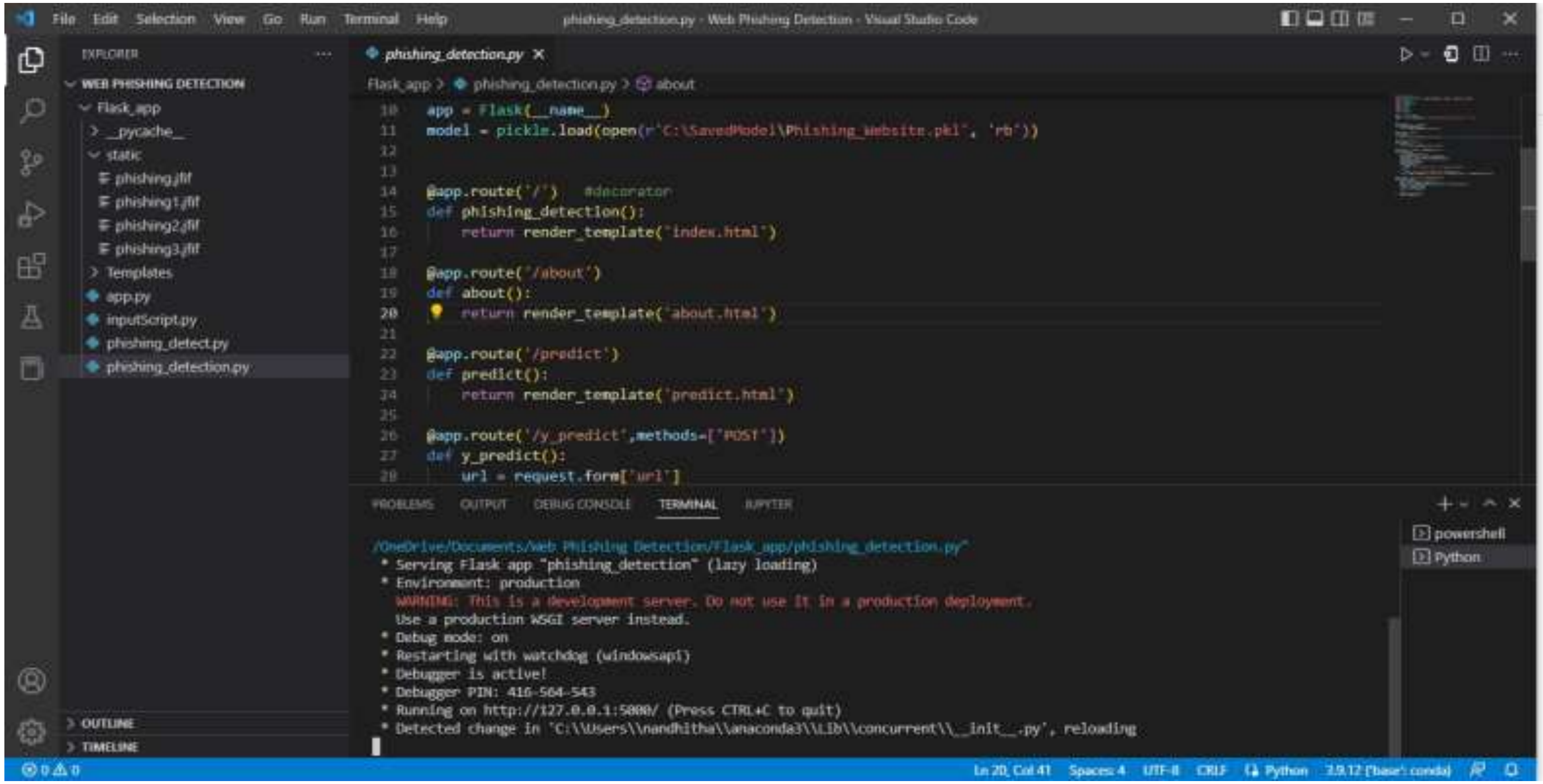
Web Phishing Detection

Testing Model

Date	15 November 2022
Team ID	PNT2022TMID42479
Project Name	Project – Web Phishing Detection
Maximum Marks	-

