

# DAT565/DIT407 Assignment 3

Ola Bratt  
ola.bratt@gmail.com

Patrick Attimont  
patrickattimont@gmail.com

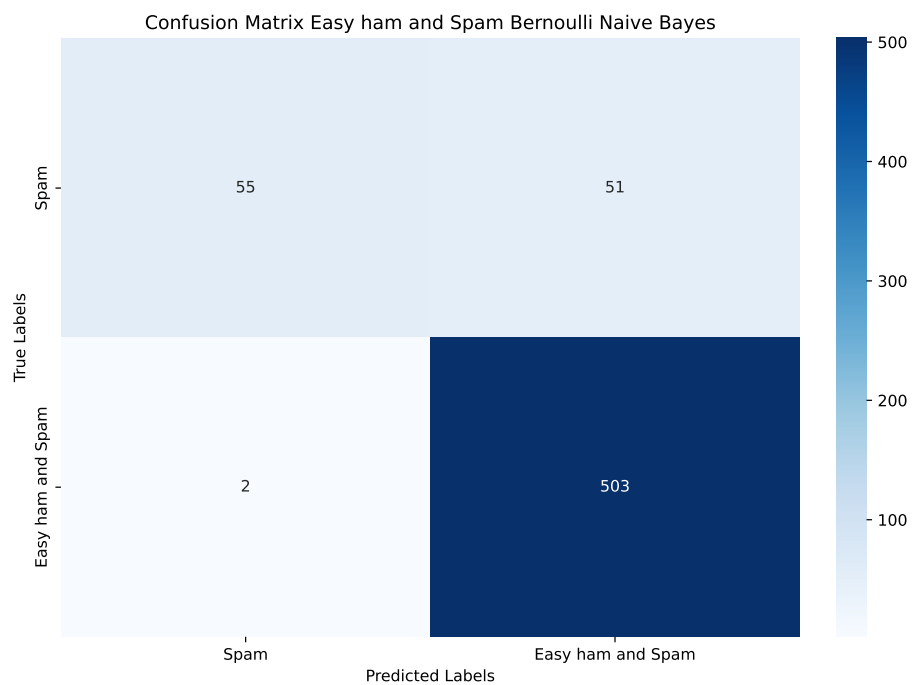
2024-02-xx

This paper is addressing the assignment 3 study queries within the *Introduction to Data Science & AI* course, DIT407 at the University of Gothenburg and DAT565 at Chalmers. The main source of information for this project is derived from the lectures and Skiena [1].

