EC 521: Final Project Report

Finding Vulnerabilities in VS Code Extensions

Anjana Srivastava - Terrier033
Aryaman Gupta - Terrier015
Prateek Jain - Terrier019
Shubham Kaushik - Terrier021
Timur Zhunussov - Terrier043

Github Repo Link : https://github.com/prateekdceit06/EC521

Table of Contents

Introduction

VS Code is a popular text editor used by millions of developers worldwide. It supports various extensions that enhance its functionality. However, these extensions can pose security risks if they are not properly tested and validated before being installed. The project aims to analyze and test various extensions of VS Code from a security breach point of view. The project will identify and analyze security vulnerabilities in popular VS Code extensions. Based on the analysis, we will develop an automated tool to identify the selected vulnerability in the VS Code extensions. In the end, we aim to suggest recommendations to mitigate these risks.

Motivation

Visual Studio Code (VSCode) is a widely-used Integrated Development Environment (IDE) with over 14 million active users, comprising about 50% of the market. This popularity makes it an attractive target for cyberattacks. The risk is heightened by the use of extensions, written by third-party maintainers and installed to enhance development. These extensions can contain vulnerabilities and run with the user's privileges, without any sandboxing, potentially installing harmful programs or compromising sensitive data. Developers often store important credentials on their machines which, if leaked, could allow unauthorized access to the codebase or production servers. Recent warnings from researchers highlight the need for greater scrutiny of VSCode extensions, as threat actors are continuously seeking new ways to breach corporate networks. Even for security-aware developers, distinguishing between benign and malicious extensions can be difficult, and a single compromised extension could lead to significant data breaches or system compromises.

It is important to note that any VS Code extension that uses input from untrusted sources, does not properly sanitize user input, or fails to validate user input can potentially introduce security vulnerabilities like:

1. Path Traversal Vulnerability
2. Zip Slip Vulnerability

Overview

After going through the available articles and official documentation about VSCode Extensions, we figured out that for path traversal vulnerability the extensions we are interested in should be those which open some port on the local system for communication. For example, extensions that open some live server to on the system for previewing JSON, html, JS or markdown files. For zip slip vulnerability we were interested in the extensions that gives some functionality to play with zip files within the VS Code environment. The list of the extensions we selected for our project is attached as **Appendix A.**

We have developed an automation tool for detecting vulnerabilities in Visual Studio Code (VSCode) extensions. The tool is designed using Python, asyncio framework, and pyautogui library.

Tool Design and Workflow: The tool takes keywords as input for searching extensions on the VSCode marketplace and checks keywords against extension tags for relevant results. Extensions are downloaded as VSIX files and installed using VSCode's console-based executable *“code –install-extension <extention>”*. The downloaded extensions are stored in a JSON library for future reference. During the testing phase, the tool extracts and analyzes *“package.json”* files for exposed commands. It then executes these

commands in the VSCode instance one by one. Vulnerable extensions are flagged, and their details are saved in a separate JSON file.

Prerequisite: The automation tool requires Python 3.7 and VSCode installation. Although it is designed for macOS, it can be easily adapted for Windows or Linux. Initially this also needed to set a few path variables like <vscode exe> to run.

Challenges: Identifying appropriate keywords for searching extensions proved challenging due to the need for precision and comprehensiveness. Additionally, bypassing rate-limiting restrictions imposed by the VSCode marketplace to access more extensions for testing was another obstacle. To enhance efficiency, async functions were employed to run IO tasks in parallel.

Results and Performance: The automation tool effectively reduces manual work and expedites the vulnerability testing process. It is capable of testing over 100 extensions within a few minutes, demonstrating its speed and effectiveness.

The proposed automation tool efficiently detects security vulnerabilities in VSCode extensions, improving overall software security. Its flexible design allows for adaptation to different operating systems and improved scalability. Further work could focus on refining keyword selection and addressing rate-limiting challenges to expand the tool's testing capabilities.

Path Traversal Vulnerability

Path traversal vulnerability, also known as directory traversal, is a type of security vulnerability that allows an attacker to gain unauthorized access to files and directories outside the intended scope of the application. It occurs when user input is not properly validated or sanitized, allowing an attacker to manipulate file paths and access sensitive data or system files.

An attacker usually exploits this vulnerability by providing a crafted input containing special characters (e.g., "../" or ".."). These characters are used to navigate up one directory level. By using a series of such characters, an attacker can navigate to higher-level directories, potentially reaching the system's root directory. Once there, they can access sensitive files or directories that should not be accessible to them.

Severity Level: The severity level of path traversal vulnerabilities can range from low to critical, depending on the nature of the accessed files and the potential impact on the system or data. In some cases, an attacker may gain access to sensitive information, such as user credentials or configuration files, while in more severe cases, they may gain the ability to execute arbitrary code or commands on the target system.

Potential Impact: Path traversal vulnerabilities can have significant consequences on the system or data. The potential impact includes:

- Unauthorized access to sensitive data, such as user credentials, personal information, or configuration files, which can lead to further exploitation of the system or data breaches.
- Access to system files, which can allow an attacker to gain a deeper understanding of the system's architecture and potentially discover additional vulnerabilities.
- In severe cases, the ability to execute arbitrary code or commands on the target system, which can result in complete system compromise or damage.

Zip Slip Vulnerability

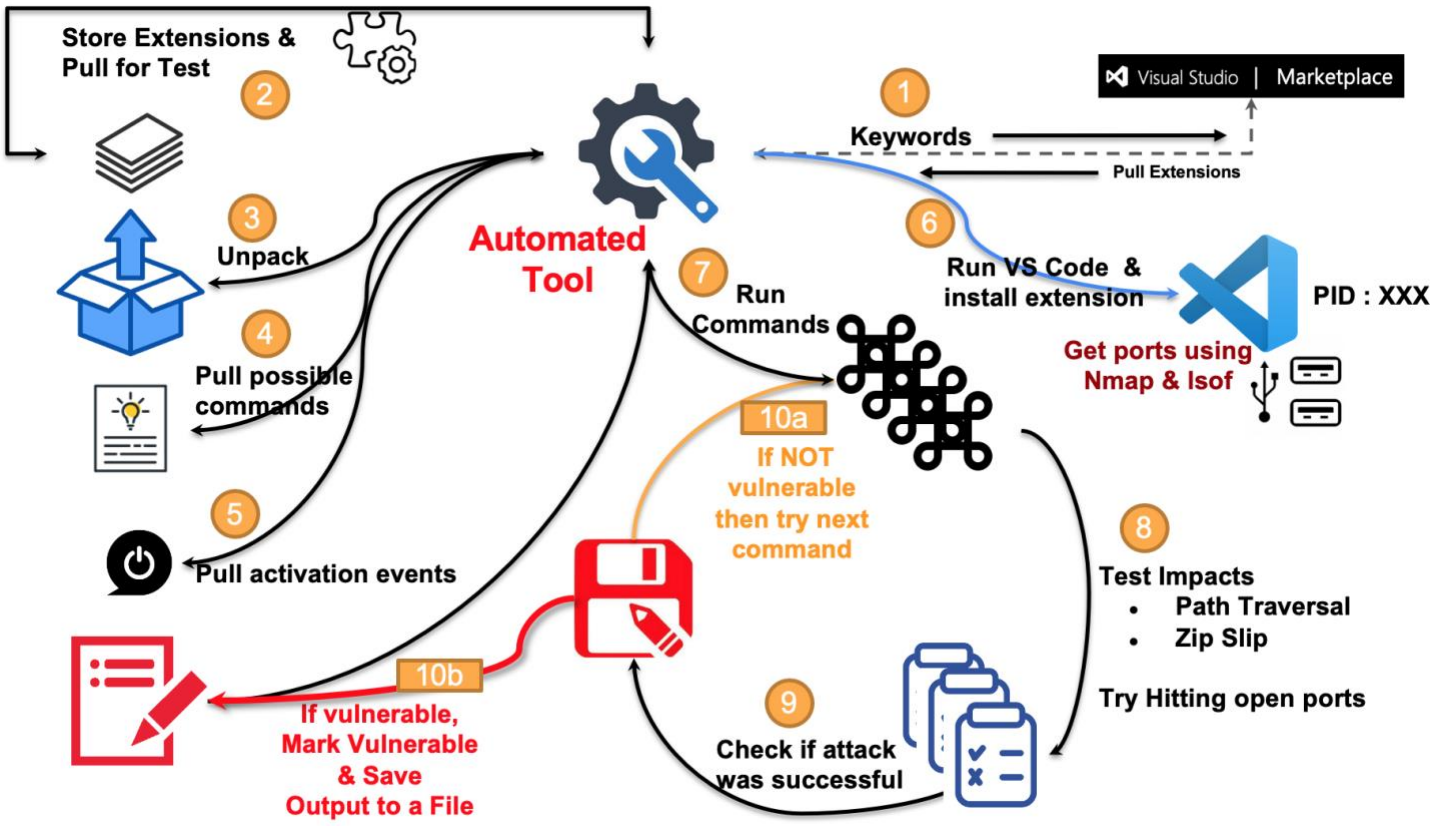
Zip Slip is a type of security vulnerability that occurs during the extraction of compressed files. It arises when an attacker manipulates the file paths within a compressed archive to cause a directory traversal, allowing them to overwrite files or create new files in unintended locations. Zip Slip vulnerabilities can be exploited by crafting a malicious archive file that contains specially crafted file paths.