Executing the model:

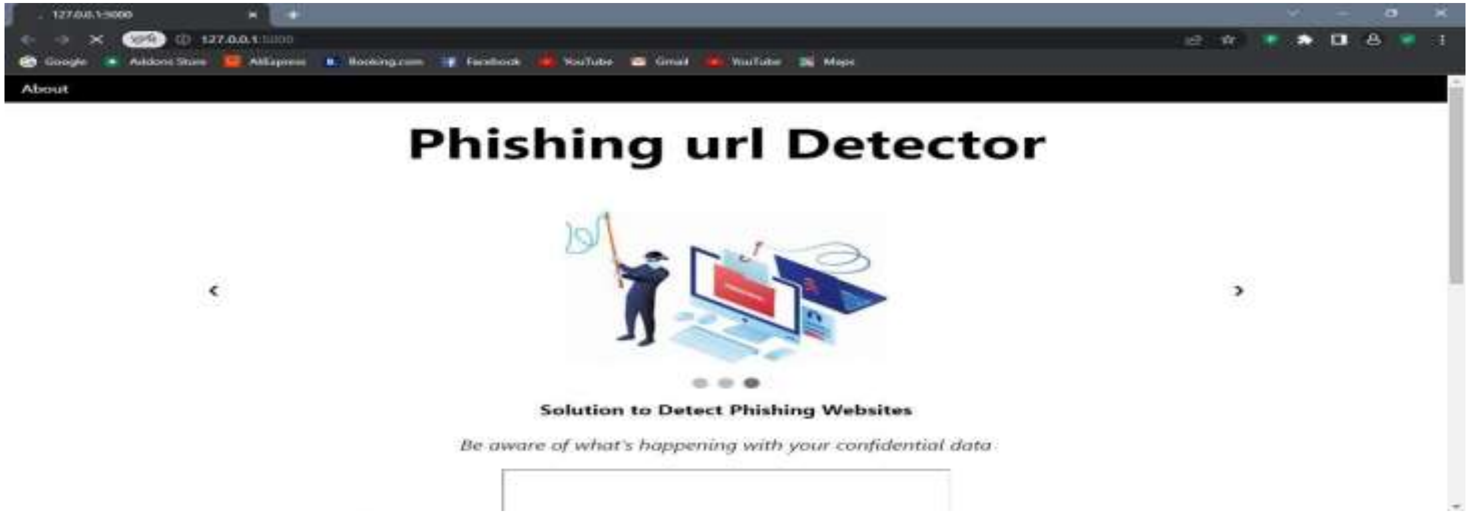


File Edit Selection View Go Run Terminal Help
phishing_detection.py - Web Phishing Detection - Visual Studio Code
EXPLORER
WEB PHISHING DETECTION
Flask_app
__pycache__
static
phishing.jfif
phishing1.jfif
phishing2.jfif
phishing3.jfif
Templates
app.py
inputScript.py
phishing_detect.py
phishing_detection.py
OUTLINE
TIMELINE
phishing_detection.py
Flask_app > phishing_detection.py > about
PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL JUPYTER
powershell
Python
Ln 20, Col 41 Spaces: 4 UTF-8 CRLF Python 3.9.12 ('base': conda)

```python
app = Flask(__name__)
model = pickle.load(open(r'C:\SavedModel\Phishing_website.pkl', 'rb'))


@app.route('/')   #decorator
def phishing_detection():
    return render_template('index.html')

@app.route('/about')
def about():
    return render_template('about.html')

@app.route('/predict')
def predict():
    return render_template('predict.html')

@app.route('/y_predict',methods=['POST'])
def y_predict():
    url = request.form['url']
```

```
/OneDrive/Documents/Web Phishing Detection/Flask_app/phishing_detection.py"
 * Serving Flask app "phishing_detection" (lazy loading)
 * Environment: production
   WARNING: This is a development server. Do not use it in a production deployment.
   Use a production WSGI server instead.
 * Debug mode: on
 * Restarting with watchdog (windowsapi)
 * Debugger is active!
 * Debugger PIN: 416-564-543
 * Running on http://127.0.0.1:5000/ (Press CTRL+C to quit)
 * Detected change in 'C:\\Users\\nandhitha\\anaconda3\\Lib\\concurrent\\__init__.py', reloading
```

