

<b>TITLE</b>	Web Phishing detection
<b>COLLEGE NAME</b>	Sri Sairam Engineering College
<b>TEAM ID</b>	PNT2022TMID03812

## **Pre-Requisites:**

## **Jupyter Lab:**

The most recent web-based interactive development environment for code, data, and notebooks is Jupyter Lab. Users can configure and arrange workflows in data science, scientific computing, computational journalism, and machine learning using the interface's flexibility. A modular structure encourages expansions to increase and improve functionality.

## **sk-learn:**

A variety of machine learning, pre-processing, cross-validation, and visualization methods are implemented by the open-source Python package SK-learn utilizing a standardized user interface.

Tools for data mining and data analysis that are easy to use and effective. Support vector machines, random forests, gradient boosting, k-means, and other classification, regression, and clustering algorithms are included.

## **Numpy:**

A general-purpose array processing library for Python called NumPy offers tools for working with n-dimensional arrays. It offers a variety of computational tools, including procedures for linear algebra and complete mathematical functions. With NumPy, you can have Python's flexibility and well-optimized, compiled C code's speed. For programmers of all backgrounds, it is incredibly accessible and productive because to its simple syntax. A general-purpose package for handling arrays is called NumPy. It offers a multidimensional array object with outstanding speed as well as capabilities for interacting with these arrays. It is the cornerstone Python module for scientific computing. The programme is open-source.

## **Pandas:**

Built on top of the NumPy library is the open-source Pandas library. It is a Python package that provides a number of data structures and actions for working with time series and numerical data. It is mostly used for how much simpler it makes importing and evaluating data. Pandas is quick and offers users exceptional performance & productivity.

Pandas is mostly used for tabular data manipulation and analysis in DataFrames. Data can be imported into Pandas from a variety of file types, including Microsoft Excel, JSON, Parquet, SQL database tables, and comma-separated values.

## **Matplotlib:**

Python's Matplotlib is a fantastic visualising package that is simple to use. It is constructed using NumPy arrays, intended to operate with the larger SciPy stack, and includes a number of graphs, including line, bar, scatter, histogram, and others.

With the aid of a sizable dataset including details about several plot types and their customizations, we will learn about Python plotting with Matplotlib in this tutorial, working our way up from the fundamentals to the more advanced.

If you are using anaconda navigator, follow below steps to download required packages:

1. Open anaconda prompt.
2. Type “**pip install numpy**” and click enter.
3. Type “**pip install pandas**” and click enter.
4. Type “**pip install matplotlib**” and click enter.
5. Type “**pip install scikit-learn**” and click enter.
6. Type “**pip install Flask**” and click enter.

## **Flask: Web framework used for building Web applications.**

A bottle, Django, Flask, and other modules or frameworks let you to develop your website using Python. But Flask and Django are the real favourites. Django is simpler to use than Flask, but Flask requires that you learn a few broader terminology in order to utilise it.

**WSGI** Web Server Gateway Interface (WSGI) has been adopted as a standard for Python web application development. WSGI is a specification for a universal interface between the web server and the web applications.

**Westernize** It is a WSGI toolkit, which implements requests, response objects, and other utility functions. This enables building a web framework on top of it. The Flask framework uses Westernize as one of its bases.

**Jinja2** jinja2 is a popular templating engine for Python. A web templating system combines a template with a certain data source to render dynamic web pages.