An attacker exploits this vulnerability by creating a malicious archive file containing directory traversal filenames (e.g., "../" or "..") in the compressed file paths. When the vulnerable application extracts the archive, it may inadvertently overwrite files outside the intended directory, possibly with files that contain malicious code.

Severity Level: The severity level of Zip Slip vulnerabilities can range from moderate to critical, depending on the nature of the overwritten files and the potential impact on the system or data. In some cases, an attacker may overwrite critical system files or configuration files, which can lead to system instability or further exploitation.

Potential Impact: Zip Slip vulnerabilities can have serious consequences for the system or data. The potential impact includes:

- Overwriting critical system files or configuration files, which can lead to system instability, malfunction, or complete system compromise.
- Overwriting or creating new files in unintended locations, which can allow an attacker to gain unauthorized access to sensitive data or inject malicious content into the system.
- In some cases, the ability to execute arbitrary code or commands on the target system, if the overwritten files have specific permissions or can be leveraged for code execution.



Implementation: Automate vulnerability identification

Automation Process

Testing extensions in Visual Studio Code (VSCode) requires simulating the entire user process for each step taken to execute an extension. Some vulnerable extensions open a port in the system and listen for incoming requests when activated or when a command is executed. These ports should only be accessible for the specific directory without any parent directory access. Our tool runs the required command to execute the extension using the `pyautogui` library and checks for open ports using `nmap` and `lsof` command. We have built an async `nmap` module to run `nmap` commands and identify open ports. It then sends a request to the same port and checks for a successful response with the required text string. If the expected response is received, the extension is marked as vulnerable. For Zip Slip attacks, the tool follows a similar approach but checks if the required files are created in the previous directory.

Code Explanation

- ***get_ports()***: This function runs `nmap` scan and `lsof` command on the local machine to identify open ports. By utilizing the `nmap` class, it asynchronously scans for open ports and returns them in a list.
- ***get_ip()***: This function retrieves the current IP address assigned to the machine. It obtains the hostname and IP address using the socket library and logs the information.
- ***test_response()***: This function sends multiple HTTP requests asynchronously to the open ports and checks their responses for vulnerabilities. It does so by connecting to the specified IP and port, sending a GET request, and analyzing the response. If the response indicates a successful attack, the extension is marked as vulnerable and saved.
- ***test_path_traversal_attack()***: This function tests for path traversal attacks by executing specific commands and analyzing the responses. It simulates user actions, such as opening the Command Palette and entering commands, using the `pyautogui` library. After running the command, it checks for open ports and sends requests to those ports. If the attack is successful, the extension is marked as vulnerable.
- ***test_zip_slip_attack()***: This function tests for ZIP Slip attacks in extensions by checking if a specific file has been created. Similar to the path traversal attack function, it simulates user actions with `pyautogui` to execute the commands. After running the command, it waits for some time to allow the file operation to complete, and then checks if the targeted file has been created. This helps determine if the extension is vulnerable to ZIP Slip attacks.
- ***debug_extension()***: This function runs tests on each extension by iterating through available commands and calling the appropriate test functions. It skips certain commands (e.g., those containing "build" or "%") and calls the test functions ***test_path_traversal_attack()*** and ***test_zip_slip_attack()*** for each valid command. Once testing is complete, it marks the extension as tested.

The provided code includes functions for running tests on VSCode extensions to identify potential vulnerabilities. By simulating user actions, the tool can thoroughly examine each extension and determine if it is susceptible to path traversal or Zip Slip attacks. The use of async functions and libraries such as `pyautogui`, `nmap`, and `lsof`

enables efficient and accurate testing of extensions. This detailed analysis allows developers to pinpoint vulnerabilities in their code and enhance the overall security of their extensions.

Evaluation: Results of vulnerability testing

Path Traversal Vulnerability

The testing process aims to discover any insecure file access processes and verify the effectiveness of existing security measures, such as input validation, file path sanitization, and access controls. This involves simulating the exploitation of the vulnerability by injecting malicious input containing directory traversal sequences (e.g., "../" or "..").

Steps to test for path traversal vulnerability:

1. **Dummy index.html:** We placed a dummy index.html at a location just before the folder from where the VS Code project will be run. If we are able to get response with status 200 to the request like `http://127.0.0.1:<Port_no>/../index.html`, then we can say with surety that the extension has path traversal vulnerability.
2. **Run VS Code:** Run VS Code and enable the extension that we want to test for vulnerability.
3. **Confirm the vulnerability:** If we believe we've identified a path traversal vulnerability, we confirmed it by repeating the steps that led to the successful exploitation. This will help ensure that the vulnerability is genuine and not a false positive.

Zip Slip Vulnerability

The testing process aims to discover any insecure file extraction processes and verify the effectiveness of existing security measures, such as input validation, file path sanitization, and access controls. This involves simulating the exploitation of the vulnerability by crafting malicious compressed archives containing directory traversal payloads and analyzing the application's response to such input.

Steps to test for Zip Slip vulnerabilities:

1. **Create a malicious archive:** We created a ZIP or TAR archive containing a file with a directory traversal payload in its path. The file path we used was ../exploit. This file aims to be extracted outside the intended directory and potentially overwrite a critical file. To make this zip we created a python script because it cannot be created the same way we create zip file in general. The system does not allow to name any file starting with a “.”
2. **Run VS Code:** Run VS Code and extract the malicious zip inside the extension that we want to test for vulnerability.
3. **Confirm the vulnerability:** We confirm a Zip Slip vulnerability by checking if the extracted file (exploit) is present in the targeted directory outside the intended extraction scope.

To see how Path Traversal and Zip Slip Vulnerability can be used to exploit a system through VS Code, check **Appendix B**.

Summary of the testing results

Path Traversal Vulnerability:

We ran our custom automated tool on 200 extensions for Path Traversal Vulnerability detection. These extensions were selected because they opened some port on the system to preview HTML, JSON, PHP, Markdown or other files. Our tool was successfully able to detect Path Traversal Vulnerability in 08 out of these 200 extensions.

List of the extensions found vulnerable for path traverssal are as follows:

S. No	Name of the extensions	No. of Downloads
1	yandeu-five-server-0.1.12	476,314
2	JSCharting-JavaScript-Charts-vscode-jscharting-0.0.3.	1,343
3	SeyyedKhandon-fpack-2.2.0	6,449
4	SeyyedKhandon-zpack-2.1.1	2,781
5	hqjs-hq-live-server-0.0.11	5,625
6	leadzen-vscweb-0.0.3	1,157
7	dzylikecode-docsify-preview-1.7.0	484
8	osteele-p5-server-1.10.0	5,262

Zip Slip Vulnerability

We ran our custom automated tool on 50 extensions for Zip Slip Vulnerability detection. We only selected 50 extensions for this vulnerability because there are not many extensions that provide this functionality of unzipping zip files within the VSCode. Our tool was successfully able to detect Zip Slip Vulnerability in 01 out of these 50 extensions. The name of the extension is **slevesque-vscode-zipexplorer-0.3.1.json** and it has **256,517 downloads.**

The detailed result of the testing of extensions can be found in **Appendix C.**

Related Work : Comparison with existing tools

Semgrep and Snyk are two popular tools used in the software development and security fields. They serve distinct purposes and can be complementary when used together since they both take different approaches to check the code for security vulnerabilities.

Semgrep

Semgrep is an open-source, lightweight static analysis tool that scans source code to detect various types of security vulnerabilities, coding issues, and other potential problems. Semgrep identifies vulnerabilities in VS Code extensions by analyzing the source code of the extension without the need to execute it.

Snyk

Snyk helps developers find, fix, and monitor vulnerabilities in their applications and projects, including dependencies and open-source libraries. Snyk identifies vulnerabilities in VS Code extensions by analyzing the dependencies used by the extension and alert developers to known security issues. Snyk works by scanning the project's dependency

files (e.g., package.json for Node.js) and cross-referencing them with its extensive vulnerability database. This database contains information about known security vulnerabilities in open-source libraries and packages, which is continuously updated to provide timely and accurate vulnerability information.

After downloading the extensions and completing the installation process for both Semgrep and Snyk tools, we automated the process of scanning extensions, saving the respective reports as individual JSON files. Owing to the distinct approaches of these tools in scanning, we opted to utilize both to obtain a comprehensive set of results. Subsequently, we executed an additional script on results of scanning to compare them with the objective of identifying extensions vulnerable to path traversal and zip slip vulnerabilities.