Home page of the web application:



About

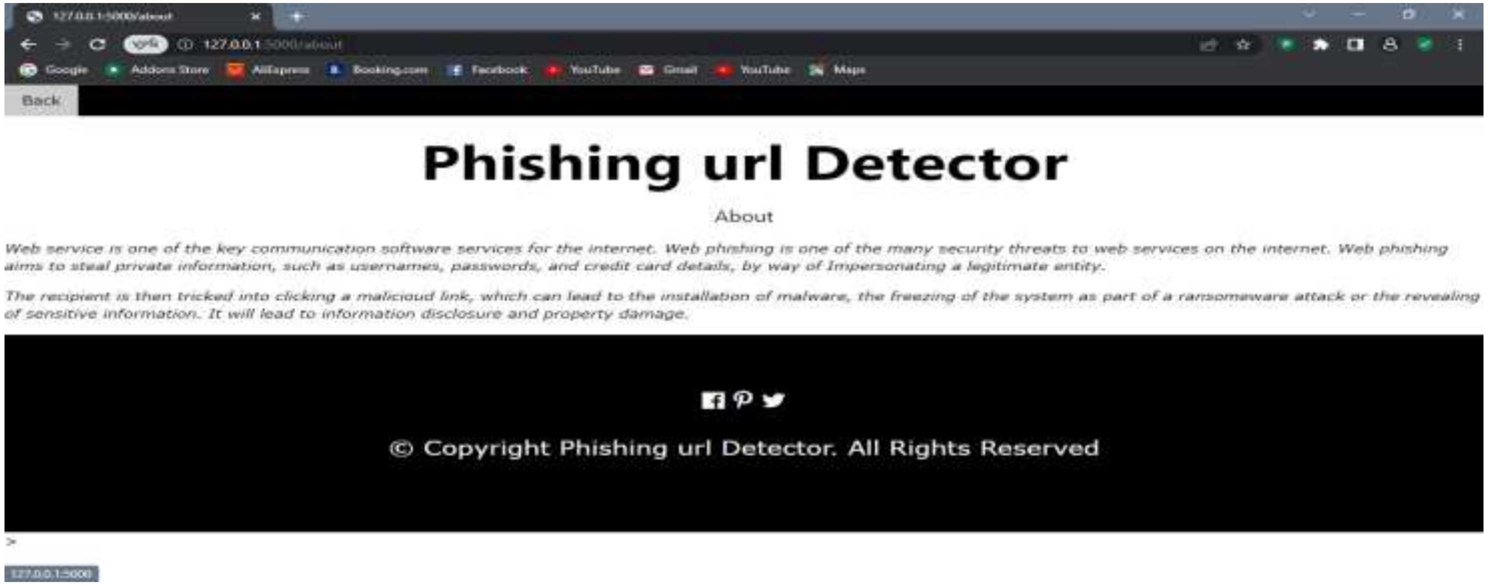
Phishing url Detector

Solution to Detect Phishing Websites

Be aware of what's happening with your confidential data

About page:

The user upon clicking the about button available in the navigation bar, the user will be redirected to the About page.



Back

Phishing url Detector

About

Web service is one of the key communication software services for the internet. Web phishing is one of the many security threats to web services on the internet. Web phishing aims to steal private information, such as usernames, passwords, and credit card details, by way of Impersonating a legitimate entity.

The recipient is then tricked into clicking a malicioud link, which can lead to the installation of malware, the freezing of the system as part of a ransomeware attack or the revealing of sensitive information. It will lead to information disclosure and property damage.

