

# ***Spam Detector***

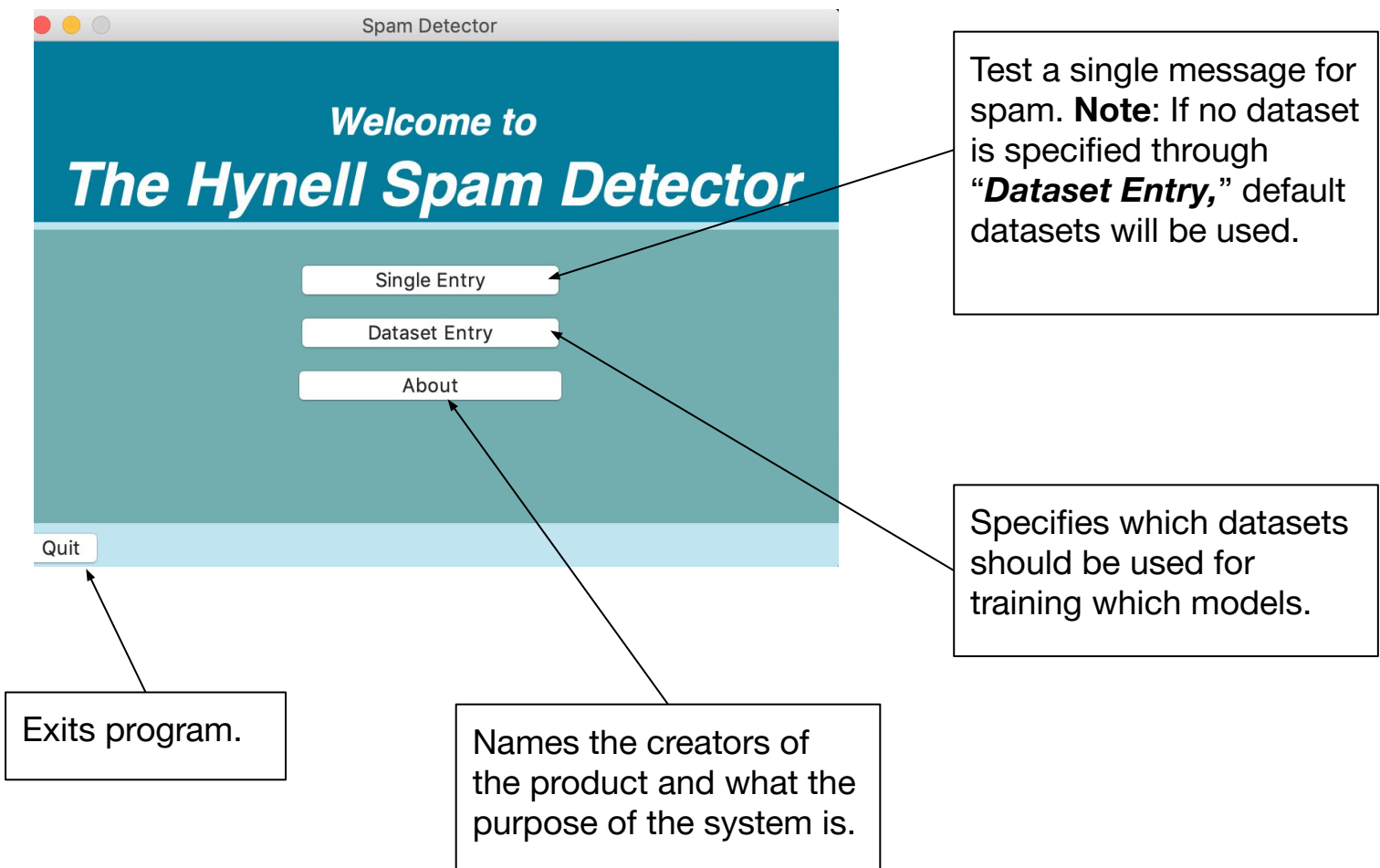
## ***User Documentation***

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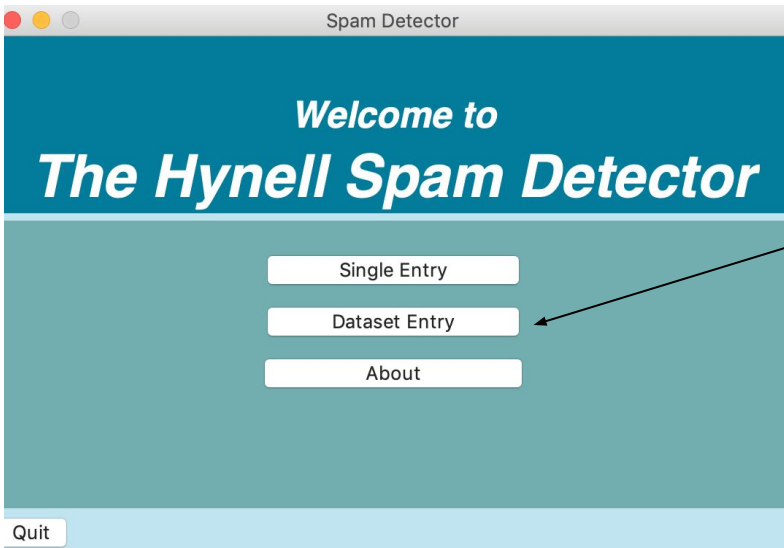
### **Run the Program:**

