PROJECT: Machine Learning

Phishing Detector using KNN

Purpose of the Document

The document has to specify the requirements for the project "Build a detector for Phishing websites (KNN)." Apart from specifying the functional and non-functional requirements for the project, it also serves as an input for project scoping.

Problem Statement

The purpose of the project is to use one or more of the classification algorithms to train a model on the Phishing website dataset.

You are provided with the following resources that can be used as inputs for your model:

- 1. A collection of website URLs for 11000+ websites. Each sample has 30 website parameters and a class label identifying it as a phishing website or not (1 or -1).
- 2. Code template containing these code blocks:
 - a) Import modules (part 1)
 - b) Load data function + input/output field descriptions

You are expected to write the code for a binary classification model using Python Scikit-Learn that trains on the data and calculates the accuracy score on the test data.



Project Guidelines

#	Exercises	Process
1	Initiation	Begin by extracting the ipynb file.
2	Exercise	Build a phishing website classifier using KNN with number of neighbors as 5 and distance metric as "minkowski." Use 70% of data as training data and remaining 30% as test data. (Hint: Use Scikit-Learn library KNeighboursClassifier and refer to the KNN tutorial.) Print count of misclassified samples in the test data prediction as well as accuracy score of the model.