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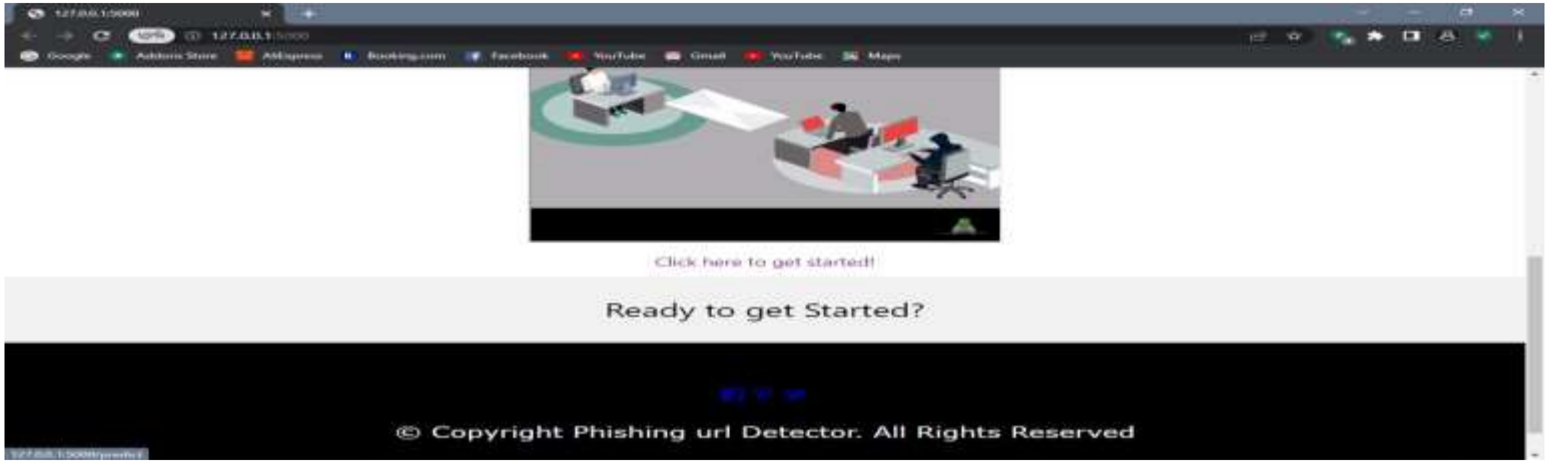
Prediction page:

- Now when the user clicks on the “Click here to get started” link, the user will now be redirected to the prediction page.
- In the prediction page the user can enter the url in the search bar, and when he clicks on the “Predict” button the user will be redirected to the y_prediction page.



Click here to get started!!

Ready to get Started?