After finishing scanning 250 extensions we found 09 potential vulnerabilities. Our findings indicated that Semgrep yielded more positive results in detecting path traversal vulnerabilities. Summary of the findings is as follows:

		Path Traversal Vulnerability			Zip Slip Vulnerability		
S. No	**Filename**	**Semgrep**	**Snyk**	**Our Result**	**Semgrep**	**Snyk**	**Our Result**
1	yandeu-five-server-0.1.12	FALSE	FALSE	TRUE	FALSE	FALSE	FALSE
2	JSCharting-JavaScript-Charts-vscode-jscharting-0.0.3	TRUE	FALSE	TRUE	FALSE	FALSE	FALSE
3	SeyyedKhandon-fpack-2.2.0	FALSE	FALSE	TRUE	FALSE	FALSE	FALSE
4	slevesque-vscode-zipexplorer	TRUE	TRUE	FALSE	FALSE	TRUE	TRUE
5	SeyyedKhandon-zpack-2.1.1	FALSE	FALSE	TRUE	FALSE	FALSE	FALSE
6	hqjs-hq-live-server-0.0.11	TRUE	TRUE	TRUE	FALSE	TRUE	FALSE
7	leadzen-vscweb-0.0.3	FALSE	FALSE	TRUE	FALSE	FALSE	FALSE
8	dzylikecode-docsify-preview	TRUE	FALSE	TRUE	FALSE	FALSE	FALSE
9	osteele-p5-server-1.10.0	TRUE	FALSE	TRUE	FALSE	FALSE	FALSE

A detailed result of both the tools is attached as **Appendix D.**

Recommendations for mitigating the vulnerabilities

Path Traversal Vulnerability

Importance of addressing: Addressing path traversal vulnerabilities is crucial because they pose a significant risk to the confidentiality, integrity, and availability of the system and its data. If left unaddressed, attackers can exploit these vulnerabilities to gain unauthorized access to sensitive data, manipulate system files, or even execute arbitrary code or commands on the target system.

To mitigate Path Traversal vulnerabilities, developers should:

- **Validate and sanitize user input** to ensure it doesn't contain any special characters or sequences that could lead to path traversal. By ensuring user input doesn't contain special characters or sequences, developers can minimize the risk of an attacker manipulating file paths.

- **Limit the scope of file access** by implementing proper access controls and restricting the directories and files that can be accessed by the application. This can be achieved by setting the correct value for root directory and thus developers can prevent unauthorized access to sensitive data or system files. VS Code already provide a built-in API to restrict the extension from accessing any resource outside the specified root directory for the extension.

Zip Slip Vulnerability

Importance of addressing: Addressing Zip Slip vulnerabilities is important because they can lead to significant damage to the system and data, as well as potential security breaches. If left unaddressed, attackers can exploit these vulnerabilities to overwrite critical system files, create new files in unintended locations, and potentially execute arbitrary code on the target system.

To mitigate Zip Slip vulnerabilities, developers should:

- **Validate and sanitize file paths** within compressed archives to ensure they don't contain any special characters or sequences that could lead to directory traversal.
- **Implement proper access controls** and restrict the directories and files that can be accessed and modified during the extraction process. By preventing unauthorized access to sensitive data or system files during extraction, developers can minimize the potential impact of a successful attack.

Guidelines Specific to VS Code Extensions

Best security practices to create a secure webview in the context of an extension for Visual Studio Code are as follows:

1. **Limit Capabilities**: A webview should only have the capabilities it needs. For instance, if your webview doesn't need to run scripts, do not set the `enableScripts` to true. If your webview doesn't need to load resources from the user's workspace, set `localResourceRoots` to [`vscode.Uri.file(extensionContext.extensionPath)`] or even `[]` to disallow access to all local resources.
2. **Content Security Policy (CSP)**: CSPs help restrict the content that can be loaded and executed in webviews. They can ensure that only a list of allowed scripts can be run in the webview, or even specify the webview to only load images over HTTPS. To add a CSP, add a `<meta http-equiv="Content-Security-Policy">` directive at the top of the webview's `<head>`. A good practice is to start with a policy that disallows all content `(default-src 'none';)` and then turn back on the minimal amount of content that the extension needs to function. This policy should also implicitly disable inline scripts and styles, promoting the best practice of extracting all inline styles and scripts to external files.
3. **Only Load Content over HTTPS**: If your webview allows loading external resources, it's strongly recommended to only allow these resources to be loaded over HTTPS and not HTTP.
4. **Sanitize User Input**: Just like for a normal webpage, when constructing the HTML for a webview, sanitize all user input to avoid content injections, which pose a security risk. Values that must be sanitized include file contents, file and folder

paths, and user and workspace settings. Consider using a helper library to construct your HTML strings and ensure all content from the user's workspace is properly sanitized.

5. **Security through Multiple Measures**: Do not rely solely on sanitization for security. Follow other security best practices, such as having a robust content security policy, to minimize the impact of potential content injections.

Github Repo Link

https://github.com/prateekdceit06/EC521

Effort Breakdown

S. No	Name	Terrier ID	Contribution (%)
1.	Anjana Srivastava	Terrier033	18
2.	Aryaman Gupta	Terrier015	19
3.	Prateek Jain	Terrier019	21
4.	Shubham Kaushik	Terrier021	22
5.	Timur Zhunussov	Terrier043	20

Appendix A

Extensions selected for identifying path traversal vulnerability

- architect-architect-1.0.1.vsix: This VS Code extension provides syntax highlighting for the Architect file format (app.arc, .arc, config.arc, and prefs.arc).
- LiveLucky-snippet-retyper-0.0.5.vsix: This VS Code extension is a tool that will help to retype snippets. Making it easy to create screen recordings.
- popstas-ansible-server-sites-0.5.1.vsix: This VS Code extension allows for easy management of sites deployed with the ansible-server role from viasite-ansible. It provides commands for SSHing into sites, opening SSH tunnels for xdebug, cloning sites via Git, and generating configs for sites.
- AlistairChristie-open-reusables-1.7.1.vsix: The Open Reusables extension allows you to open a variable or reusable referenced in the selected text.
- manhen-github-linker-0.0.11.vsix: The extension provides commands to make and open links to GitHub repositories.
- hosseinagha-vscode-livescript-snippets-0.1.0.vsix: This VS Code extension provides common LiveScript snippets.
- SimonSiefke-svg-preview-2.8.3.vsix: This VS Code extension provides a preview of SVG files.
- JSCharting-JavaScript-Charts-vscode-jscharting-0.0.3.vsix: This extension allows you to preview charts in VSCode using JSCharting.
- msedge-dev-gnls-0.1.3.vsix: This VS Code extension provides code IntelliSense for the GN build system.
- yandeu-five-server-0.1.12.vsix: This extension allows for real-time updates by injecting the html body. It also highlights the html tag in the browser.
- takagimeow-chatgpt-editor-1.0.4.vsix: This VS Code extension allows you to use ChatGPT on the editor.
- Artsy-artsy-studio-extension-pack-1.3.1.vsix: This VS Code extension installs a collection of recommended extensions for working in Artsy's front-end/platform stacks.
- liveColor-dark-0.0.1.vsix: This VS Code extension provides a color theme for the VS Code editor.
- chaliy-handlebars-preview-1.3.1.vsix: This VS Code extension provides live preview for Handlebar templates.
- kazukitash-esa-1.0.1.vsix: This VS Code extension allows users to create, open, and edit esa files.
- SeyyedKhandon-fpack-2.2.0.vsix: This extension pack for Visual Studio Code includes a number of extensions that are useful for frontend development, including HTMLHint, HTML CSS Support, Auto Rename Tag, Color Highlight, Color Info, Unused CSS Classes for JavaScript/Angular/React, CSS Navigation, Image preview, Live Server, Static server, Five Server, Font Preview, Svg Preview, and Prettier code formatter.
- alexdima-open-in-github-0.3.0.vsix: This VS Code extension provides a command to open the current file in GitHub.
- vvzen-vscode-foxdot-darktheme-0.0.2.vsix: This VS Code extension provides a dark theme for live coding with FoxDot.

- RafaelMartinez-svelte-preview-2.6.1.vsix: This VS Code extension provides a live preview of svelte files.
- lochbrunner-vscode-hdf5-viewer-0.0.3.vsix: This VS Code extension allows you to view HDF5 files in VS Code.
- filipesabella-live-p5-1.4.3.vsix: This VS Code extension allows you to edit your p5 code live, without reloading.
- adrianwilczynski-switcher-1.0.4.vsix: This extension provides a way to switch between related files using keybindings, context menu or command palette.
- jcasc-developers-jcasc-plugin-0.0.4.vsix: This extension is used to integrate a live jenkins instance configuration with your editor. It can be used to edit and validate YAML files.
- mute-mips-0.0.2.vsix: This VS Code extension adds language support for MIPS to Visual Studio Code, including features such as highlight and snippets.
- chogath-nest-server-tools-0.3.5.vsix: This VS Code extension helps nest-server developers quickly create templates/directories/files in vscode.
- karyfoundation-idf-3.0.0.vsix: The extension provides language support for HeatStudio, OpenStudio and EnergyPlus files.
- miguel-savignano-middleman-partial-trasporter-0.0.3.vsix: The Middleman Partial Trasporter extension helps you to open partial files with the Go to Definition feature in VS Code.
- hoskinson-ml-lean-chat-vscode-0.0.3.vsix: This VS Code extension allows you to open a chat with the OpenAI Codex.
- hqjs-hq-live-server-0.0.11.vsix: This VS Code extension provides a light-weight web server for development purposes. It also has livereload capabilities so that changes made to the code are reflected immediately in the browser preview.
- TenraNeko-pubspec-dependency-opener-1.0.2.vsix: The Pubspec Dependency Opener extension helps to open the package in the browser in one click.
- VLARAORT-opencoverage-0.0.6.vsix: This VS Code extension provides a button to open the coverage HTML folder in a browser.
- SeyyedKhandon-zpack-2.1.1.vsix: This VS Code extension is a collection of essential extensions for web developers, which aim to improve the developer experience.
- LiaScript-liascript-preview-web-0.2.10.vsix: This VS Code extension allows you to preview LiaScript Markdown files in your web browser.
- mbehr1-vsc-lfs-1.4.1.vsix: This VS Code extension allows other extensions to work with large files.
- UtsavVaria-goog-search-0.0.2.vsix: This VS Code extension allows users to search selected text in the editor using Google.
- fagnercarvalho-redis-lsp-1.0.2.vsix: This VS Code extension provides autocompletion for Redis commands.
- magicus-openjdk-devel-1.1.0.vsix: This VS Code extension is designed to help OpenJDK developers manage their development process by providing a GitHub integration. This allows developers to see Pull Requests for their projects and repos, as well as set up filters for labels and repos.
- Phu1237-live-reload-1.1.1.vsix: This VS Code extension provides live reloading for web pages.
- sfodje-perlcritic-1.3.8.vsix: This VS Code extension provides language support for the Perl programming language.

