

Project Design Phase-II Technology Stack (Architecture &Stack)

Date	22 October 2022
Team ID	PNT2022TMID10819
Project Name	Project - Web Phishing Detection
Maximum Marks	4 Marks

Technical Architecture:

The information from tables 1 and 2 as well as the architectural diagram below must be included in the deliverable.

Web Phishing Detection Diagram Reference: [What is phishing? | IBM](#)

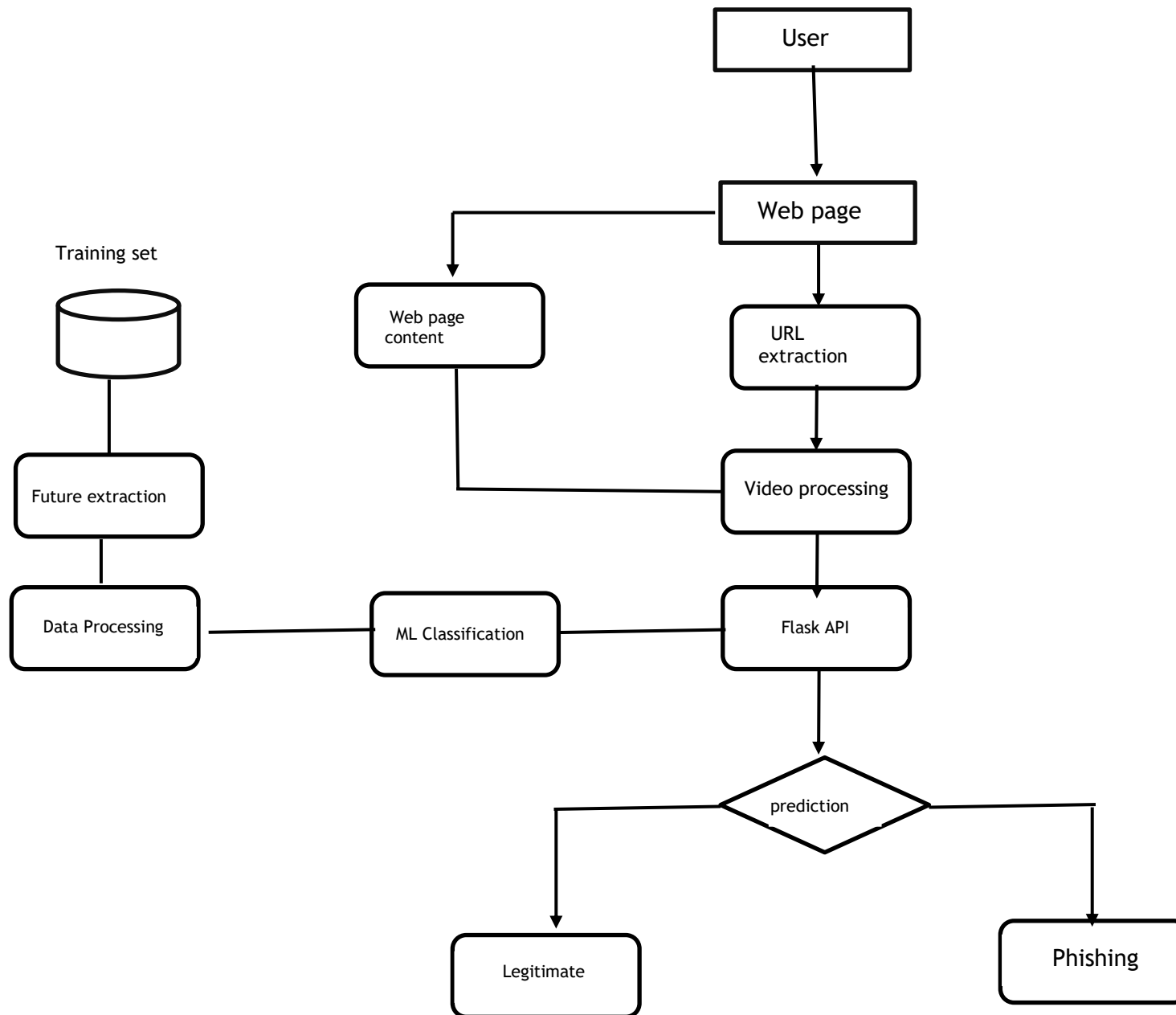


Table-1 : Components & Technologies:

S. No	Component	Description	Technology
1.	User Interface	Dynamic Web UI	HTML, CSS, JavaScript, Bootstrap
2.	Application Logic-1	User Registration/Login	IBM API Connect Service, Gmail API, LinkedIn API
3.	Application Logic-2	Web app that predicts if the link is a phishing site or not	Flask API, Python
4.	Database	Store user input links in the database	MongoDB
5.	Cloud Database	Database Service for storing user profile	IBM DB2, IBM Cloudant etc.
6.	File Storage	Store the datasets used for prediction	Local Filesystem
7.	External API-1	User Registration/Login using email and password	IBM API Connect
8.	External API-2	User Registration/Login using external apps	Gmail API, LinkedIn API
9.	Machine Learning Model	Machine Learning Model for web phishing detection	Logistic Regression Model
10.	Infrastructure (Server / Cloud)	Application Deployment on Local System / Cloud	Local, Render, IBM Cloud

Table 2: Application Characteristics:

S. No	Characteristics	Description	Technology
1.	Open-Source Frameworks	High-level open-source frameworks	Docker, Flask, Bootstrap

S. No	Characteristics	Description	Technology
2.	Security Implementations	It is the security discipline that makes it possible for the right entities (people or things) to use the right resources (applications or data) when they need to, without interference, using the devices they want to use.	IAM Controls of IBM
3.	Scalable Architecture	Compose is a tool for defining and running multi-container Docker applications. With a single command, can create and start all the services from the configuration.	Docker, Docker Compose
4.	Availability	It can balance the load traffic among the servers to help improve uptime. Can scale applications by adding or removing servers, with minimal disruption to traffic flows.	IBM Cloud load balancers
5.	Performance	It provides performance feedback such as page size and how long it takes to load a page and can show the impact new features have on the performance of the site.	IBM's Speed Curve and Delivery Pipeline

References:

[What are identity and access management? IAM, SSO, MFA, and IDaaS definitions | IBM Speed Curve: Visually monitor an app across platforms - IBM Garage Practices](#)
[Load Balancer | IBM](#)