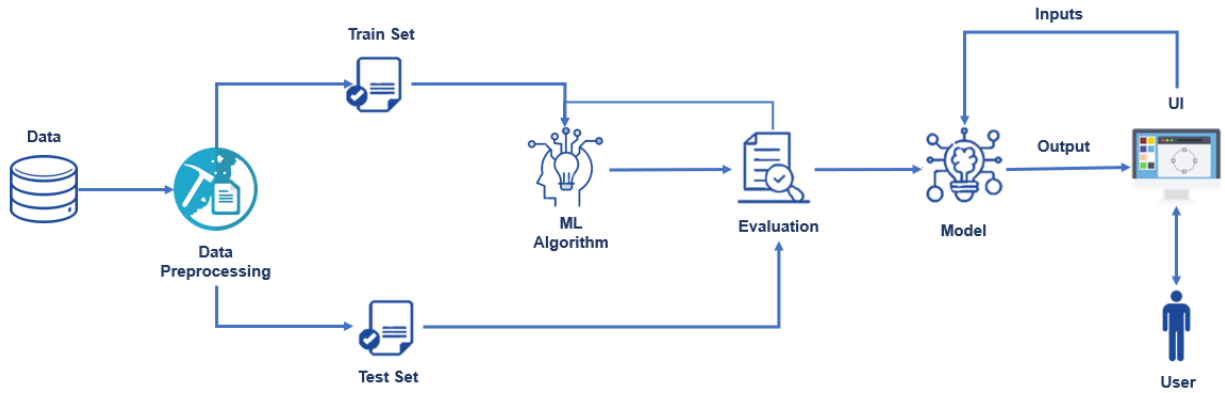
Project Design Phase-II
Technology Stack (Architecture & Stack)

Date	03 October 2022
Team ID	PNT2022TMID42127
Project Name	Web Phishing Detection
Maximum Marks	4 Marks

Technical Architecture:



S.No	Component	Description	Technology
1.	User Interface	User interacts with application through Web UI.	HTML, CSS.
2.	Application Logic-1	The logic for the application is written using the Python language.	Python
3.	Application Logic-2	Machine learning models are used in order to predict the phishing and legitimate url.	Machine Learning
4.	Application Logic-3	To Deploy the model on the IBM cloud	IBM Watson Studio
5.	Database	The Data are collected and stored in a csv file	SQL
6.	Cloud Database	The IBM cloud object storage service is used to store the dataset on the cloud.	IBM Cloud Object storage service
7.	File Storage	The codings are written on the jupyter notebook and stored as the ipynb file	Local Filesystem
8.	External API-1	IBM Watson Studio is used to run the jupyter notebook	IBM Watson studio.
9.	External API-2	In order to train the model we make use of Machine Learning Service	Machine learning services
10.	Machine Learning Model	A machine learning model is a file that has been trained to recognize certain types of patterns	Machine learning Classification Model

11.	Infrastructure (Server / Cloud)	Application Deployment on Local System / Cloud Local Server Configuration: Cloud Server Configuration :	Local, Cloud Foundry, Kubernetes, etc.

Table-2: Application Characteristics:

S.No	Characteristics	Description	Technology
1.	Open-Source Frameworks	Jupyter notebook is web-based open source software for creating and sharing documents, containing live code.	Jupyter notebook,Python,R
2.	Security Implementations	Data Encryption through TLS, Access Control, Data Validation, Remove Unnecessary informations, Throttling and Quotas	e.g. Encryptions, Access controllers
3.	Scalable Architecture	Micro-services Architecture is built as a suite of small services, each with its codebase.	Python
4.	Availability	The Web-application should be accessible whenever somebody request it by accessing either in browser or on mobile application	IBM cloud
5.	Performance	As the application is deployed on the IBM Cloud it can handle upto 1,00,000 requests per second	IBM cloudant