

PRIOR KNOWLEDGE

Date	4 November 2022
Team ID	PNT2022TMID01032
Project Name	Web Phishing Detection
Maximum Marks	2 Marks

TO UNDERSTAND AND WORK OUT THE PROJECT, WE MUST HAVE PRIOR KNOWLEDGE ON THE FOLLOWING CONCEPTS:

- SUPERVISED LEARNING
- UNSUPERVISED LEARNING
- REGRESSION CLASSIFICATION AND CLUSTERING
- LOGISTIC REGRESSION
- FLASK

SUPERVISED LEARNING:

SUPERVISED LEARNING IS THE TYPES OF MACHINE LEARNING IN WHICH MACHINES ARE TRAINED USING WELL "LABELLED" TRAINING DATA, AND ON BASIS OF THAT DATA, MACHINES PREDICT THE OUTPUT. THE LABELLED DATA MEANS SOME INPUT DATA IS ALREADY TAGGED WITH THE CORRECT OUTPUT.

UNSUPERVISED LEARNING:

UNSUPERVISED LEARNING IS A TYPE OF MACHINE LEARNING IN WHICH MODELS ARE TRAINED USING UNLABELED DATASET AND ARE ALLOWED TO ACT ON THAT DATA WITHOUT ANY SUPERVISION.

REGRESSION CLASSIFICATION AND CLUSTERING:

REGRESSION AND CLASSIFICATION ARE TYPES OF SUPERVISED LEARNING ALGORITHMS WHILE CLUSTERING IS A TYPE OF UNSUPERVISED ALGORITHM.

WHEN THE OUTPUT VARIABLE IS CONTINUOUS, THEN IT IS A REGRESSION PROBLEM WHEREAS WHEN IT CONTAINS DISCRETE VALUES, IT IS A CLASSIFICATION PROBLEM.

LOGISTIC REGRESSION:

THIS TYPE OF STATISTICAL MODEL (ALSO KNOWN AS *LOGIT MODEL*) IS OFTEN USED FOR CLASSIFICATION AND PREDICTIVE ANALYTICS. LOGISTIC REGRESSION ESTIMATES THE PROBABILITY OF AN EVENT OCCURRING, SUCH AS VOTED OR DIDN'T VOTE, BASED ON A GIVEN DATASET OF INDEPENDENT VARIABLES.

FLASK:

FLASK IS A WEB FRAMEWORK, IT'S A PYTHON MODULE THAT LETS YOU DEVELOP WEB APPLICATIONS EASILY. IT'S HAS A SMALL AND EASY-TO-EXTEND CORE: IT'S A MICROFRAMEWORK THAT DOESN'T INCLUDE AN ORM (OBJECT RELATIONAL MANAGER) OR SUCH FEATURES.

