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

Date	03 October 2022
Team ID	PNT2022TMID23944
Project Name	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 Registration	Registration through Form in our website
FR-2	User Confirmation	Confirmation via email
FR-3	User login	Login by providing required credentials.
FR-4	User input	User inputs a URL in the textbox that is present in the dashboard.
FR-5	URL matching	Our model tries to match the user given URL link with already existing URL in our database.
FR-6	Feature extraction	If the URL given by the user is not found in the database then our model extracts feature using Principal component analysis, Linear discriminant analysis
FR-7	Prediction	Our model predict the URL using machine learning algorithm like Logistic regression ,decision tree,KNN.
FR-8	Accuracy	The predict output is checked for accuracy using machine learning algorithm such as confusion matrix.
FR-9	Classifier	The send all the output to the classifier and produces the final result.
FR-10	Output display	Model then display whether the website is a legal site or a phishing site.

## **Non-functional Requirements:**

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

FR No.	Non-Functional Requirement	Description
NFR-1	Usability	Phishing is consider as one of the most serious threats for the internet and e-commerce. With the help of this web phishing we can protect our data from the fradulent web sites.
NFR-2	Security	Access permission for the particular system infromationn may only be changed by the system's data administrator.
NFR-3	Reliability	The database update process must rollback all related updates when any update fails.
NFR-4	Performance	The detection process must not take more than 2 sec.
NFR-5	Availability	The services must be available to all user at all time. If any failure occurs the model shows a notification with the timer when it is going to be back again.
NFR-6	Scalability	The website traffic limit must be scalable enough to support 2,00,000 users at the time