

- Verify correct links for downloading files or software.

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Github Repository: <https://github.com/KSonyReddy/verificationOfCorrectLinks/tree/main>

Verify correct links for downloading files or software – Final Report

Project Overview

This project was completed as part of the **Cyber Security Internship**. The objective was to verify the users whether the links are safe or not. Security was the main focus. This can be solved 1. Using the WOT: Website Security & Safety Checker browser extension to visually indicate the trustworthiness of websites during browsing. 2. Using the VirusTotal API for deep scanning and verification of URLs before downloading software or files.

WOT Extension Usage: The WOT browser extension (available on Chrome Web Store) shows a reputation score and trust level for websites. It helps users identify malicious or suspicious websites directly in search results, reducing the risk of clicking on unsafe links. Below are screenshots demonstrating WOT in action.

Technologies & Tools Used

- **Browser extension:** WOT: Website Security & Safety Checker
 - **API:** VirusTotalApi
 - **Library:** requests(python library)
 - **Version Control:** GitHub
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System Architecture

Browser-Level Protection (WOT Extension)

- The user installs the **WOT: Website Security & Safety Checker** extension.
- It displays **real-time trust ratings** (green, yellow, red) for websites in search results, helping users avoid malicious links early.

Link Verification (Python + VirusTotal API)

- A **Python script** sends the URL to the **VirusTotal API**, which checks the link against **antivirus engines** and threat intelligence databases.
- The system outputs a **SAFE or UNSAFE verdict** along with the number of detections.

Security Features

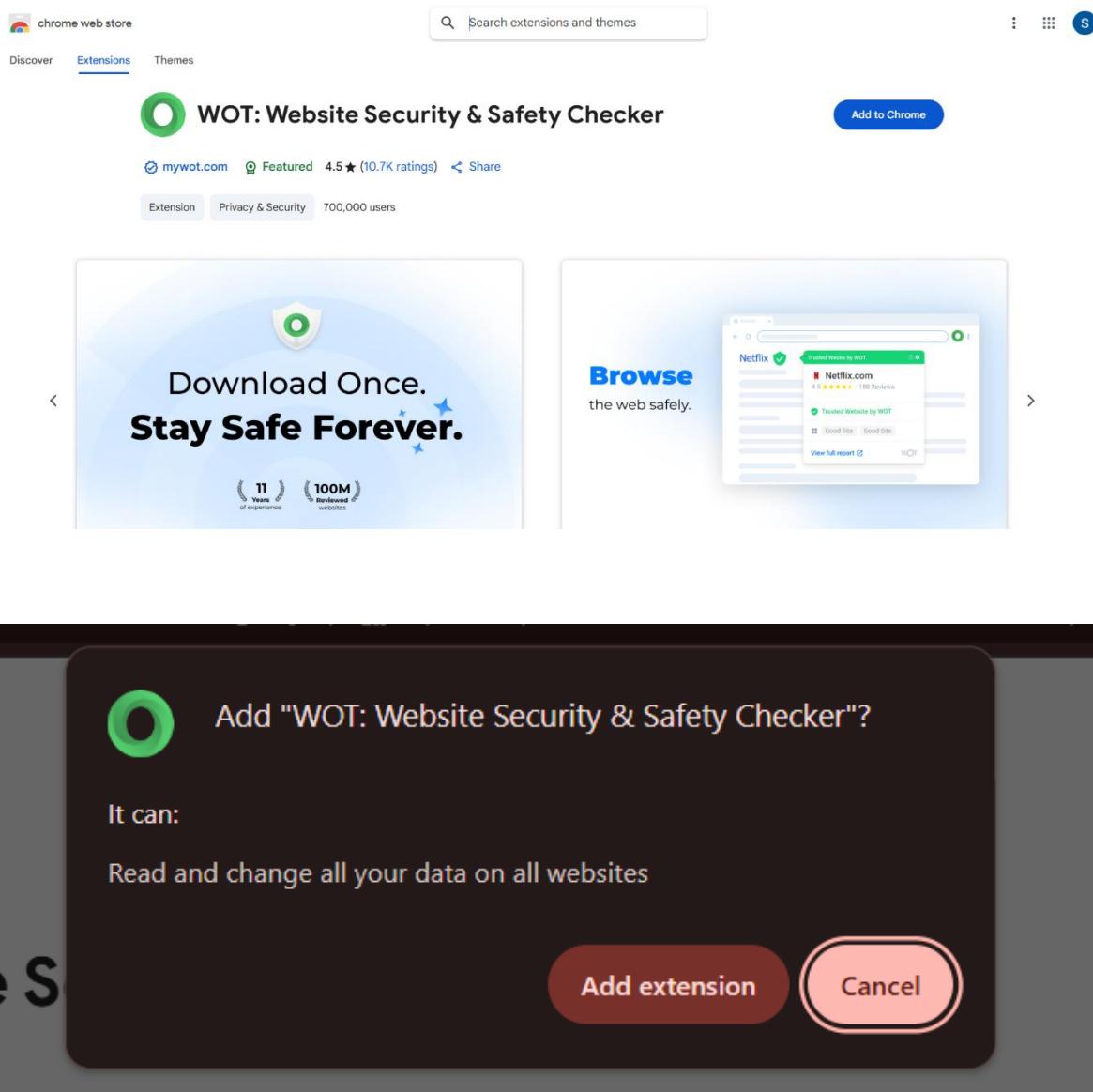
1. **Real-Time Website Reputation Check**
 - The **WOT browser extension** provides instant visual trust indicators (Green, Yellow, Red) for websites in search results, helping users avoid suspicious sites before clicking.
2. **Multi-Engine URL Scanning**

