

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

Date	17October 2022
Team ID	PNT2022TMID31980
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	<b>Features Extraction</b>	Lexical Features. Hyperlink Features. URL Features. Textual content Features.
FR-2	<b>Data Base Collection</b>	Phishing URL's. Non-Phishing URL.
FR-3	<b>Machine Learning Classifier Training</b>	Identify the Criteria. Build a decision tree. Train our model. Evaluate our model. Check for false positives/negatives.
FR-4	<b>Features Set Classification</b>	Address Bar based Features. Abnormal Based Features. Domain Based Features. HTML & JavaScript Based Features.
FR-5	<b>Algorithm</b>	Data Mining Algorithm. PhishDekt Algorithm.
FR-6	<b>Techniques</b>	Whitelist & 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	<b>Usability</b>	The internet users can assist antiphishing tools and technology which provide essential information, such as warning of spoofed pages.
NFR-2	<b>Security</b>	The list-based detection will alert the users before entering into the phishing websites.
NFR-3	<b>Reliability</b>	Provide warning message to the users when it fails to detect the blacklisted URL are encountered with minor changes
NFR-4	<b>Performance</b>	The phishing websites can be detected with 97.95% accuracy
NFR-5	<b>Availability</b>	Users can utilize the ML algorithm to detect attacks based on features extracted from URL
NFR-6	<b>Scalability</b>	ML based models is able to detect 0-day attacks which is scalable and accurate

