

Mini Project

Phase-2

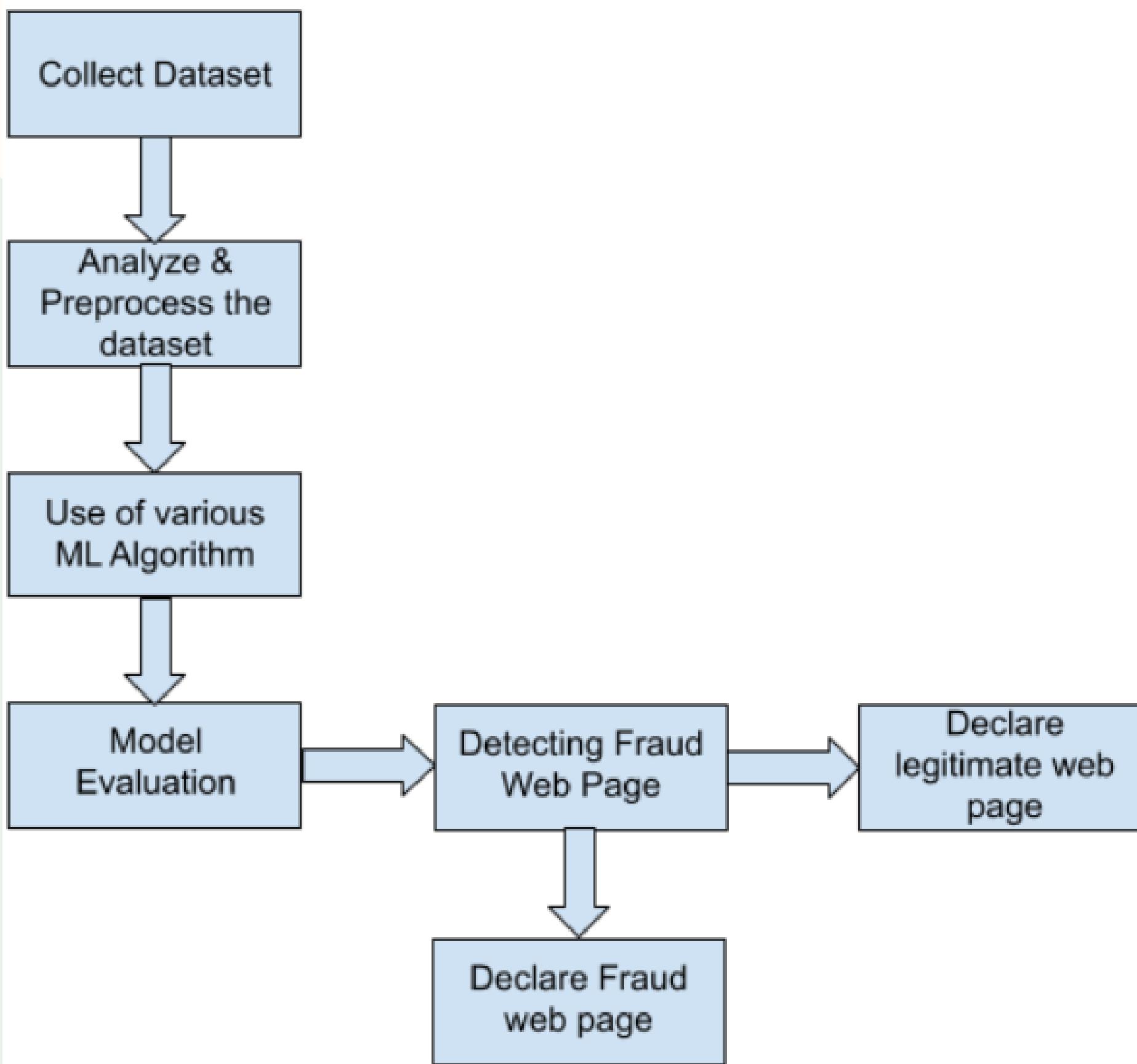
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- ~ Under the Guidance of Prof. Kiran
Gawande

