Project Design Phase-I
Proposed Solution Template

Date	12 October 2022
Team ID	PNT2022TMID50233
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)	• Web phishing aims to steal private information, such as usernames, passwords, and credit card details, by way of impersonating a legitimate entity. • It will lead to information disclosure and property damage.
2.	Idea / Solution description	• A deep learning-based framework by implementing it as a browser plug-in capable of determining whether there is a phishing risk in real-time when the user visits a web page and gives a warning message. • The real-time prediction includes whitelist filtering, blacklist interception, and machine learning (ML) prediction.
3.	Novelty / Uniqueness	• To deal with phishing attacks and distinguishing the phishing webpages automatically, Blacklist based detection technique keeps a list of websites' URLs that are categorized as phishing sites. If a web-page requested by a user exists in the formed list, the connection to the queried website is blocked. • Machine Learning (ML) based approaches rely on classification algorithms such as Support Vector Machines (SVM) and Decision Trees (DT) to train a model that can later automatically classify the fraudulent websites at run-time without any human intervention.
4.	Social Impact / Customer Satisfaction	• Large organizations may get trapped in different kinds of scams. • There are a number of users who purchase products online and make payments through e-banking. There are e-banking phishing websites that ask

		users to provide sensitive data such as username, password & credit card details, etc., often for malicious reasons.
5.	Business Model (Revenue Model)	• The browser plugin can be provided with a subscription plan or could be sold as a licensed software.
6.	Scalability of the Solution	• To create microservices with flask web framework so that the model could scaled vertically or horizontally and effective traffic management.