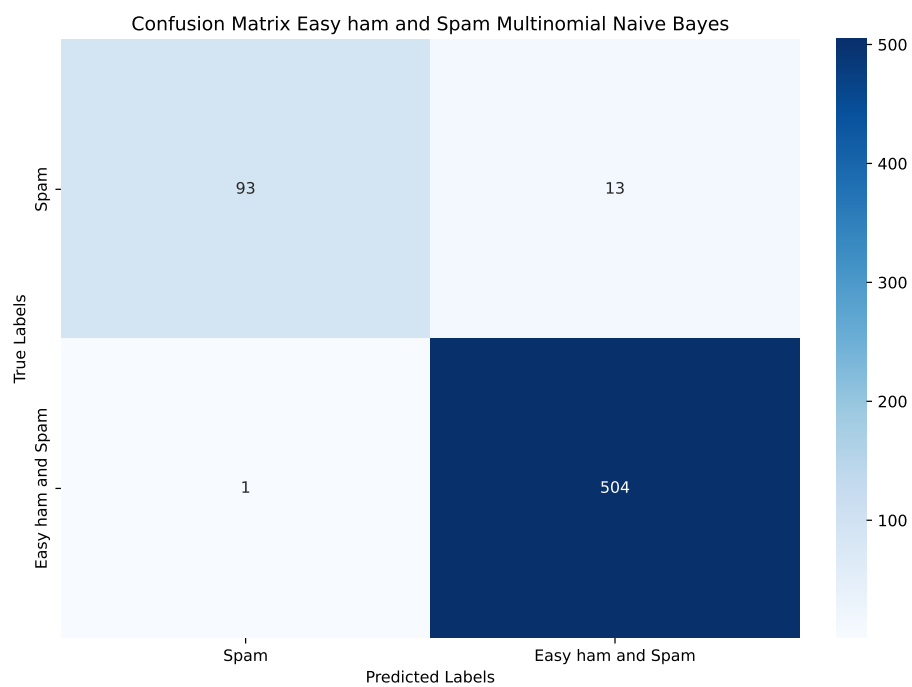
**Problem 1: Spam and Ham**

**Problem 2: Preprocessing**

**Problem 3: Easy Ham**

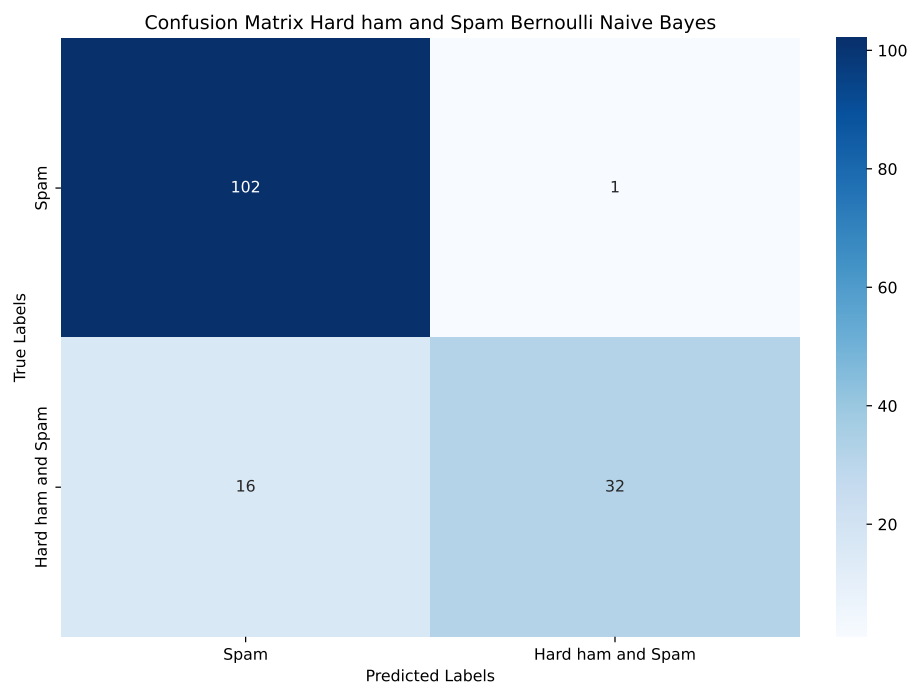


(a) Easy ham vs spam, Bernoulli Naive Bayes

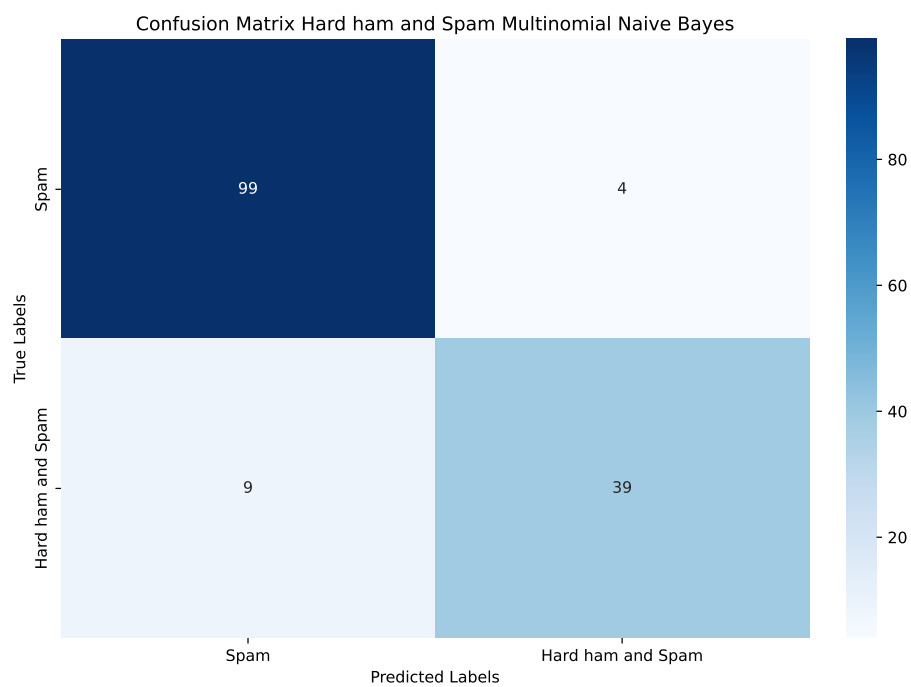


(b) Easy ham vs spam, Multinomial Naive Bayes

### **Problem 3: Hard Ham**



(a) Hard ham vs spam, Bernoulli Naive Bayes



(b) Hard ham vs spam, Multinomial Naive Bayes

## References

- [1] Steven S Skiena. *The Data Science Design Manual*. Retrieved 2024-01-20. 2024. URL: <https://ebookcentral.proquest.com/lib/gu/detail.action?docID=6312797>.

## Appendix: Source Code