"Fraud Web Page Detection using Machine Learning"

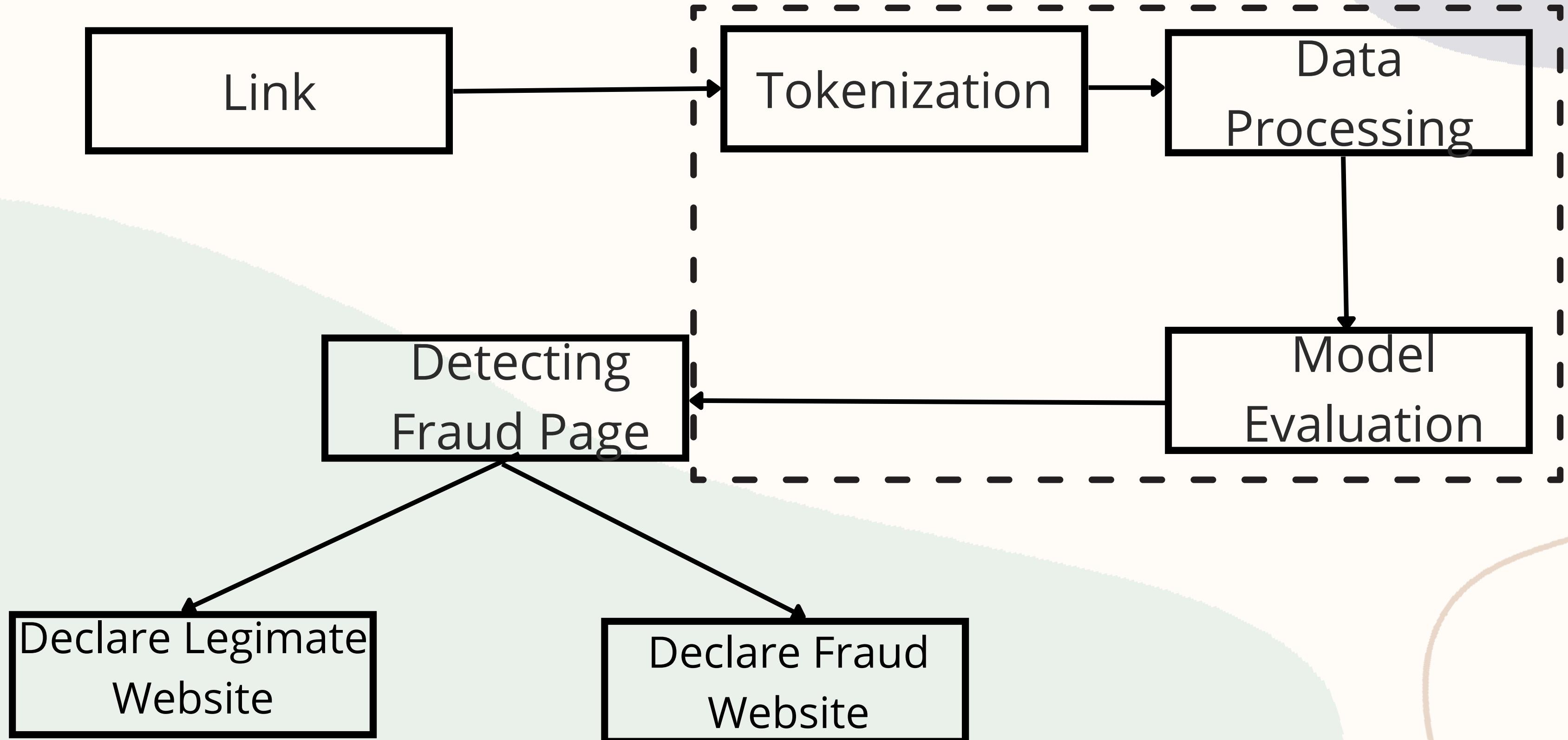
Problem Statement

- Phishing Websites are duplicate Web pages created to mimic real Websites in-order to deceive people to get their personal information.
- Because of the adaptability of their tactics with little cost Detecting and identifying.
- The purpose of the project is to detect fraud websites that might encounter.
- The task is to determine if a user still can be trusted or if it should be flagged for potential fraud through that website.