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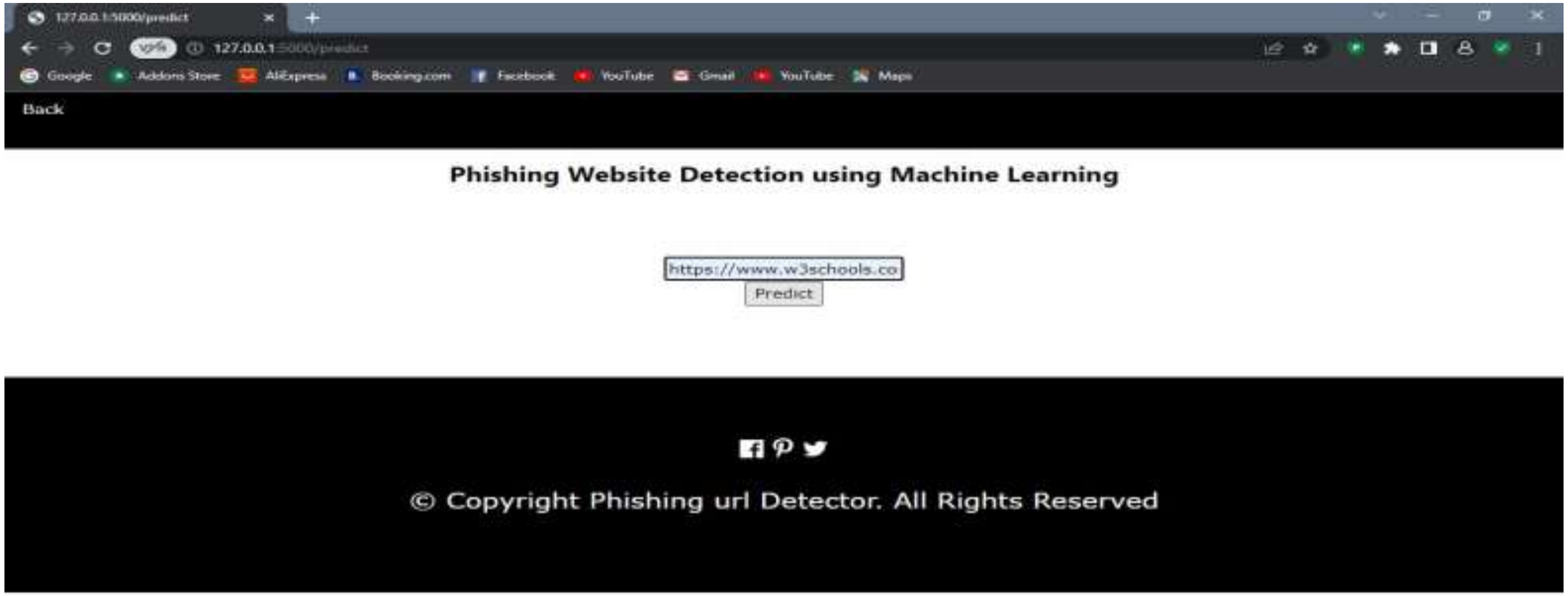

Phishing Website Detection using Machine Learning

https://www.w3schools.co

Predict

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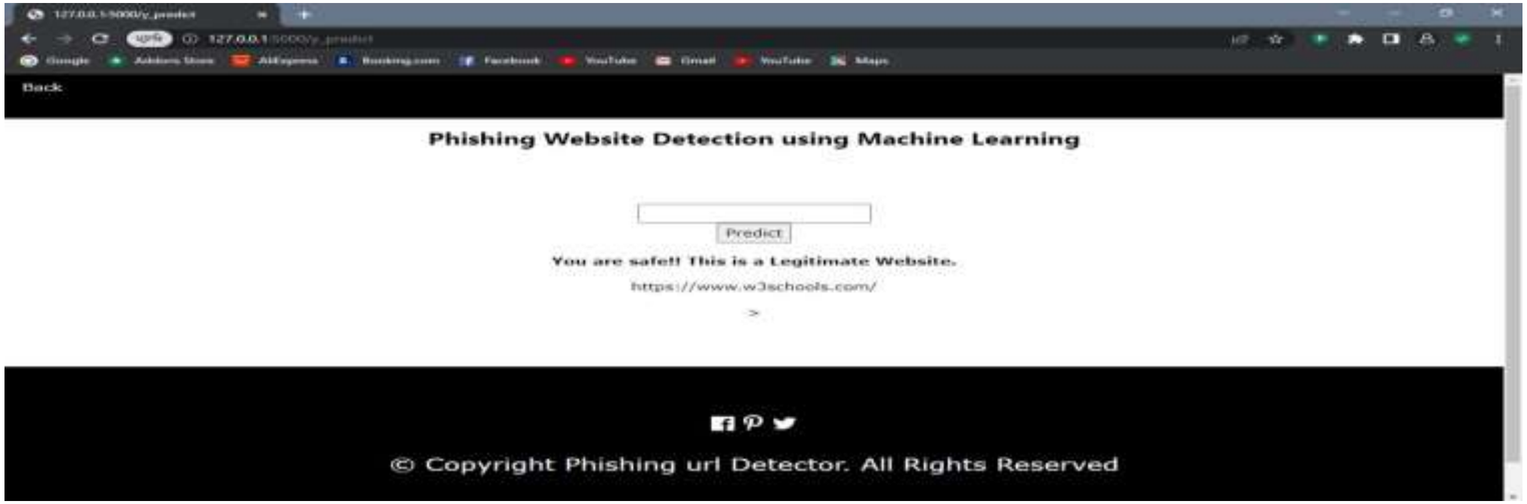
Y_prediction page:

