Data Collection and Preprocessing Phase

Date	06-06-2024
Team ID	739972
Project Title	DETECTION OF PHISHING WEBSITE FROM URLS
Maximum Marks	6 Marks

Data Exploration and Preprocessing Report

Dataset variables will be statistically analyzed to identify patterns and outliers, with Python employed for preprocessing tasks like normalization and feature engineering. Data cleaning will address missing values and outliers, ensuring quality for subsequent analysis and modeling, and forming a strong foundation for insights and predictions.

Section	Description
Data Overview	Dimension: 614 rows × 13 columns Descriptive statistics: -
Univariate Analysis	

Bivariate Analysis	-
Multivariate Analysis	-

Outliers and Anomalies	-

Data Preprocessing Code Screenshots

| Loading Data | ```python
#Import Dataset
ds= pd.read_csv("dataset_phishing.csv")
ds.head()
```<br><br>url length_url length_hostname ip nb_dots nb_hyphens nb_at nb_qm nb_and nb_or ... domain_in_title domain_with<br>0 http://www.crestonwood.com/router.php 37 19 0 3 0 0 0 0 0 ... 0<br>1 http://shadetreetechnology.com/V4/validation/a... 77 23 1 1 0 0 0 0 0 ... 1<br>2 https://support-appleid.com.secureupdate.duila... 126 50 1 4 1 0 1 2 0 ... 1<br>3 http://rgipt.ac.in 18 11 0 2 0 0 0 0 0 ... 1<br>4 http://www.iracing.com/tracks/gateway-motorspo... 55 15 0 2 2 0 0 0 0 ... 0<br><br>5 rows × 89 columns |
| Handling Missing Data | ```python
#Splitting data as independent and dependent
#removing index column in independent dataset
x=ds.iloc[:,1:31].values
y=ds.iloc[:, -1].values
print(x,y)
```<br><br>```
[[ 37. 19.  0. ...  0.  0.  0.]
 [ 77. 23.  1. ...  0.  0.  0.]
 [126. 50.  1. ...  0.  0.  0.]
 ...
 [105. 16.  1. ...  0.  0.  0.]
 [ 38. 30.  0. ...  0.  0.  0.]
 [477. 14.  1. ...  0.  0.  1.]] ['legitimate' 'phishing' 'phishing' ... 'legitimate' 'legitimate'
 'phishing']
```<br><br>- |
Data Transformation	-
Feature Engineering	Attached the codes in final submission.
Save Processed Data	-