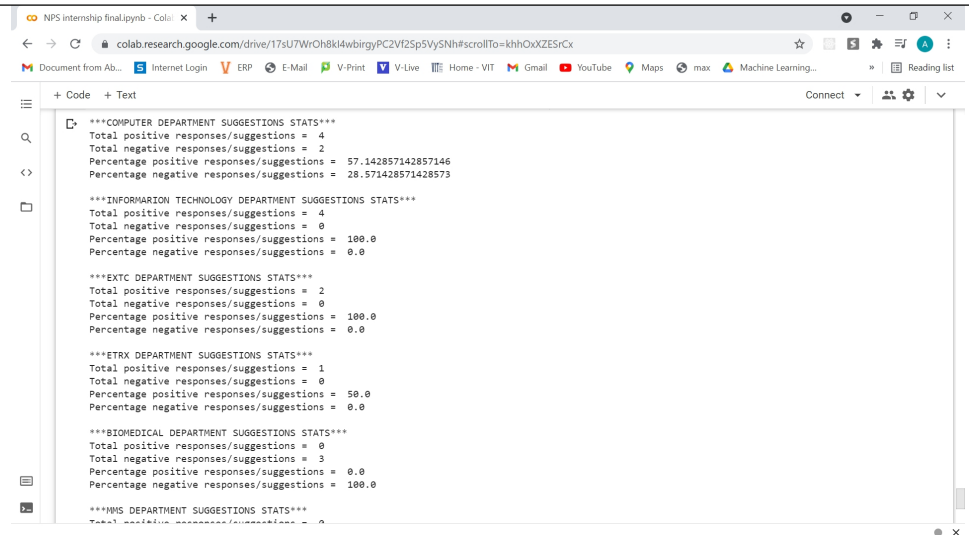
Title of Internship	NAAC Survey Analyzer			
Name of Mentor	Amit Nerurkar			
Name of Students & Roll No.	Sr.No	Name	Roll No.	Mobile No.
	1.	Abhishek Yashvant Phalak	18102A0027	9769976580
	2.	Shubhankar Ravindra Yevale	18102A0031	9321699005
	3.	Piyush Dilip Patil	18102A0036	7738104523
Semester & Batch	Sem 7, CMPN A			
Domain of project/Area	Machine Learning and Natural Language Processing			
Technologies used	Python, sickit learn, pandas, nltk, tensorflow, seaborn, matplotlib, tkinter			
Duration	21 June 2021 - 25 Aug 2021			
Project features	1. Project can calculate department wise NPS scores. 2. It also analyses sentiments of the suggestions given to classify as positive, neutral or negative and gives the detailed report. 3. The top 10 department wise frequently occurring positive and negative suggestions gets downloaded on your local device in csv format.			
Project Abstract	<p>NAAC surveys that are being conducted for the college are very crucial to know whether the facilities provided to the students are reaching to each one of them and can also be used to asses student teacher relation. This survey if analyzed correctly, can help us to gain feedback which in turn can help us to improve in order to enhance student life at the college. The project aims to calculate department wise NPS score from the survey. By using machine learning models and neural networks for natural language processing, it classifies the suggestions received in the survey into three categories mainly positive suggestion, negative suggestion and neutral suggestion. These classified suggestions are further analyzed to take out most frequently occurring words/suggestions to list the top 10 positive and negative suggestions so that the respective department can work on those suggestions to improve. Total 7 csv files are generated where in 6 csv files has respective top 10 positive and negative suggestions department wise while the 7th csv file contains department wise NPS scores of the questions in the survey.</p>			

Screenshots (Min 3-5)



The screenshot shows a Google Colab notebook with a table of suggestions and sentiment scores. The table has two columns: 'Suggestions' and 'Sentiment(Positive/Negative)'. The data is as follows:

	Suggestions	Sentiment(Positive/Negative)
0	qksboqubcuqbc	0.550869
1	The teaching is of great quality and profs put...	0.941159
2	The teaching is of great quality and profs put...	0.941159
3	No teaching at all	0.137502
4	Teachers are very rude and not well qualified.	0.729518
5	Great teaching \nUnder par personal attention	0.982005
6	Very big infrastructure and full ac room	0.711215
7	Great teaching \nUnder par personal attention	0.982005
8	No better place than VIT	0.085735
9	No better place than VIT	0.085735
10	VIT is the best college of MU	0.847422
11	Spacious Classrooms and easy connectivity	0.535347
12	Teachers are very helpful	0.982583
13	teaching is not appropriate.	0.399218
14	VIT is average college..	0.067150
15	Good	0.931163
16	Everything is better than Vit	0.205886