Design and Methodology



Methodology



Algorithms/techniques used

- Logistic Regression

Training Accuracy : 0.9783572688946115

Testing Accuracy : 0.9638334898825517

CLASSIFICATION REPORT

	precision	recall	f1-score	support
Bad	0.91	0.96	0.93	36442
Good	0.99	0.96	0.98	100895
			•	
accuracy			0.96	137337
macro avg	0.95	0.96	0.95	137337
weighted avg	0.97	0.96	0.96	137337

Algorithms/techniques used

- Multinomial Naive Bayes classifier object using MultinomialNB() function.

Training Accuracy : 0.9739204726110352

Testing Accuracy : 0.9574477380458288

CLASSIFICATION REPORT

	precision	recall	f1-score	support
Bad	0.91	0.93	0.92	38035
Good	0.97	0.97	0.97	99302
accuracy			0.96	137337
macro avg	0.94	0.95	0.95	137337
weighted avg	0.96	0.96	0.96	137337

Tech Stack Used

Kaggle(CSV File)

Google Colab (Jupyter)

Python

HTML / CSS

Flask

Module-wise Implementation Screenshots



The image shows a screenshot of a web application's dashboard. On the left, there is a dark sidebar with the title "DASHBOARD" at the top. Below it is a vertical list of menu items: "Home", "About Us", "ML Detection", "Add Blacklisted words", "Check Link", and "Feedback". Each item is separated by a horizontal line. The main content area on the right has a light blue background featuring a faint, stylized globe and network graphics. Overlaid on this background is the title "Fraud Web Page Detection using Machine Learning" in a large, bold, black serif font.