- q-vscode-refactor-by-js-0.0.16.vsix: This VS Code extension provides a way to bulk refactor your source code using Javascript functions, with live preview.
- remirobichet-open-single-sibling-1.0.2.vsix: This VS Code extension opens a sibling file of the currently opened file.
- ssigwart-vscode-smarty-1.0.14.vsix: This VS Code extension provides syntax highlighting and language support for the Smarty template language.
- KevinRose-line-link-0.0.1.vsix: This extension provides a way to open a link to your exact line of code in a browser from VS Code. Compatible with GitHub and GitLab.
- AlfredoLopez-chatgpt-theme-1.0.3.vsix: This VS Code extension is a theme inspired by the ChatGPT code input panel.
- DanielSanMedium-dscodegpt-2.1.3.vsix: This VS Code extension provides documentation for the Google PageSpeed Insights API.
- cheaty-sheet-pcheaty-0.3.2.vsix: This VS Code extension is a preview for Cheaty Sheet.
- xuzn-pikchr-markdown-preview-0.0.5.vsix: This VS Code extension adds Pikchr support to VS Code's built-in Markdown preview.
- with-one-vision-livecoder-1.0.1.vsix: This VS Code extension types out code for you in live coding sessions.
- leadzen-vscweb-0.0.3.vsix: This VS Code extension allows you to open files in your web browser of choice.
- zhangjiangqige-checkerframework-language-server-0.2.0.vsix: This VS Code extension provides language support for the Checker Framework.
- squaredup-scaffold-serverless-service-vscode-1.0.6.vsix: This VS Code extension provides a scaffold for creating a Serverless Service.
- calcoph-hexpat-language-server-0.2.0.vsix: This VS Code extension provides language support for the Hexpat language.
- mtxr-sqltools-driver-mssql-0.4.1.vsix: This VS Code extension provides tools for working with databases, including a connection explorer, query runner, intellisense, bookmarks, and query history.
- distinction-dev-sls-snippets-1.3.1.vsix: This VS Code extension provides code snippets for Serverless Applications.
- inferrinizzard-prettier-sql-vscode-1.6.0.vsix: The sql-formatter extension formats whitespace in a SQL query to make it more readable.
- jeffreymanzione-jeff-vm-language-server-0.0.4.vsix: This VS Code extension provides language support for Jeff's VM Language.
- kirchner-trevor-shopify-liquid-preview-2.1.0.vsix: This VS Code extension provides live preview for Shopify Liquid templates.
- fragcys-asp-net-core-switcher-2.0.2.vsix: This VS Code extension provides a quick way to switch between views, controllers, pages, page models and Blazor components in ASP.NET Core using keybindings, context menu or command palette.
- tgreen7-open-file-command-0.0.1.vsix: This VS Code extension adds a command which can be used by keyboard shortcuts to open any file.
- RomainMenke-css-gradients-preview-1.1.0.vsix: The VS Code extension provides syntax highlighting and code completion for the JavaScript programming language.
- anka-213-gf-vscode-1.0.4.vsix: This VS Code extension provides language support for the Grammatical Framework (GF) programming language.

- CKGrafico-icomoon-viewer-0.6.2.vsix: This VS Code extension allows you to preview your Icomoon icons into your style files.
- PranaySingh-phabview-1.0.1.vsix: This VS Code extension opens the current file in Phabricator.
- TakumiI-markdown-previewstyle-0.0.1.vsix: This VS Code extension adds style to markdown preview to make it look nicer.
- ZaderRox1111-white-oak-chillhop-1.0.3.vsix: This VS Code extension is a theme that is designed to match the live wallpaper White Oak Chillhop.
- KazukiIsogai-FS-Live-Viewer-0.0.4.vsix: This VS Code extension provides a FreeStyle Wiki Live Viewer with VSCode.
- satiromarra-vscode-php-test-explorer-docker-1.0.5.vsix: This VS Code extension provides a UI for the PHPUnit testing framework.
- mtsmfm-ruby-lsc-0.1.1.vsix: This VS Code extension is a client for the Ruby Language Server.
- davnn-assistant-gpt3-0.2.0.vsix: This VS Code extension provides completion and editing suggestions based on the GPT-3 language model.
- mattn-OpenVim-0.0.8.vsix: This VS Code extension allows users to open their current file in Vim.
- beeinger-ts-live-checks-1.0.0.vsix: This VS Code extension provides real time TypeScript tests repo-wide.
- nodename-vscode-hacker-typer-fork-0.2.4.vsix: This VS Code extension provides a modified version of the Hacker Typer extension. It allows the user to look cool while live coding by providing a realistic typing experience.
- marcfreiheit-gs-topaz-0.1.0.vsix: This VS Code extension provides language support for the GemStone Topaz programming language.
- MetaConcProject-effortless-language-servers-0.8.1.vsix: This VS Code extension provides support for many common IDE features, including debugging and executing programs.
- david-reis-dockerlive-1.0.21.vsix: This VS Code extension provides a live programming environment for Dockerfiles.
- RoyalDevsTheme-royal-devs-theme-0.1.0.vsix: This VS Code extension is a color theme for Visual Studio Code inspired by the colors of the Royal Devs logo, a Discord server dedicated to the programming community.
- fraser-live-coder-1.0.2.vsix: This VS Code extension is called Live Coder and it allows users to see how their code executes as they write it.
- HoracioGutierrez-rest-api-server-0.5.0.vsix: This VS Code extension creates a REST API server using a JSON file.
- pxgamer-hgwo-1.1.2.vsix: This VS Code extension opens Mercurial repositories in Hg Workbench.
- jevakallio-vscode-hacker-typer-0.1.1.vsix: This VS Code extension allows you to type like a hacker.
- dzylikecode-docsify-preview-1.7.0.vsix: This VS Code extension allows you to preview your markdown files using the docsify server.
- voilalex-open-in-ipython-1.0.1.vsix: This VS Code extension allows you to open a file with IPython right from the File Explorer context menu.
- hosseinagha-vscode-open-react-component-style-0.3.0.vsix: This extension allows you to open a component's style file and vice versa.
- florianjosefreheis-open-my-calendar-1.0.3.vsix: This VS Code extension allows the user to load their pre-defined calendars from the VSCode command palette.

- MuTsunTsai-jsdoc-link-0.2.1.vsix: This VS Code extension provides a preview of JSDoc links in-place.
- demystifying-javascript-python-extensions-pack-1.0.2.vsix: The Python Development Extensions Pack includes all the necessary tools for Python development, including the Git Extensions Pack. It provides Python-specific syntax highlighting, code completion, linting, formatting, and more.
- slevesque-vscode-link-1.0.0.vsix: The VS Code extension provides a way to open a link directly in vscode.
- tejanium-blame-pr-1.0.5.vsix: The extension allows users to blame and open Github's associated PR.
- lennardv-livewire-goto-updated-1.1.0.vsix: This VS Code extension provides goto functionality for Livewire components.
- treinaweb-tw-dev-server-1.0.1.vsix: This VS Code extension allows you to start and stop a development server, as well as open the server's GUI.
- SimonSiefke-html-preview-2.0.6.vsix: The VS Code extension enables developers to preview HTML code within the editor.
- jit-y-vscode-ghq-open-0.0.2.vsix: This VS Code extension provides a command that opens a new window and displays the contents of a specified directory.
- chipcode-nl-picoprobe-mac-1.0.6.vsix: This VS Code extension provides support for the Raspberry Pi Picoprobe on macOS.
- derekdavenport-vscode-plonefs-0.4.8.vsix: This VS Code extension provides a file system for Plone sites.
- bcanzanella-openmatchingfiles-0.5.4.vsix: This VS Code extension opens all files matching a search query.
- Bridgecrew-checkov-1.0.94.vsix: This VS Code extension provides static analysis for infrastructure as code.
- CodeChimp-lmsslim-snippets-1.0.0.vsix: This VS Code extension provides snippets for Logitech Media Server dev.
- Mukundan-nodejs-docs-0.2.2.vsix: This VS Code extension opens the Node.js documentation.
- yechunan-json-color-token-1.3.2.vsix: This VS Code extension provides language server support for previewing/editing hex color tokens in json documents.
- ezshine-rainbow-fart-waifu-0.0.20.vsix: This VS Code extension puts a virtual lover on your desktop and keeps giving you compliment while you are coding. supported python, javascript, c#, php, java, vue...and all language.
- jeswr-shaclc-language-server-0.0.1.vsix: This VS Code extension provides language support for SHACL Compact Syntax.
- yy0931-gitconfig-lsp-0.9.3.vsix: This VS Code extension provides language support for the gitconfig and gitattributes files.
- brano-b-theme-0.4.0.vsix: This VS Code extension provides a set of dark themes for VS Code, including syntax highlighting, debugging, diff/merge and terminal colors.
- lifeart-vscode-ember-unstable-3.0.48.vsix: This VS Code extension provides features like auto complete, goto definition and diagnostics for Ember.js projects.
- kumar-harsh-graphql-for-vscode-1.15.3.vsix: This VS Code extension provides syntax highlighting, linting, auto-complete, and other features for GraphQL files.
- beaglefoot-awk-ide-vscode-0.9.5.vsix: The VS Code extension provides TypeScript and JavaScript language support for the popular React JavaScript library.