Now in this page the output is displayed. If the url is legitimate then the message is displayed stating that “You are safe!! This is a Legitimate Website.” else if the url is a phishing url then the message is displayed as “You are on the wrong site, Be cautious!”.



Phishing Website Detection using Machine Learning

You are safe!! This is a Legitimate Website.

https://www.w3schools.com/

>

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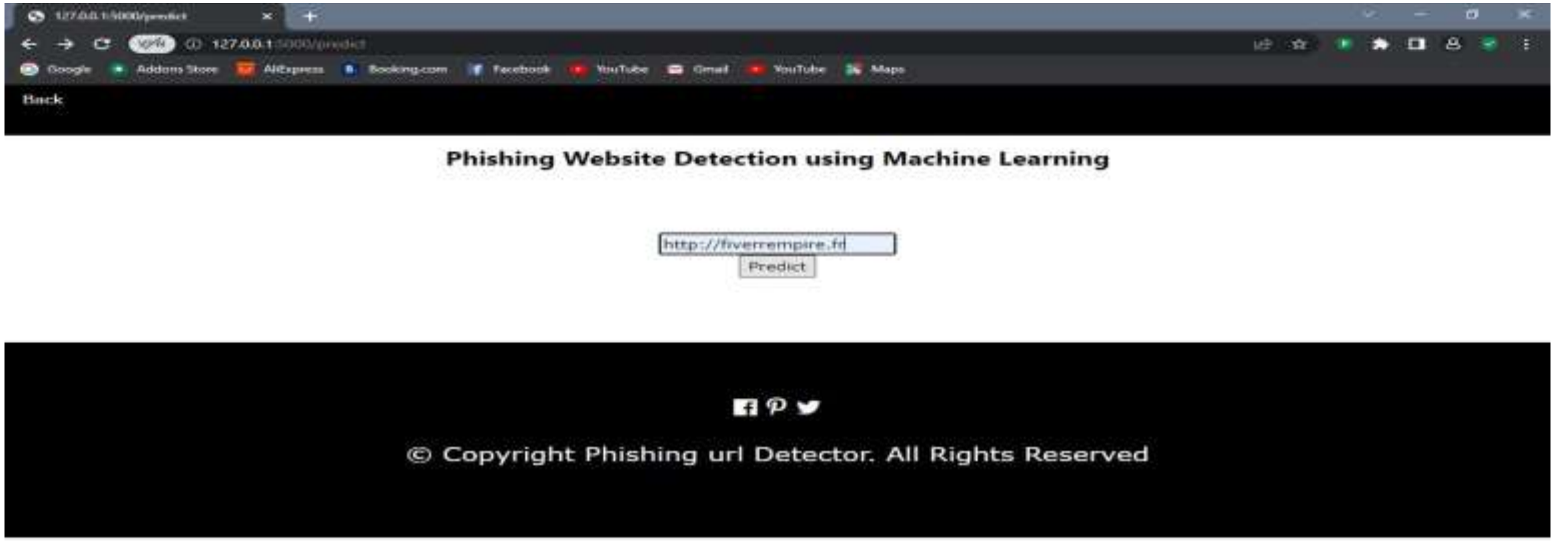