DASHBOARD

Home

About Us

ML Detection

Add Blacklisted words

Check Link

Feedback

*Fraud Web Page
Detection using
Machine Learning*

DASHBOARD

Home

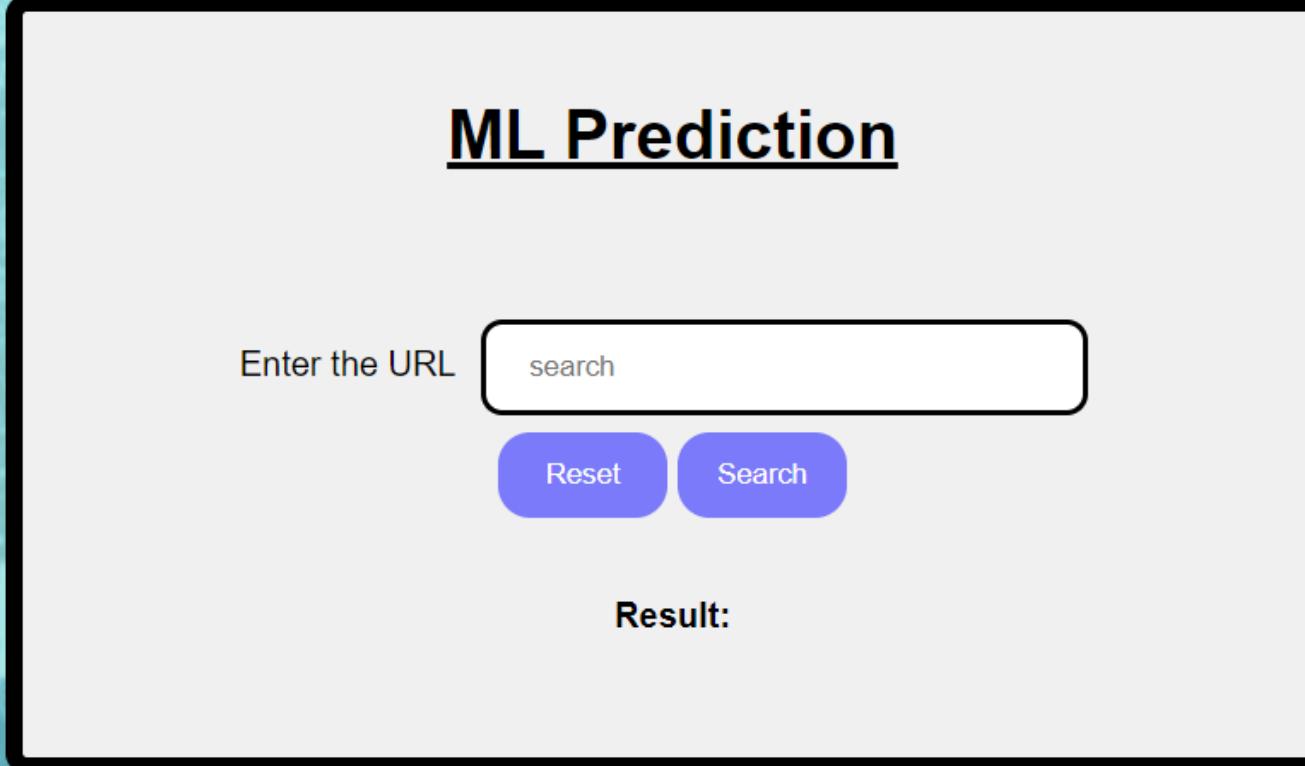
About Us

ML Detection

Add Blacklisted
words

Check Link

Feedback



The image shows a modal window titled "ML Prediction". Inside the modal, there is a text input field labeled "Enter the URL" with a placeholder "search". Below the input field are two buttons: "Reset" and "Search", both in purple. To the right of the input field, the word "Result:" is displayed in bold black text.

ML Prediction

Enter the URL

search

Reset

Search

Result:

ML Prediction

Enter the URL

Reset

Search

Result:

ML Prediction

Enter the URL

Reset

Search

Result: This is not a Phishing Site

ML Prediction

Enter the URL

<nobell.it/70ffb52d079109dca5664cce6f3>

Reset

Search

Result:

ML Prediction

Enter the URL

Reset

Search

Result: This is a Phishing Site

DASHBOARD

Home

About Us

ML Detection

Add Blacklisted
words

Check Link

Feedback

Blacklist Prediction

Add black listed word:

Enter the word

Reset

Add

DASHBOARD

Home

About Us

ML Detection

Add Blacklisted
words

Check Link

Feedback

Blacklist Prediction

Add black listed word:

nobell

Reset

Add

Blacklist Prediction

Add black listed word:

Enter the word

Reset

Add

Succesfully added

1234

DASHBOARD

Home

About Us

ML Detection

Add Blacklisted
words

Check Link

Feedback

Blacklist Prediction

Enter the URL

search

Reset

Search

Result:

Blacklist Prediction

Enter the URL

nobell.it/70ffb52d079109dca5664cce6f3'

Reset

Search

Result: Phishing Website

Reference:

- Weiheng Bai; "Phishing Website Detection Based on Machine Learning Algorithm"
<https://ieeexplore.ieee.org/document/9275957>
- Junaid Rashid; Toqeer Mahmood; Muhammad Wasif Nisar; Tahira Nazir; "Phishing Detection Using Machine Learning Technique"
<https://ieeexplore.ieee.org/document/9283771>
- Mohammed Hazim Alkawaz; Stephanie Joanne Steven; Asif Iqbal Hajamydeen; "Detecting Phishing Website Using Machine Learning"
<https://ieeexplore.ieee.org/document/9068728>

THANK YOU