

Project Design Phase-I
Proposed Solution Template

Date	30 September 2022
Team ID	PNT2022TMID52926
Project Name	Web Phishing Detection

Proposed Solution Template:

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

Sl.No.	Parameter	Description
1.	Problem Statement (Problem to be solved)	Phishing sites are harmful websites that mimic trustworthy websites or web pages in an effort to steal users' personal information, including their user's name, password, and credit card number. Because phishing is mostly a semantics- based assault that focuses on human vulnerabilities rather than network or software flaws, identifying these phishing websites can be difficult.
2.	Idea / Solution description	We perform Web scraping of the URLs that the user accesses most commonly and feed it into our classification based machine learning model. This deployed extension alerts the user if our model predicts that the detected website could be a phishing website.
3.	Novelty / Uniqueness	There are no prior works that make advantage of the browser extension factor. Also, the model developed will also be able to continuously monitor the website. As certain phishing websites appear perfectly normal and turn malicious midway through the process

4.	Social Impact / Customer Satisfaction	The user does not have to do any work because this is a fairly hands-off approach; instead, the extension will educate the user about the legitimacy of the website. Due to the fact that less information is stolen by phishing sites, customers are more satisfied as a result. When accessing a trustworthy website, with ease.
5.	Business Model (Revenue Model)	We suggest a two-tier system, with one tier being "free" and the other "premium." When classifying a website, the free tier would include the advertisements that appear underneath. The premium tier is a monthly or yearly recurring membership that eliminates all ads. Advertising, which speed up and improve the classification algorithms.
6.	Scalability of the Solution	Since this would be a Chrome Marketplace-published browser extension, it can Everybody in the globe can access and use it. It could be scaled up because it is hosted on the IBM Cloud as needed, up and down.