## **Project Design Phase-II**

## **Solution Requirements (Functional & Non-functional)**

DATE	27-1-2022
TEAM ID	PNT2022TMID51508
PROJECT NAME	WEB PHISHING DETECTION
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	Features Extraction	Lexical Features. Hyperlink Features. URL Features. Textual content Features
FR-2	Data Base Collection	Phishing URL's. Non-Phishing URL.
FR-3	Machine Learning Classifier Training	Identify the Criteria. Build a decision tree. Train our model. Evaluate our model. Check for false positives/negatives.
FR-4	Features Set Classification	Address Bar based Features. Abnormal Based Features. Domain Based Features. HTML & JavaScript Based Features.
FR-5	Algorithm	Data Mining Algorithm. Phish Dect Algorithm.
FR-6	Techniques	White list & Blacklist Techniques. Layout Based Detection Schemes.

## **Non-functional Requirements:**

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

FR No.	Non-Functional Requirement	Description
NFR-1	Usability	The internet users can assist antiphishing tools and technology which provide essential information, such as warning of spoofed pages.
NFR-2	Security	The list-based detection will alert the users before entering into the phishing websites.

NFR-3	Reliability	Provide warning message to the users when it fails to detect the blacklisted URL are encountered with minor changes
NFR-4	Performance	The phishing websites can be detected with 97.95% accuracy
NFR-5	Availability	Users can utilize the ML algorithm to detect attacks based on features extracted from URL
NFR-6	Scalability	ML based models is able to detect 0-day attacks which is scalable and accurate