***Research paper on cyber hygiene tools***

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Abstract

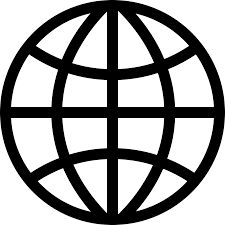
With the increase in Data production , cyber attacks have skyrocketed to new heights . The complexity and stealthiness of new age malwares have made it even more difficult to detect and reverse engineer the exploits . People may not be always familiar with the ways to protect themselves against such exploits . Its better to enable an antivirus or a malware detector to be alerted and be on a safer side . But Even then people whether knowingly or by mistake click or get redirected to an unfamiliar site which might be malicious or blacklisted . This is where the cyber hygiene tool comes into play . The tool prevents the user to be redirected to a malicious site by comparing the link to a large database of blacklisted websites and restricts the access to the site immediately . Thus preventing the User’s information leak and possible prevent a cyber attack.

1. Introduction

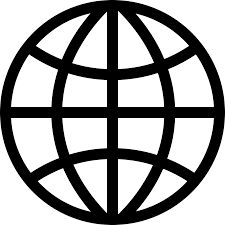
Cyber Hygiene refers to the techniques of protecting Users , networks, programs and data from unauthorized public ally accessible web application by checking for known vulnerabilities and weak configurations or attacks that are aimed for exploitation . Cyber Hygiene is about Using AI and machine learning to automate the restriction of blacklisted websites to a system and can be applied to technical solutions for increasing cyber security . Restricting the access to the website before requesting it also prevents data leaks like ( ip address , ISP information , Location , Device information etc...).

1. Components of Cyber Hygiene tools
2. URL Blacklist - A URL Blacklist is a list of unsafe URLSs , IP addresses , or domain names that are removed from the search results by authorities .
3. Malware - Malware is any software intentionally designed to cause disruption to a computer , server , client or computer network , leak private information , gain unauthorized access to information or systems , deprive users access to information or which unknowingly interfaces with the users computer security and privacy.
4. Exploits -

Authentication - Before the interaction with the website the process of verifying the URL and the domain name to the URL Blacklist is termed as authentication.



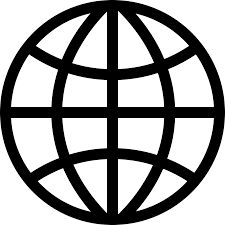
**URL**



**URL**

**ISP**

**Requests**



**Router**

**Blacklisted URL**

**Cyber Hygiene tool**

1. Working of the Cyber Hygiene Tool