1. Type in terminal the following while inside of the SpamDetector directory:  
`$ python3 ui.py`

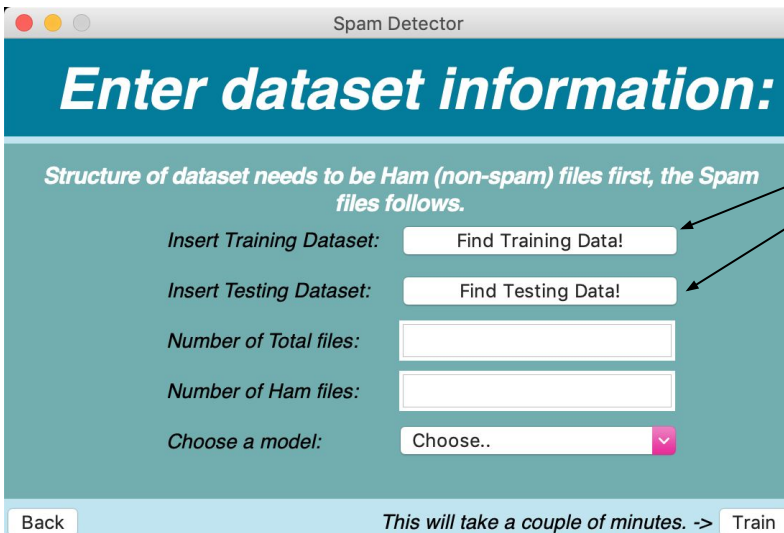
### **Main Menu:**



## Specify Dataset:



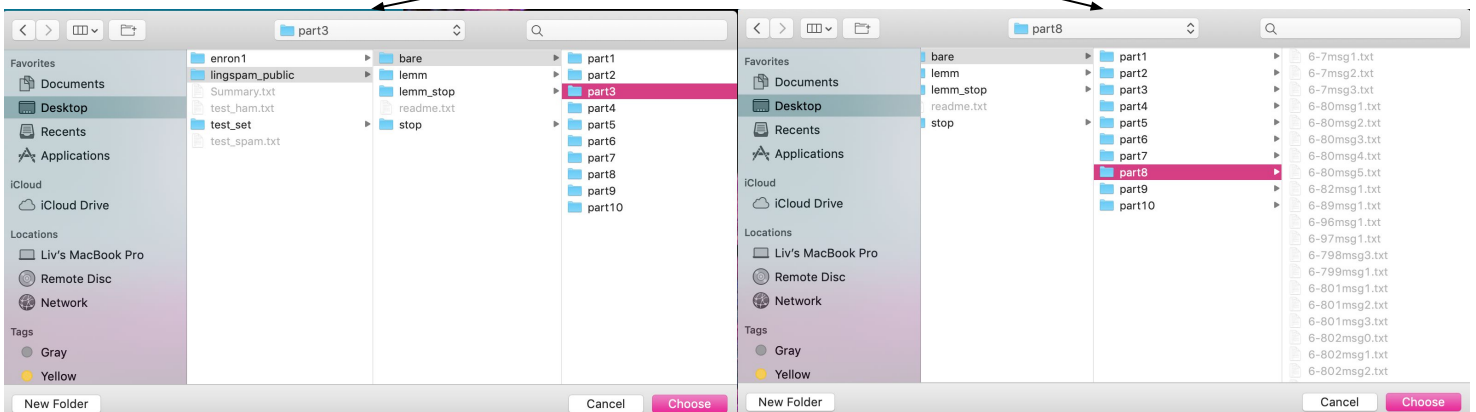
1. Click Here!



2. Click here to choose specific datasets.

3. Find Training and Testing datasets.

**Note:** Files in datasets must be .txt files.



Spam Detector

## Enter dataset information:

Structure of dataset needs to be Ham (non-spam) files first, the Spam files follows.

Insert Training Dataset:

Insert Testing Dataset:

Number of Total files:

Number of Ham files:

Choose a model:

This will take a couple of minutes. ->

4. Enter the total amount of files and how many of those are not spam.

