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

| Date | 20 October 2022 |
|---------------|----------------------------------|
| Team ID | PNT2022TMID15186 |
| 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 table 1 & table 2

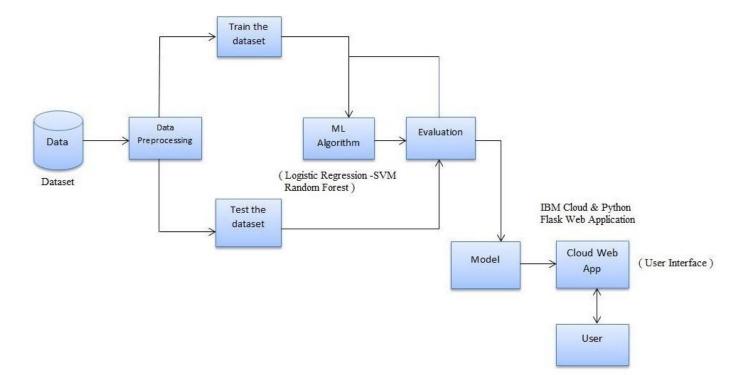


Table-1 : Components & Technologies:

| S.No | Component | Description | Technology |
|------|------------------------|--|--|
| 1. | User Interface | Web Application, Cloud UI | HTML, CSS, JavaScript / Angular Js / React Js etc. |
| 2. | Application Logic-1 | Machine Learning Algorithms such as Random forest, Decision Tree , Logistic Regression and SVM. Python Flask Application for Web App | Java / Python |
| 3. | Application Logic-2 | IBM Watson Speech to Text technology enables fast and accurate speech transcription in multiple languages for a variety of use cases, including but not limited to customer self-service, agent assistance and speech analytics. | IBM Watson STT service |
| 4. | Application Logic-3 | The IBM Watson Assistant service combines machine learning, natural language understanding, and an integrated dialog editor to create conversation flows between your apps and your users. | IBM Watson Assistant |
| 5. | Database | Stored Procedure (EXEC) | MySQL, NoSQL, etc. |
| 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 |

Table-2: Application Characteristics:

| S.No | Characteristics | Description | Technology |
|------|-----------------------------|--|--|
| 1. | Open-Source Frameworks | Gophish is a powerful, open-source phishing framework that makes it easy to test your organization's exposure to phishing. | Machine Learning |
| 2. | Security Implementations | In our prototype we use encryption techniques and security algorithms on web application | AES 256 , Cofense PDR |
| 3. | Scalable Architecture | Scalability is high due to accuracy provided by the model and Responsive UI/UX | React Framework, jQuery, Bootstrap, Cloudfare |
| 4. | Availability | Available at NLP, Spam Detection ,Blacklisting or Reporting, and machine learning techniques | Acunetix, Intruder, Ghost Phisher |
| 5. | Performance | Deployed and Tested with multiple algorithms and this system gives greater accuracy and better performance than other. | Deep Learning |