**Project Design Phase-II**
**Solution Requirements (Functional & Non-functional)**

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|---|---|
| Date | 03 October 2022 |
| Team ID | PNT2022TMID51349 |
| Project Name | Project – Web Phishing Detection |
| Maximum Marks | 4 Marks |

**Functional Requirements:**

Following are the functional requirements of the proposed solution.

| FR No. | Functional Requirement (Epic) | Sub Requirement (Story / Sub-Task) |
|---|---|---|
| FR-1 | User Input | Users inputs an URL in required field to check its validation. |
| FR-2 | Website comparison | Model compares the websites using Blacklist and Whitelist approach. |
| FR-3 | Feature Extraction | After comparing, if none found on comparison then its extracts feature using heuristic and visual similarity approach. |
| FR-4 | Prediction | Model predicts the URL using Machine Learning algorithms such as Logistic Regression, KNN |
| FR-5 | Classifier | Model sends all output to classifier and produces final result. |
| FR-6 | Events | This model needs the capability of retrieving and displaying accurate result for a website. |

**Non-functional Requirements:**

Following are the non-functional requirements of the proposed solution.

| FR No. | Non-Functional Requirement | Description |
|---|---|---|
| NFR-1 | **Usability** | The system must be easy to use for users because the main reason is the lack of awareness of users. But security defenders must take precautions to prevent users from confronting these harmful sites. Preventing these huge costs can start with making people conscious in addition to building strong security mechanisms which are able to detect and prevent phishing domains from reaching the user. |
| NFR-2 | **Security** | Web Phishing Detection aims to prevent the users data from the theft. for example if we click unsecured URL it might be an attacker |
| NFR-3 | **Reliability** | The link must give accurate status to the users continuously. Any inaccuracies are taken care by the regular confirming of the actual levels with the level displayed in the system. The system must successfully provide the secured URL to the user for securing data from the attacker. |

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| NFR-4 | **Performance** | Phishing is the ultimate social engineering attack, giving a hacker the scale and ability to go after hundreds or even thousands of users all at once. Phishing scams involve sending out emails or texts disguised as legitimate sources. |
| NFR-5 | **Availability** | Availability is the general term used to depict how much an item, gadget, administration, or condition is open by however many individuals as would be prudent. In our venture individuals who have enrolled with the cloud can get to the cloud to store and recover their information with the assistance of a mystery key sent to their email ids. UI is straightforward and productive and simple to utilize. |
| NFR-6 | **Scalability** | Framework is fit for taking care of increment all out throughput under an expanded burden when assets are included. Framework can work ordinarily under circumstances, for example low data transfer capacity and substantial number of clients. |