Phishing Website Detection using Machine Learning

http://fiverrempire.fr

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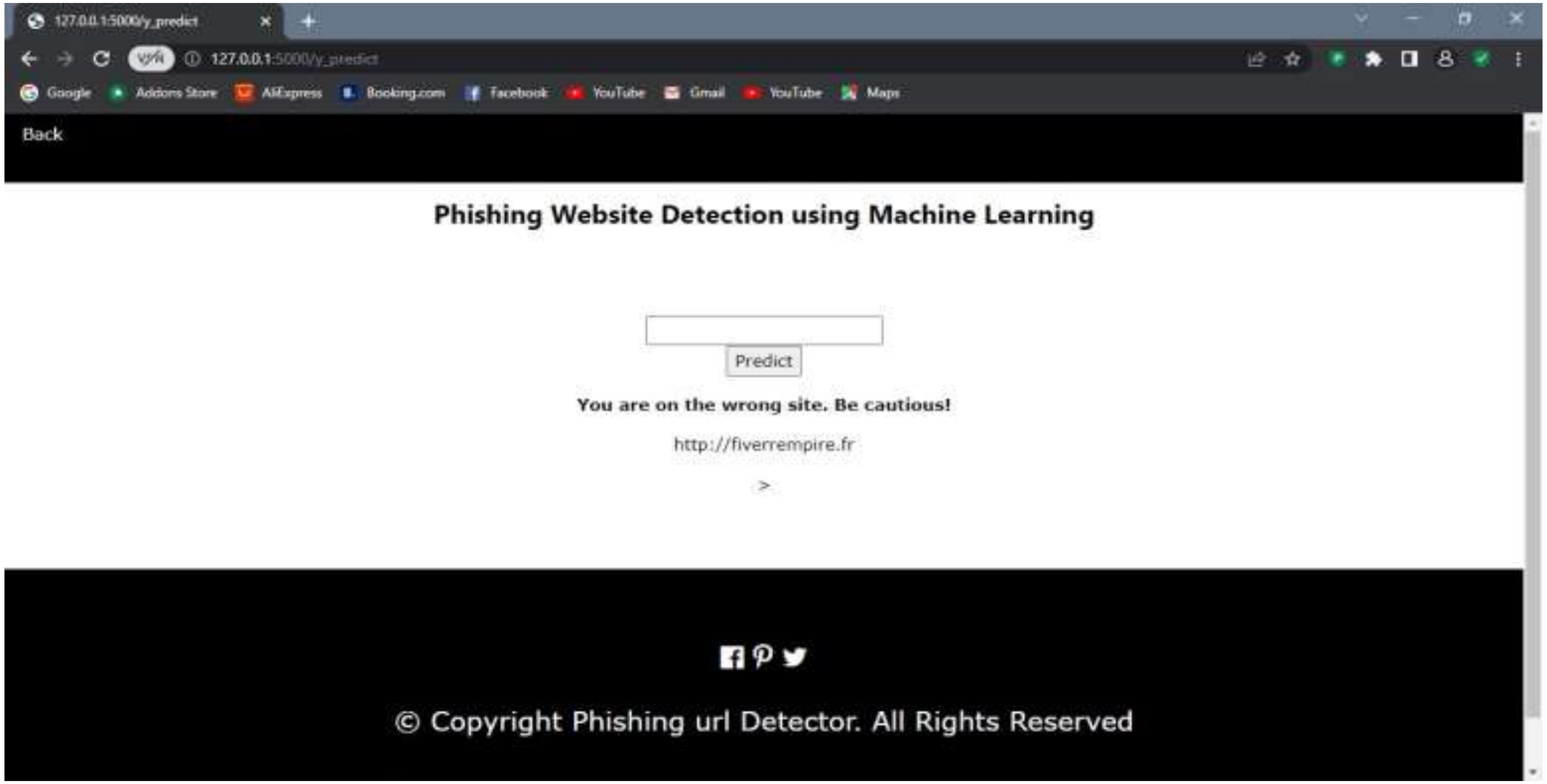

Phishing Website Detection using Machine Learning

Predict

You are on the wrong site. Be cautious!

http://fiverrempire.fr

>

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Conclusion:

We have successfully built the model for predicting the phishing urls and have successfully built the web application using flask framework and the testing is done and the website works successfully as expected. We have used the Random Forest Classifier since it has produced 96.56% accuracy for producing accurate result.