Extensions selected for identifying zip slip vulnerability

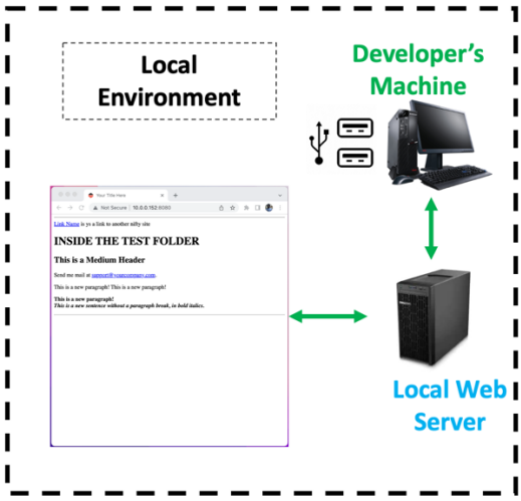
- goloveychuk-yarn-pnp-extension-0.1.3.vsix: This VS Code extension allows you to view and resolve Yarn packages.
- jackpanyj-zip-preview-0.0.4.vsix: This VS Code extension allows you to preview a Zip file.
- ecmel-vscode-archiver-0.0.27.vsix: This VS Code extension is used to archive and backup workspace folders.
- zhenfan0753-tinypng2cos-0.0.3.vsix: This VS Code extension allows users to automatically compress and upload images based on TinyPNG to COS.
- xxicao-compressed-upload-1.2.0.vsix: This VS Code extension automatically compresses and uploads images based on TinyPNG to COS.
- badre429-bmgvscodepowertools-1.6.10.vsix: This VS Code extension provides a set of tools for developers, including an archiver, a string encoder/decoder, a line sorter, and an i18n tool.
- gep13-chocolatey-vscode-0.7.2.vsix: This VS Code extension provides a set of snippets and commands for helping with creating packages for Chocolatey.
- pdamianik-folder-archiver-0.0.5.vsix: This VS Code extension archives any folder in the workspace.
- monasticpanic-hrx-syntax-1.0.1.vsix: This VS Code extension provides syntax highlighting for HRX files. It also supports embedded languages, so that code in other languages can be properly highlighted when included in an HRX file.
- slevesque-vscode-zipexplorer-0.3.1.vsix: This VS Code extension allows users to explore the contents of a Zip file in a Tree Explorer.
- unclebeast-har-viewer-0.0.2.vsix: This extension allows users to view HTTP Archive (HAR) files in VS Code.
- kalifun-lazyswitch-0.1.3.vsix: This VS Code extension can be used to generate GO code from YAML or JSON files.
- eridem-vscode-nupkg-1.0.1.vsix: This VS Code extension displays all information from a NuPkg file.
- AnchovyStudios-zip-extract-all-1.2.0.vsix: This VS Code extension extracts all zip files inside a folder.
- betwo-vscode-linux-binary-preview-2.4.0.vsix: This extension provides previews for Linux binaries such as shared objects and archive files.
- YuTengjing-vscode-archive-0.3.2.vsix: This VS Code extension provides a set of commands for compressing and decompressing files. The supported file formats include .zip, .vsix, .crx, .asar, .tgz, .gzip, .br, and .tar.
- sandipchitale-vscode-multipane-explorer-0.0.15.vsix: This VS Code extension is a multipane explorer that supports File System, Kubernetes Container (Pod) File System, Zip File System, (S)FTP File System.
- AdamRaichu-zip-viewer-3.9.2.vsix: This extension allows you to preview and extract files from zip archives.
- edp1096-vscode-style-compressor-0.0.1.vsix: This VS Code extension minifies CSS or SCSS files.
- InternetArchive-coderunr-vscode-1.6.5.vsix: This VS Code extension runs configured CI/CD commands when a file is saved in vscode, and output configured messages on status bar.
- wmanth-jar-viewer-1.2.0.vsix: This extension lists classes and files inside JAR archives.

- avive-archive-viewer-0.0.1.vsix: This VS Code extension allows you to view the contents of archive files.
- gnoijli-vscode-dragonbones-preview-0.4.0.vsix: vscode-dragonbones-preview is a VS Code extension that allows you to preview dragonbones zip files.
- benedly-csscomb-formatter-0.1.1.vsix: This VS Code extension formats CSS, LESS, SCSS, and SASS code using the csscomb tool.
- shinyypig-md-paste-image-2.7.5.vsix: This VS Code extension enables users to paste images from their clipboard directly into markdown files.
- dzylikecode-md-paste-enhanced-2.6.0.vsix: This VS Code extension allows you to paste images from your clipboard directly into a markdown file.
- Coders-workspace-archive-1.0.24.vsix: This VS Code extension allows users to archive their project into a zip file.
- morissonmaciel-typescript-auto-compiler-0.7.0.vsix: The extension watches for changes in .ts and tsconfig.json files and runs the tsc command to build them. It can also use tsconfig.json files for batch build or build single .ts files.
- informagico-vscode-lua-minify-1.3.1.vsix: This VS Code extension minifies Lua source code.

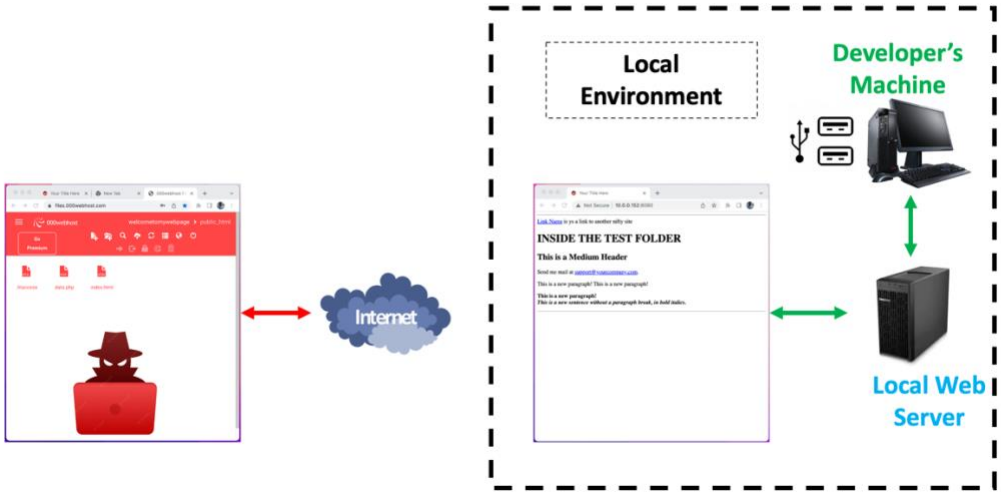
Appendix B

Path Traversal Vulnerability Exploitation

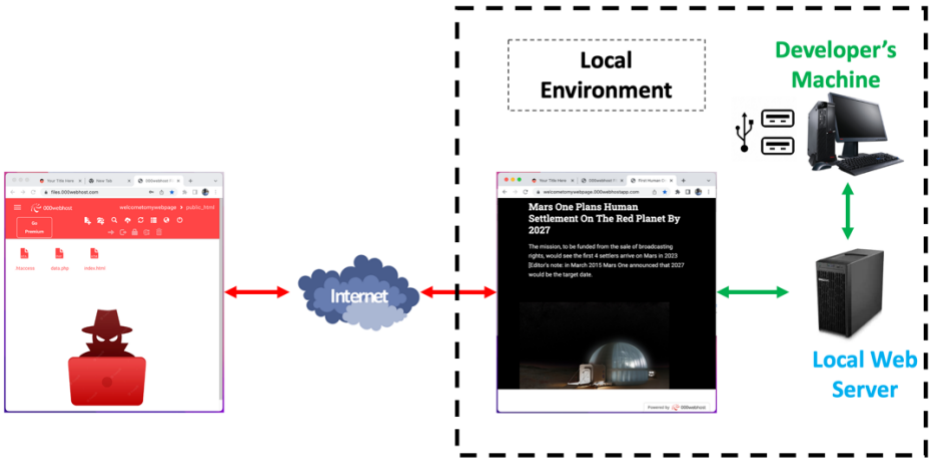
1) Assume a developer is working on his system (local environment), creating some html page in VS Code. He wants to see the output of his code on the go, so he downloads the extension HQJS live server with 15000 downloads. He runs the extension which opens the port 8080 locally on the system and now he can see the output of his hard work at localhost:8080.