Folder Structure

```
verificationOfLinks/  
|--code.py # Contains code by using api key  
|__ README.md # Project documentation
```

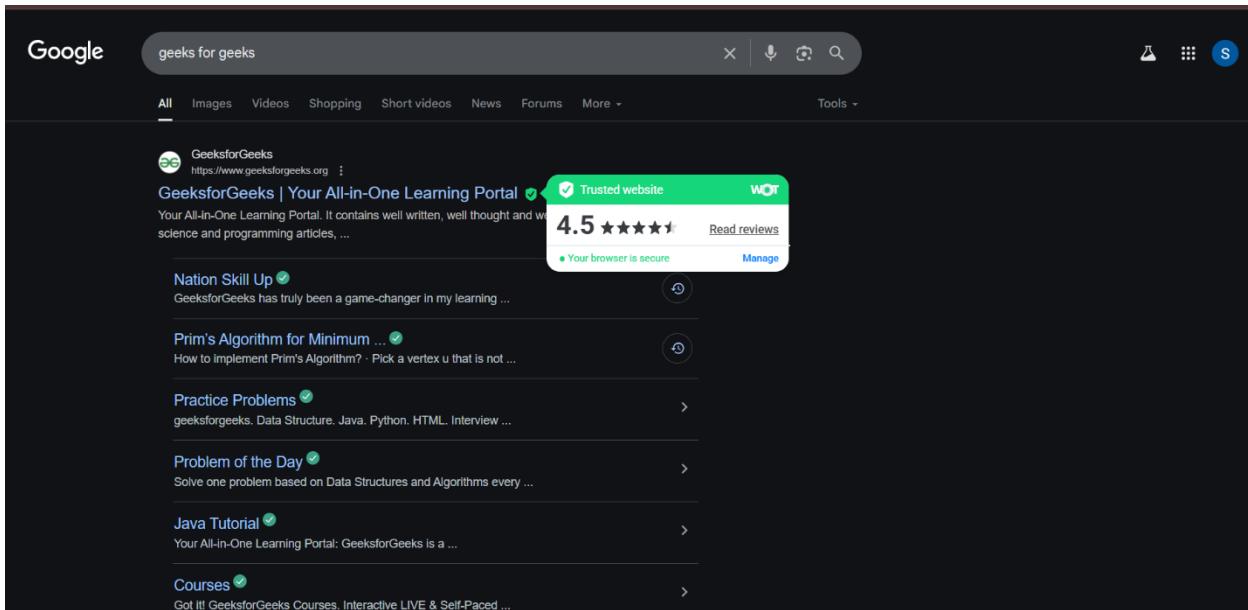
Screenshots

1. Adding extensions to chrome:



Testing & Results by using extensions

A pop message showing rating



By using api keys:

Output

enter url <https://www.5movierulz.irish/>

⚠ UNSAFE LINK! 1 engines flagged this URL.

enter url <https://openai.com/index/chatgpt/>

✓ SAFE LINK: No detections.

Learning Outcomes

- Verification of links is known and when the search we can whether it is safe or not opening the url.
- Experience in access api keys and extensions to chrome according to requirement.

Conclusion

By combining browser extensions like WOT with API-driven verification using VirusTotal, users can effectively safeguard themselves from malicious downloads and phishing websites. This multi-layer security solution is easy to implement and provides both real-time warnings and deep link scanning.