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

Date	03 October 2022
Team ID	PNT2022TMID15890
Project Name	Project – Web Phishing Detection
Maximum Marks	4 Marks

Technical Architecture:

The Deliverable shall include the architectural diagram as below and the information as per the table1 & table 2

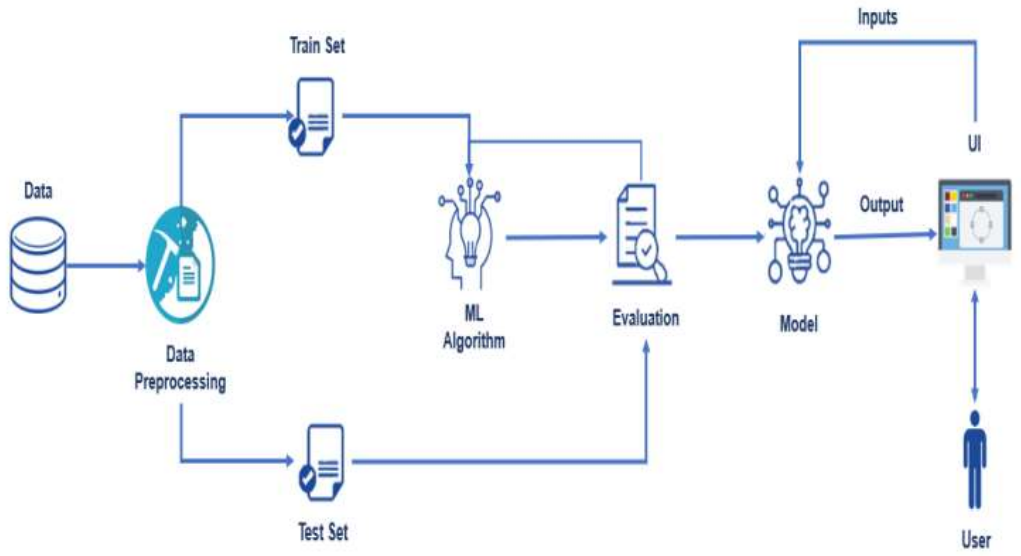

Table-1 : Components & Technologies:

S.No	Component	Description	Technology
1.	User Interface	User interacts with the web UI.	HTML, CSS, JavaScript, Python – Flask Web framework etc.
2.	Application Logic-1	Registration process and login process in the website	Python
3.	Application Logic-2	Train and test the model in the cloud with the provided dataset.	Python & ML
4.	Application Logic-3	Get input URL, fetch features of the URL and predict the nature of the given URL using ML model.	Python & ML
5.	Database	Data Type, Configurations etc.	MySQL, SQLite
6.	Cloud Database	Database Service on Cloud	IBM DB2, IBM Cloudant etc.
7.	File Storage	File storage requirements	IBM Block Storage or Other Storage Service or Local Filesystem
8.	Machine Learning Model	Purpose of Machine Learning Model	Binary Classification Model like Logistic Regression etc.
9.	Infrastructure (Server / Cloud)	Application Deployment on Local System / Cloud	Local, Cloud Foundry, Kubernetes, etc.

Table-2: Application Characteristics:

S.No	Characteristics	Description	Technology
1.	Open-Source Frameworks	Using Python Flask Framework, helps to build the backend of the website.	Python – Flask framework
2.	Security Implementations	Using certain encryption techniques to secure the user's password.	SHA-256, Encryptions, IBM DB2
3.	Scalable Architecture	Our website will be built using three tier architecture.	HTML, CSS, JavaScript, Python - Flask
4.	Availability	Our website will be deployed in the cloud, so that it will be accessed throughout the world.	IBM DB2, IBM Cloud Object Storage
5.	Performance	Detect phishing websites more accurately using better algorithms.	Python & Machine Learning.