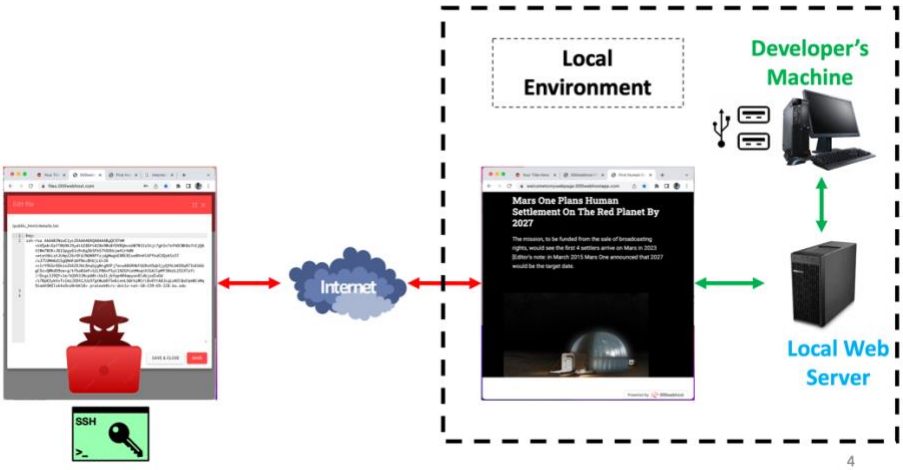
2) There is an attacker who has hosted a webpage on the internet with some malicious JavaScript code running in the background. He is waiting patiently for his target (the innocent developer) to visit his webpage with the HQJS live server extension (or some other extension vulnerable to path traversal) enabled.



3) The developer visits the attacker's webpage and connects to his server.

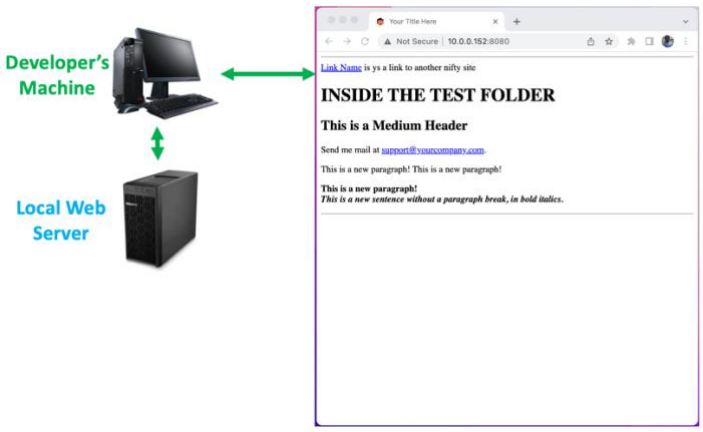


4) The malicious JS runs in the background and steals the SSH key of the developer.

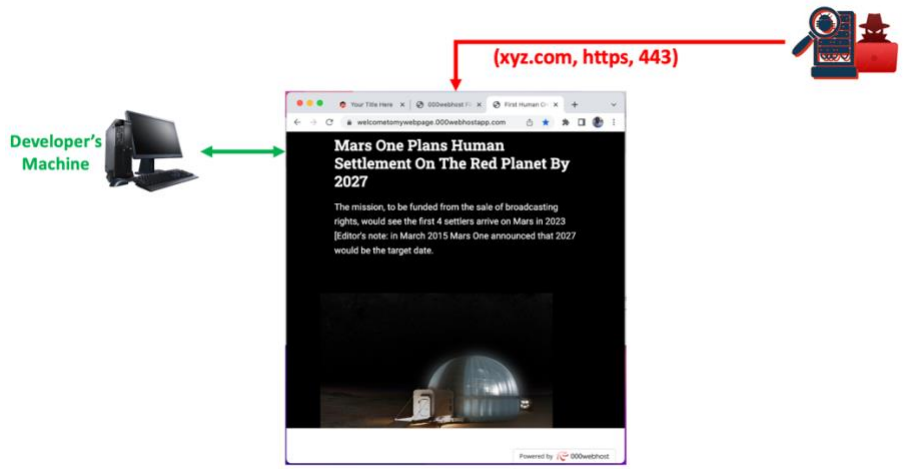


Details of the Exploit

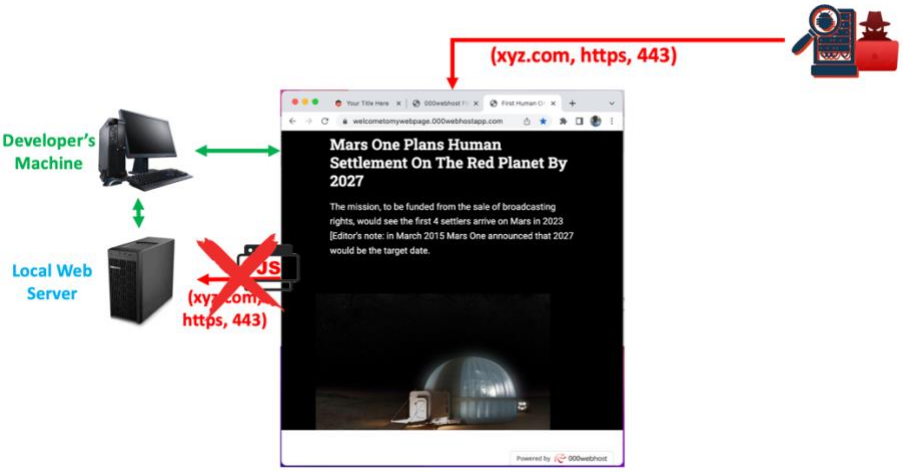
1) When developer runs the extension on his system, he opens a port on his system locally.



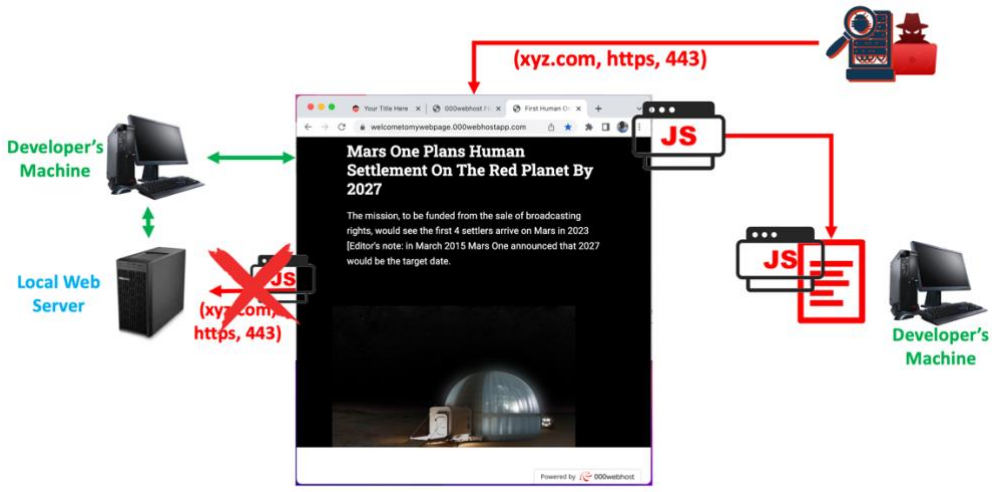
2) When he visits the malicious webpage hosted by attacker, the page has an origin (xyz.com, https, 443). Therefore, all the objects on that page will have the same origin.



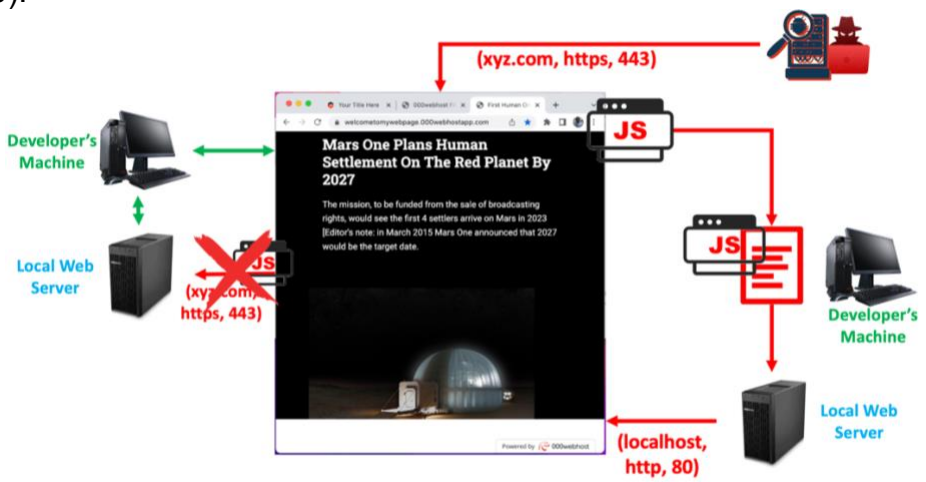
3) If the malicious JS tries to steal the SSH key directly then the local server refuses this request as the origin of the JS (xyz.com, https, 443) is different from the origin of the local web server (localhost, http, 8080).