**Note:** For given test datasets the *Number of Total files* will be 289 and the *Number of Ham files* will be 241.

Choose a model:

- Nearest Neighbor
- Perceptron
- Both

5. Choose which models to train.

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## Enter dataset information:

Structure of dataset needs to be Ham (non-spam) files first, the Spam files follows.

Insert Training Dataset:

Insert Testing Dataset:

Number of Total files:

Number of Ham files:

Choose a model:

This will take a couple of minutes. ->

6. Click Train!

**Note:** This may take a couple of minutes, please don't click any buttons.

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## Training Results:

Training Dataset: part3

Testing Dataset: part8

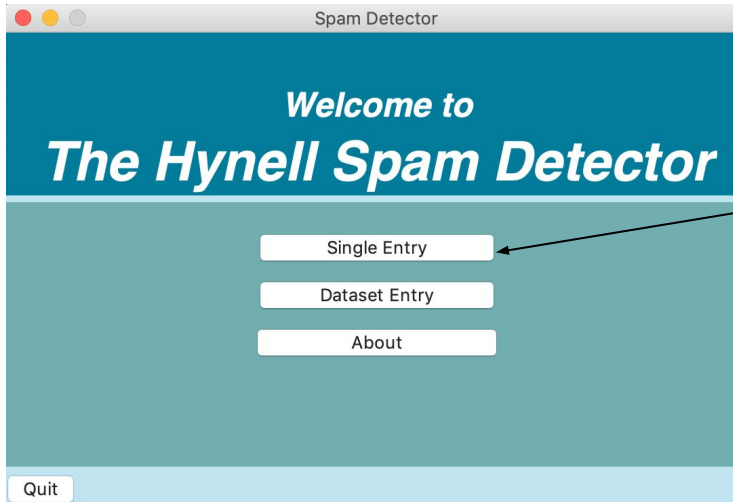
Nearest Neighbor Accuracy (%): 83.33333333333334