The screenshot shows a Google Colab notebook with sentiment statistics for different departments. The code and output are as follows:

```
***COMPUTER DEPARTMENT SUGGESTIONS STATS***
Total positive responses/suggestions = 4
Total negative responses/suggestions = 2
Percentage positive responses/suggestions = 57.142857142857146
Percentage negative responses/suggestions = 28.571428571428573

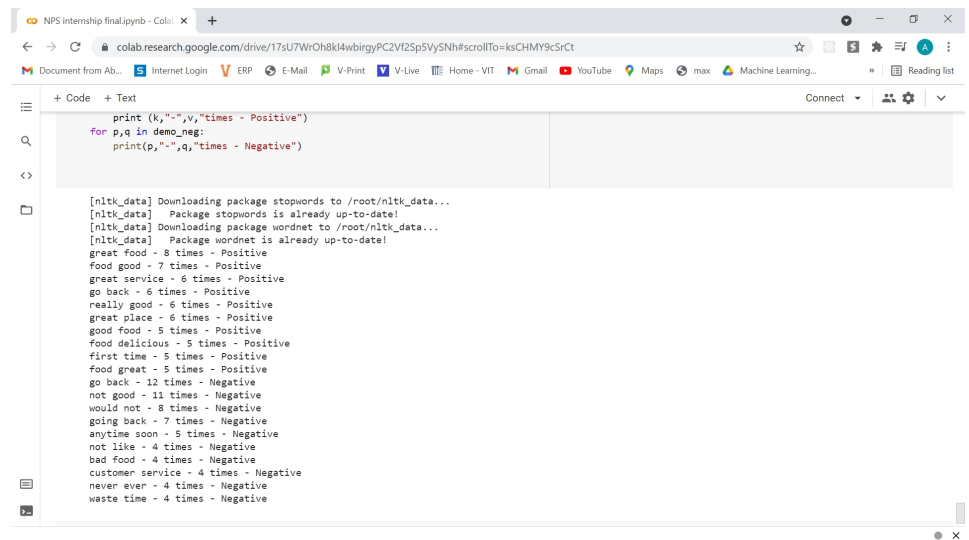
***INFORMATION TECHNOLOGY DEPARTMENT SUGGESTIONS STATS***
Total positive responses/suggestions = 4
Total negative responses/suggestions = 0
Percentage positive responses/suggestions = 100.0
Percentage negative responses/suggestions = 0.0

***EXTC DEPARTMENT SUGGESTIONS STATS***
Total positive responses/suggestions = 2
Total negative responses/suggestions = 0
Percentage positive responses/suggestions = 100.0
Percentage negative responses/suggestions = 0.0

***ETRX DEPARTMENT SUGGESTIONS STATS***
Total positive responses/suggestions = 1
Total negative responses/suggestions = 0
Percentage positive responses/suggestions = 50.0
Percentage negative responses/suggestions = 0.0

***BIOMEDICAL DEPARTMENT SUGGESTIONS STATS***
Total positive responses/suggestions = 0
Total negative responses/suggestions = 3
Percentage positive responses/suggestions = 0.0
Percentage negative responses/suggestions = 100.0

***NMS DEPARTMENT SUGGESTIONS STATS***
Total positive responses/suggestions = 0
Percentage positive responses/suggestions = 0.0
```



The screenshot shows a Google Colab notebook with NLTK word frequency analysis. The code and output are as follows:

```
print(k, "-", v, "times - Positive")
for p,q in demo_neg:
    print(p, "-", q, "times - Negative")

[nltk_data] Downloading package stopwords to /root/nltk_data...
[nltk_data] Package stopwords is already up-to-date!
[nltk_data] Downloading package wordnet to /root/nltk_data...
[nltk_data] Package wordnet is already up-to-date!
great food - 8 times - Positive
food good - 7 times - Positive
great service - 6 times - Positive
go back - 6 times - Positive
really good - 6 times - Positive
great place - 6 times - Positive
good food - 5 times - Positive
food delicious - 5 times - Positive
first time - 5 times - Positive
food great - 5 times - Positive
go back - 12 times - Negative
not good - 11 times - Negative
would not - 8 times - Negative
going back - 7 times - Negative
anytime soon - 5 times - Negative
not like - 4 times - Negative
bad food - 4 times - Negative
customer service - 4 times - Negative
never ever - 4 times - Negative
waste time - 4 times - Negative
```

NPS internship final.ipynb - Colab

colab.research.google.com/drive/17sU7WrOh8kl4wbirgyPC2vI2Sp5VySNh#scrollTo=We5KSx-UHIEz

Document from Ab... Internet Login ERP E-Mail V-Print V-Live Home - VIT Gmail YouTube Maps max Machine Learning... Reading list

+ Code + Text

NPS SCORE.csv

1 to 20 of 20 entries Filter

	Questions	NPS Score (CMPN)	NPS Score (INFT)	NPS Score (ETRX)	NPS Score (EXTC)	NPS Score (BIOMED)	NPS Score (MMS)
0	How much of the syllabus was covered in the class?	14.28571429	75	0	-100	-100	-100
1	How well did the teachers prepare for the classes?	42.85714286	75	-50	-50	-100	100
2	How well were the teachers able to communicate?	28.57142857	25	0	-100	-33.33333333	-100
3	The teacher's approach to teaching can best be described as	14.28571429	-50	-100	-50	-33.33333333	100
4	Fairness of the internal evaluation process by the teachers.	0	-25	-50	-100	-33.33333333	0
5	Was your performance in assignments discussed with you?	0	75	-50	-100	100	100
6	The institute takes active interest in promoting internship, student exchange, field visit opportunities for students	28.57142857	100	0	-100	0	-100
7	The teaching and mentoring process in your institution facilitates you in cognitive, social and emotional growth.	0	100	-100	0	0	100
8	The institution provides multiple opportunities to learn and grow.	0	-50	-50	0	0	-100
9	Teachers inform you about your expected competencies, course outcomes and programme outcomes	14.28571429	50	-50	-100	100	100
10	Your mentor does a necessary follow-up with an assigned task to you.	0	0	-50	-100	100	-100
11	The teachers illustrate the concepts through examples and applications.	28.57142857	-50	-50	-100	100	-100
12	The teachers identify your strengths and encourage you with providing right level of challenges	28.57142857	75	0	-100	100	-100
13	Teachers are able to identify your weaknesses and help you to overcome them	-14.28571429	50	-50	-100	100	0
14	The institution makes effort to engage students in the monitoring, review and continuous quality improvement of the teaching learning process.	-14.28571429	0	0	-100	100	100

Mentor Signature