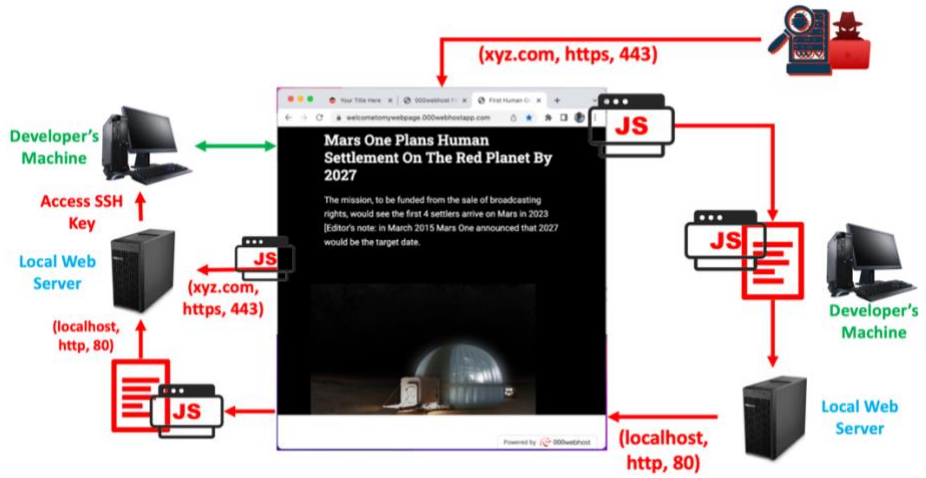
4) So, the malicious script downloads a payload on the attacker's system in the Downloads folder.



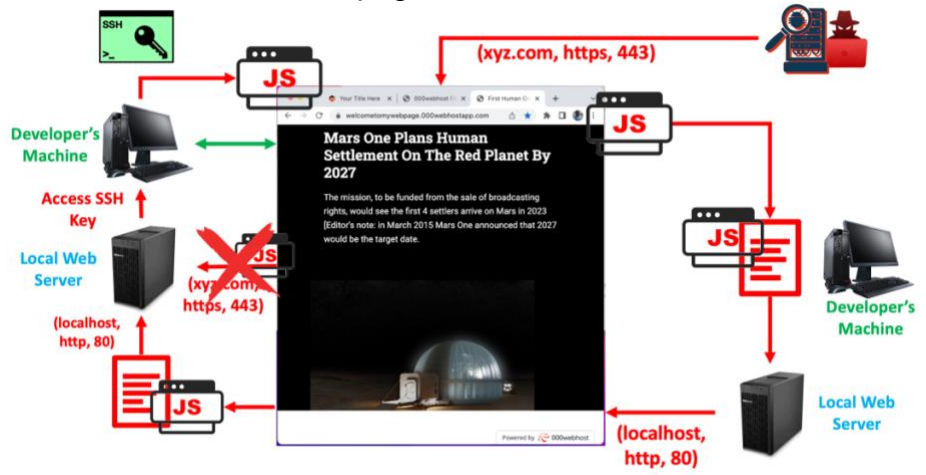
5) After this, the script uses the Path Traversal Vulnerability of the local web server to access this downloaded payload which has the code to steal the SSH key of the target. This payload is injected in the malicious webpage in an iframe, so that the JS inside the payload can be executed. Doing this, changes the origin of this iframe to (localhost, http, 8080).



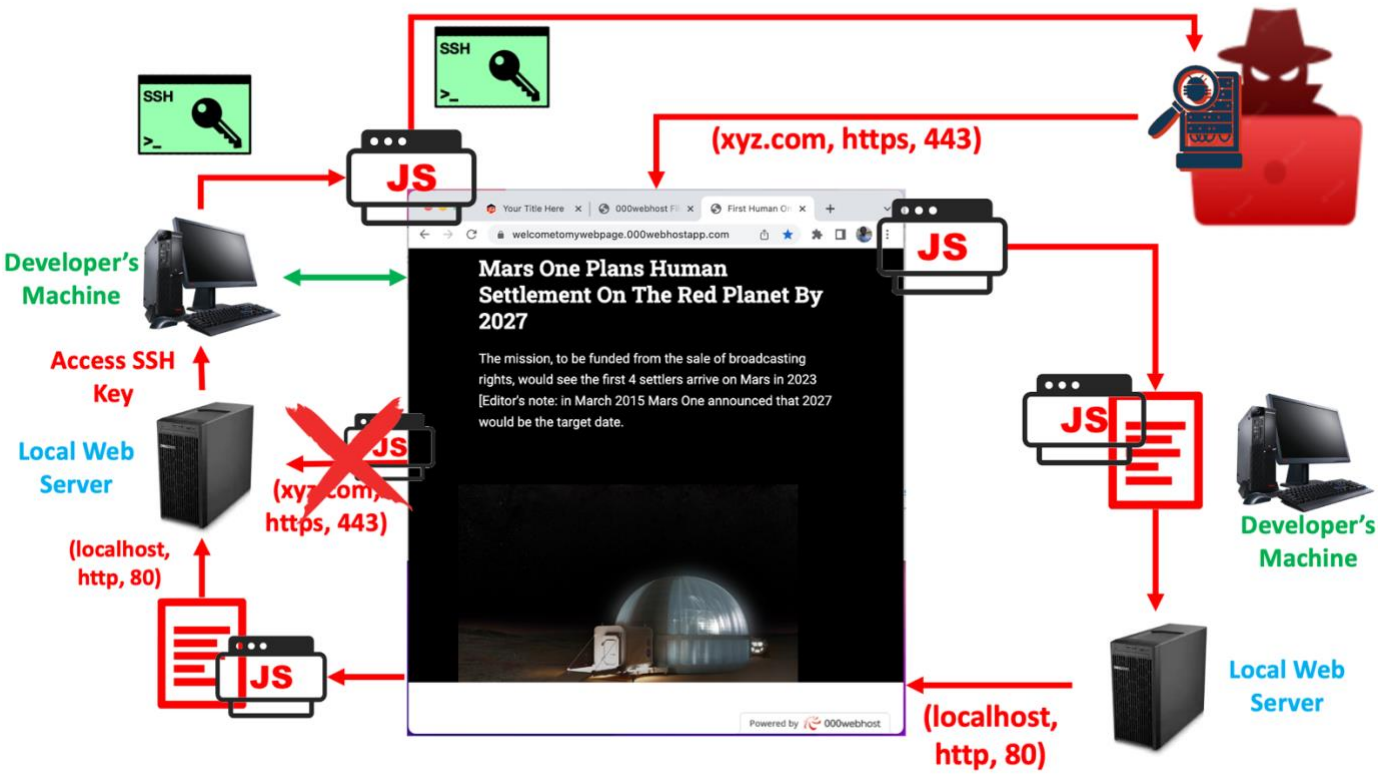
6) Now when the JS inside the iframe is executed, it communicates with the local web server with origin (localhost, http, 8080). Now the script tries to access the SSH key of the developer saved at path `../../../../../.ssh/id_rsa.pub`.



7) Again, as the local web server is vulnerable to the Path Traversal Attack, it fetches the SSH key from the specified location and sends it to the message handler in the malicious JS on the attacker's webpage.

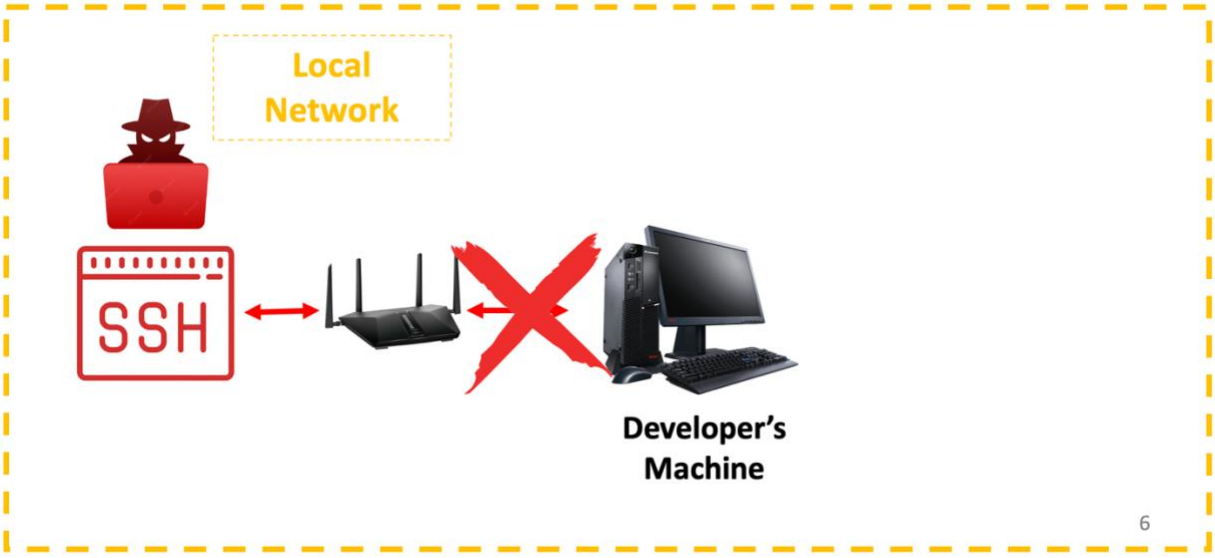


8) Finally, the malicious JS sends the target's SSH Key to the attacker where he writes it to a file.