Perceptron Accuracy (%): 70.58823529411765

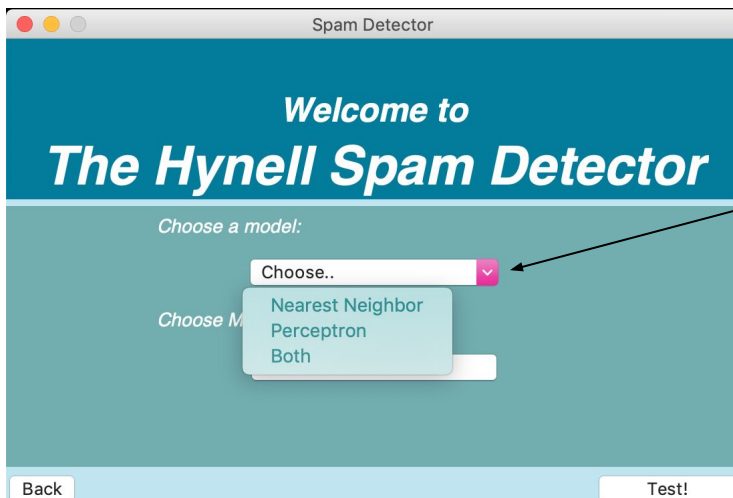
7. Receive Results!

**Note:** This training will be stored for future Single Entry Testing.

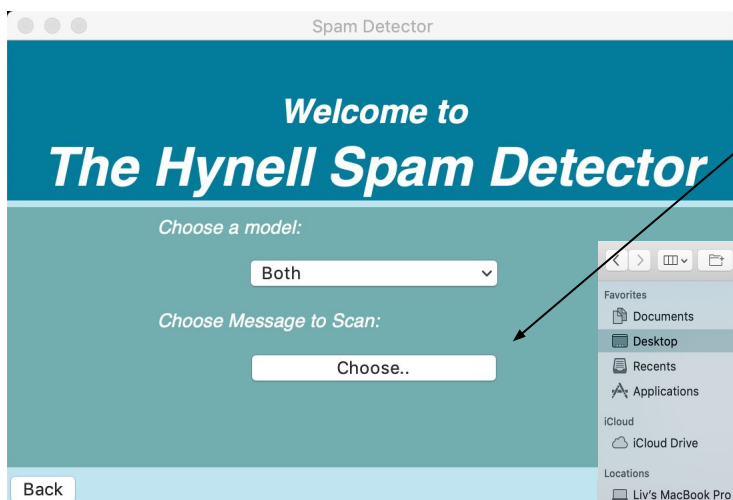
## Test a single message for spam:



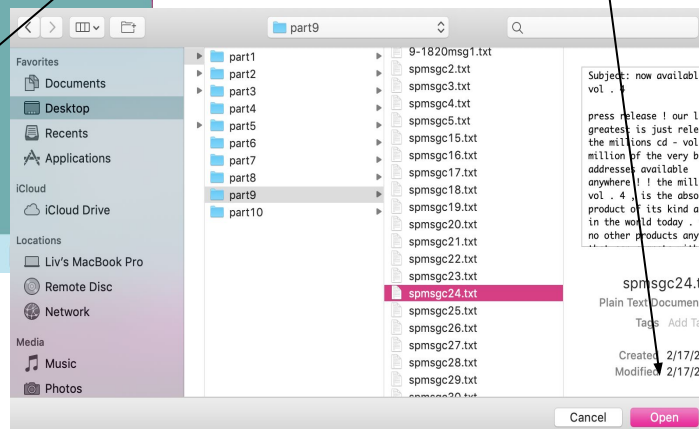
1. Click Here!



2. Choose which  
models to test the  
message with.



3. Choose which .txt file to  
scan for spam.



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## Welcome to The Hynell Spam Detector

Choose a model:

Both

Choose Message to Scan:

Choose..

Back Test!

4. Click Here to  
test the message.

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## Results:

# Spam

**File Name:** spmsgc24.txt  
**Average Model Accuracy (%):** 76.9607843137255  
**Nearest Neighbor Result:** Spam  
**Perceptron Result:** Spam

Try Another Message Main Menu

5. Receive Results!