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

Date	03 October 2022
Team ID	PNT2022TMID32768
Project Name	Project – Technology Stack
Maximum Marks	4 Marks

Technical Architecture:

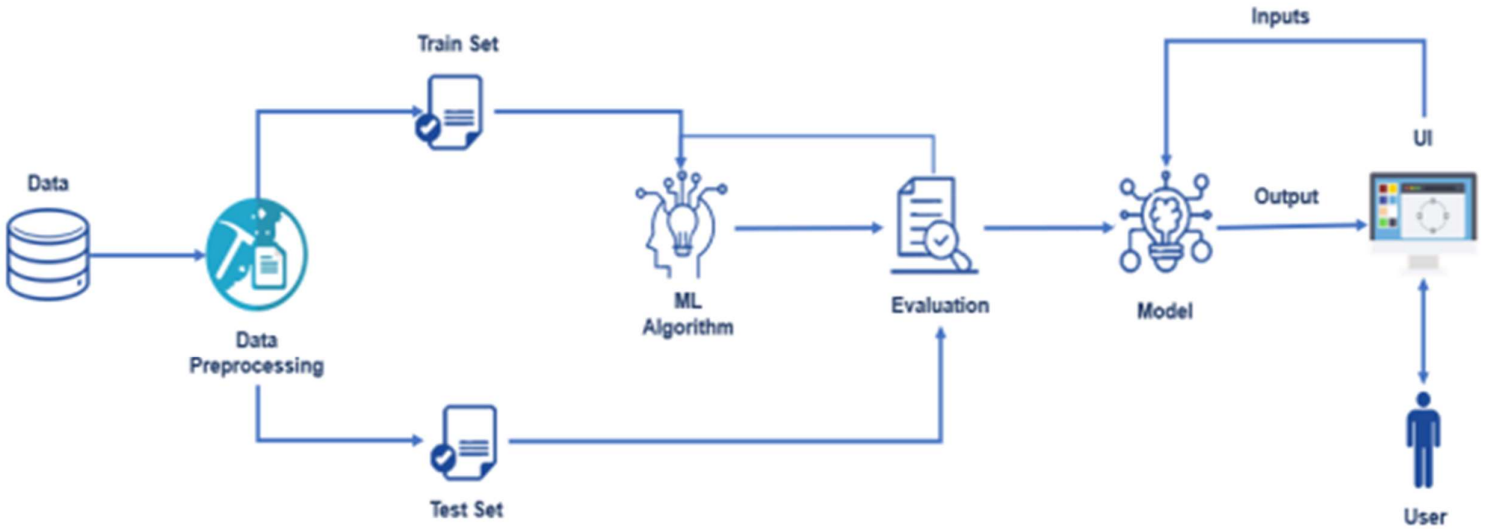

Table-1 : Components & Technologies:

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.	Application Logic-3	Logic for a process in the application	IBM Watson Assistant
5.	Database	Store user input links in the database	MongoDB
6.	Cloud Database	Database Service for storing user profile	IBM DB2, IBM Cloud ant etc.
7.	File Storage	Store the datasets used for prediction	Local Filesystem
8.	External API-1	User Registration/Login using email and password	IBM API Connect
9.	External API-2	User Registration/Login using external apps	Gmail API, LinkedIn API
10.	Machine Learning Model	Machine Learning Model for web phishing detection	Logistic Regression Model
11.	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	Open-source phishing framework that makes it easy to test your organization's exposure to phishing.	Go phish, Speed Phish Framework (SPF), King Phisher, etc
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.	e. g, anti-phishing protection and anti-spam software et
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.	Response time, Throughput, CPU and network usages, etc.
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.	Blacklists/whitelists, Natural language Processing, Visual similarity, rules, machine learning techniques, etc