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

| Date | 03 October 2022 |
|---------------|------------------------|
| Team ID | PNT2022TMID19533 |
| Project Name | Web Phishing Detection |
| Maximum Marks | 4 Marks |

Technical Architecture:

The Deliverable shall include the architectural diagram as below and the information as per the table 1 & table 2

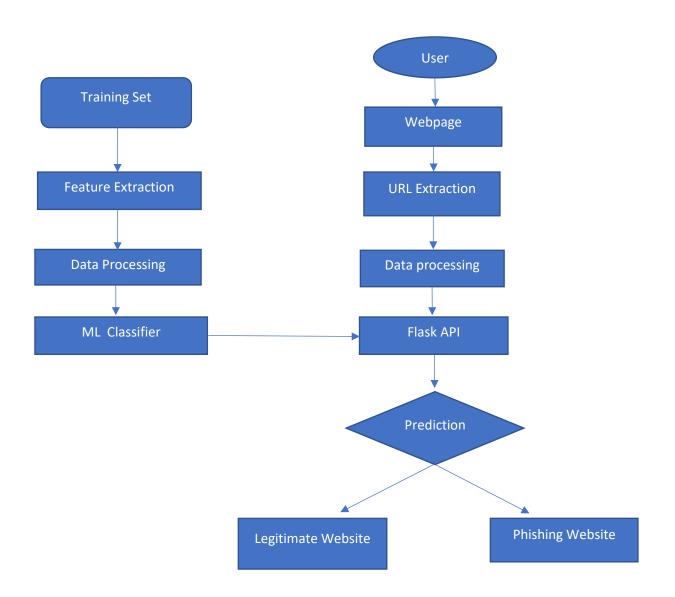


Table-1 : Components & Technologies:

| S.No | Component | Description | Technology |
|------|---------------------------------|---|---|
| 1. | User Interface | Dynamic Web UI | HTML, CSS, Browser |
| 2. | Application Logic-1 | User Registration/Login | HTML, CSS, |
| 3. | Application Logic-2 | Web app that predicts if the link is a phishing site or not | HTML, CSS, Python - Flask |
| 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 | IBM Block Storage or Other Storage Service or Local Filesystem |
| 7. | Machine Learning Model | For Detecting web phishing detection | Logistic Regression Model |
| 8. | 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 | Python - Flask |
| 2. | Security Implementations | It is the security discipline that makes it possible for the right entities. | IAM Controls of IBM |
| 3. | Scalable Architecture | Multi-tier architecture - connected to IBM cloud | Python |
| 4. | Availability | Cloud load balancing and storage in DB | IBM cloud service |
| 5. | Performance | Scalable to accommodate users and response time is reduced | Cloud App services, security modules |