

Project Design Phase-I
Proposed Solution Template

Date	14 October 2022
Team ID	PNT2022TMID00649
Project Name	Project – Web Phishing Detection
Maximum Marks	2 Marks

Proposed Solution Template:

Project team shall fill the following information in proposed solution template.

S.No.	Parameter	Description
1.	Problem Statement (Problem to be solved)	<p>Phishing is a form of fraudulent attack where the attacker tries to gain sensitive information by posing as a reputable source. In a typical phishing attack, a victim opens a compromised link that poses as a credible website. The victim is then asked to enter their credentials, but since it is a “fake” website, the sensitive information is routed to the hacker and the victim gets “hacked”.</p> <p>Hence, Problem to be solved is: Detection of malicious websites and ransomware; Identify, block, and mitigate targeted threats.</p>
2.	Idea / Solution description	<p>Phishing is popular since it is a low effort, high reward attack. To build phishing URL detector using Python and machine learning.</p>
3.	Novelty / Uniqueness	<p>To come up with effective feature engineering techniques to evaluate the given URL's authenticity. Identify phishing URLs, build and train a simple decision tree model to evaluate any given URL, and indicate whether it is actually valid or not.</p>
4.	Social Impact / Customer Satisfaction	<p>To spread the cyber awareness on multiple attacks mainly on this phishing attack. An individual can unlearn and relearn this model in various types of aspects in Cyber security and Data theft. Add great value in terms of security to organization.</p> <p>The major objective is to identify phishing websites and safeguard user information from phishing to protect users' privacy.</p>
5.	Business Model (Revenue Model)	<p>In Business Organization, they can use this tool to get rid from cyber attack and can implement how to improve the security when this attack occurs next time.</p> <p>Will be great business to the organization that prefers high security.</p>
6.	Scalability of the Solution	<p>Machine Learning models and effective feature engineering techniques helps identify phishing websites and come up with key features that are common in most phishing websites.</p> <p>The model is tested and trained in multiple types of datasets to get high accuracy than other algorithms.</p>