

# Natural Language Processing

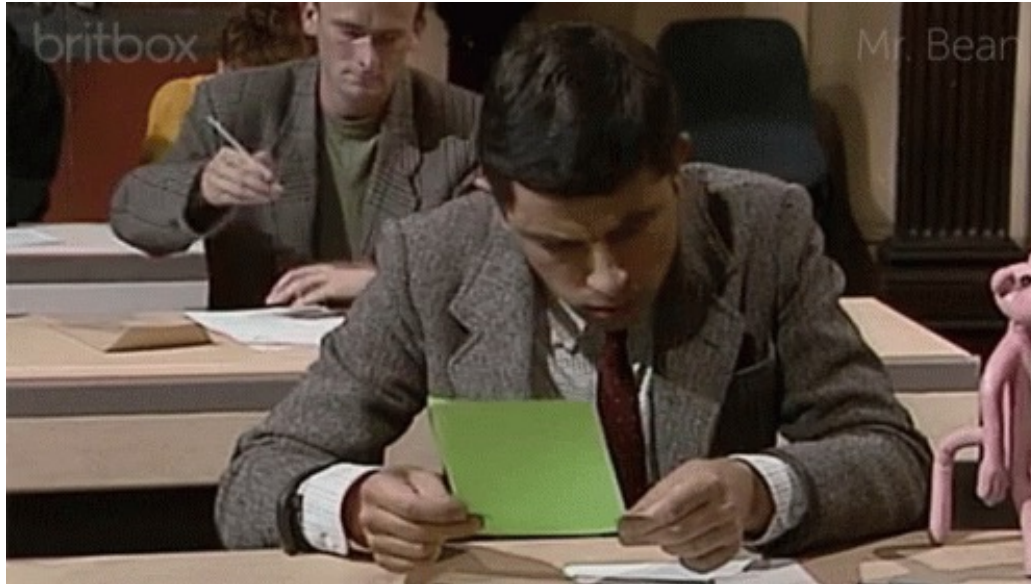
**Technology**  
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## Bachelor Student Project





## Bachelor Students' Project



Hi

Hi, how can I help you?

Analyze the sentiment of "it was tremendous movie"

Cool! Which technique would you like to apply?

**Logistic Regression**

The result is negative.



## Bachelor Students' Project

1. Train your classifiers on IMDB dataset
2. Then connect your classifier into the chatbot
3. Two days before the deadline, I will share 50 samples as test set with you to evaluate the performance of classifier using evaluation metrics:

Precision

Recall

F1

Accuracy

...



## Bachelor Students' Project

	The regular expression	Training on IMDB dataset	Naive Bayes	Logistic Regression	Neural Network	Evaluation	Additional features
Student1							
Student2							
...							
...							
...							

Write a report, and send the file.



## Bachelor Students' Project-Additional features

### Some samples:

- ❖ Add spell-checker
- ❖ Add recommendation facility to the chatbot



# Schedule for Summer Term 2023

23.5.2023	8	N-gram language model	Performance metric		only Bachelor
30.5.2023	9	Generative classifiers	Vector semantics (TF-IDF) and cos similarity		
6.6.2023	Exam	Oral Exam Master			
13.6.2023	10	Vector semantics (TF-IDF) and cos similarity	Logistic Regression with NLTK		
20.6.2023	Preperation for Exam	Group Work	Group Work		
27.6.2023	Preperation for Exam	Group Work	Group Work	Last day of lectures	
31.7.2023	Exam	Submission of term papers			
Legende:		(Lecture)	(Tutorial)	Exam	