**Spam Email Detection**

A simple ML model to detect spam emails.

**Setup**

1. Clone this repo
2. Install dependencies:

pip install numpy pandas scikit-learn joblib

1. Place your mail\_data.csv file in the project folder

**Dataset Format**

Your mail\_data.csv needs:

* Message column: Email content
* Category column: "spam" or "ham" labels

**Quick Start**

Run the script:

python spam\_detector.py

This will:

* Train the model using your data
* Save the model files
* Let you test with your own input

**How To Use**

After running once, the model is saved. You can input emails when prompted:

Enter an e-mail:

The model will classify it as "Spam Mail" or "Ham Mail".

**Code Overview**

* Uses TF-IDF to convert emails to feature vectors
* Applies Logistic Regression for classification
* Saves the trained model for later use

**Notes**

* Uncomment the accuracy measurement section if you want to see performance metrics
* The training/test split is 80/20