

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

Date	03 October 2022
Team ID	PNT2022TMID34937
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	Detect and predict phishing websites	Phishing website can be detected based on some important characteristics like URL and domain identity, security and criteria in the final phishing detection rate.
FR-2	Identify Fraudulent URL	A fraudulent domain or phishing domain is an URL scheme that looks suspicious. Ex: misspelled, A combination of valid and fraudulent URL , Poor rank in Alexa top 1 million websites. These characteristics helps us to distinguish it from valid URL.
FR-3	Building a data tree	We can use a Machine Learning algorithm, such as a decision tree classifier to help us to decide whether an URL is valid or not.
FR-4	Train the Model	In machine learning model , the dataset is spilted into testing data and training data. It is always better use decision tree because it is straight forward and generally gives the best results when trying to classify data.
FR-5	Evaluate the model	After training it is evaluated to check how it works .It helps to know the accuracy level of dectecting phished domains.
FR-6	Identify false positives & false negatives	The results of any decision tree may contain both false positives(URLs that are actually valid,but our model indicates are not) and false negatives(URLs that are actually bad, but our model indicates are fine). This should be resolved.

Non-functional Requirements:

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

FR No.	Non-Functional Requirement	Description
NFR-1	Usability	It should be user friendly. It should constantly detect the phished domains and report to the user.
NFR-2	Reliability	It should be trustworthy and it should have more accuracy in detecting the phished domains.

NFR-3	Scalability	It should have low maintenance cost,high user experience and should have high agility
NFR-4	Performance	The performance should be good and more accurate. It should work ceaselessly.