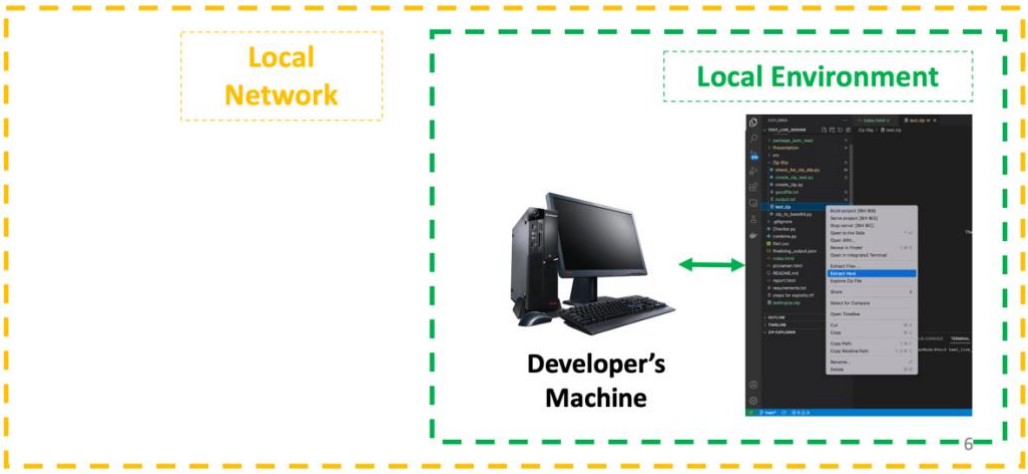


Zip Slip Vulnerability Exploitation

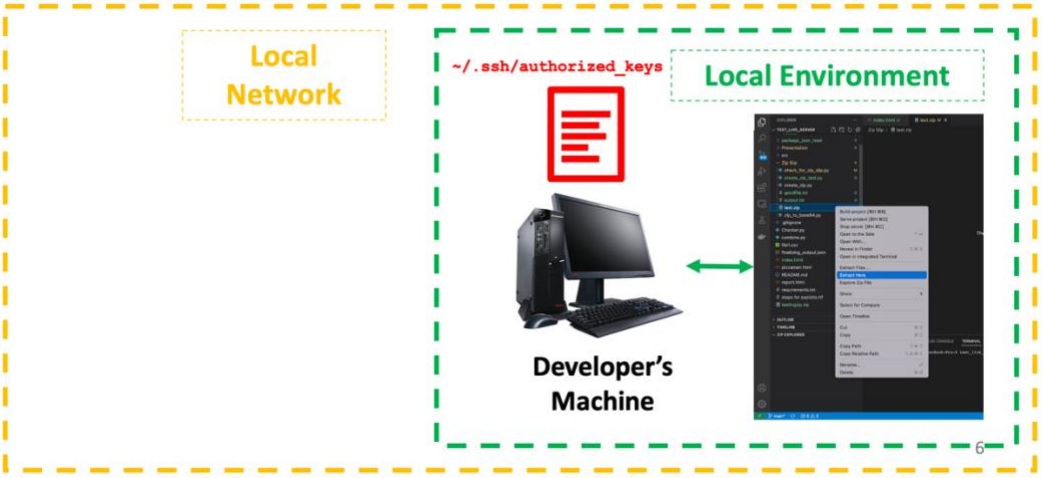
1. Assume that an attacker, on a local network, knows the username of a target and he tries to SSH into the target's system, but he does not know target's password, so his attempt is unsuccessful.



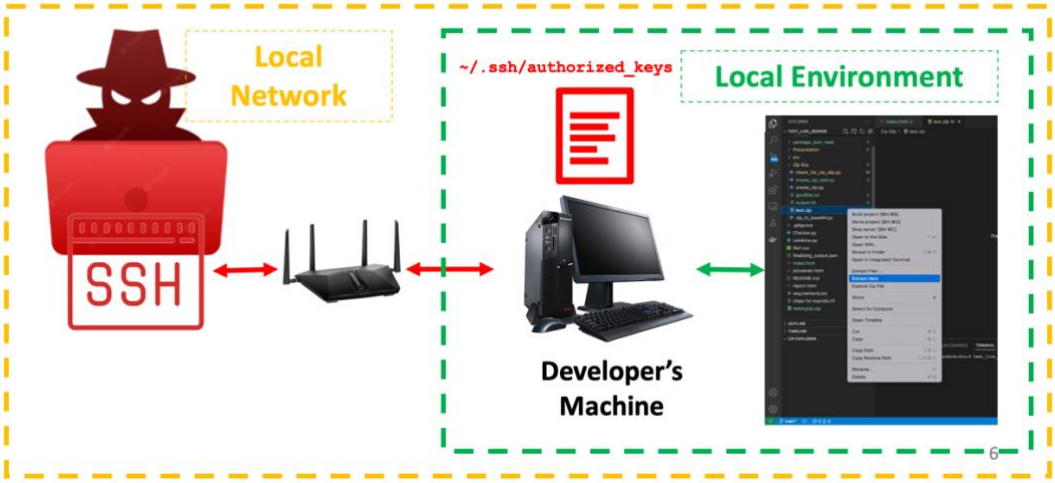
2. He knows that his target uses a VS Code extension Zip Explorer with 250,000 downloads, so he sends a zip file to the target and waits for him to unzip it using Zip Explorer extension inside the VS Code.



3. The target does exactly that and the file unzips and creates a harmless file in the same folder but in the background, it creates a file `authorized_keys` in the `~/.ssh` location with attacker's public key for SSH access.



4. Now, the attacker tries to SSH into the system again. This time he successfully SSH into the target system because in the order of authorization for SSH, public key method gets precedence over password method.

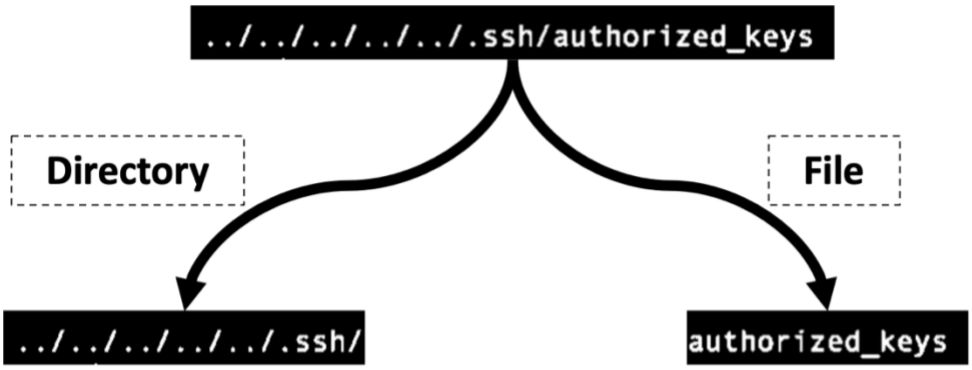


Details of the Exploit

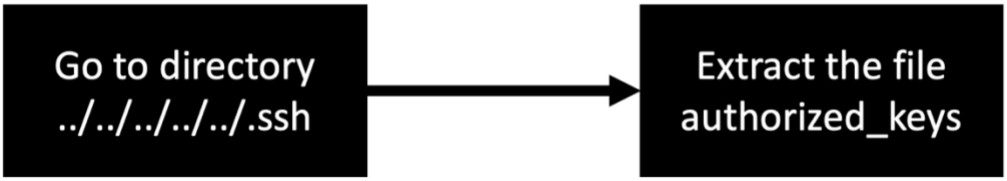
1) The zip file that the attacker had sent to the target contained 2 files:
   a) `../../../../../.ssh/authorized_keys`
      Contains SSH public key of attacker.
   b) `goodfile.txt`
      Contains harmless text.

```
(base) prateek@Prateeks-MacBook-Pro-2 Zip Slip % unzip -l test.zip
Archive:  test.zip
  Length      Date    Time    Name
---------  ---------- -----   ----
      575  04-14-2023 17:47   ../../../../../.ssh/authorized_keys
       21  04-25-2023 16:18   goodfile.txt
---------                     -------
      596                     2 files
```

2) When the target extracts these files, the zip explorer extension splits the name of the files in two parts on the last backslash (/) in the name (if present). The two parts of the name are thus used as follows:
   a) First part – Directory
   b) Second Part – File name



3) It then changes the directory to the path specified by the directory part if it exists otherwise, it creates the specified directory and extracts the file to this directory.



4) This creates a file `authorized_keys` with the SSH public key of the attacker in the `~/.ssh/` directory, thus giving the attacker access to his system using SSH.

Appendix C

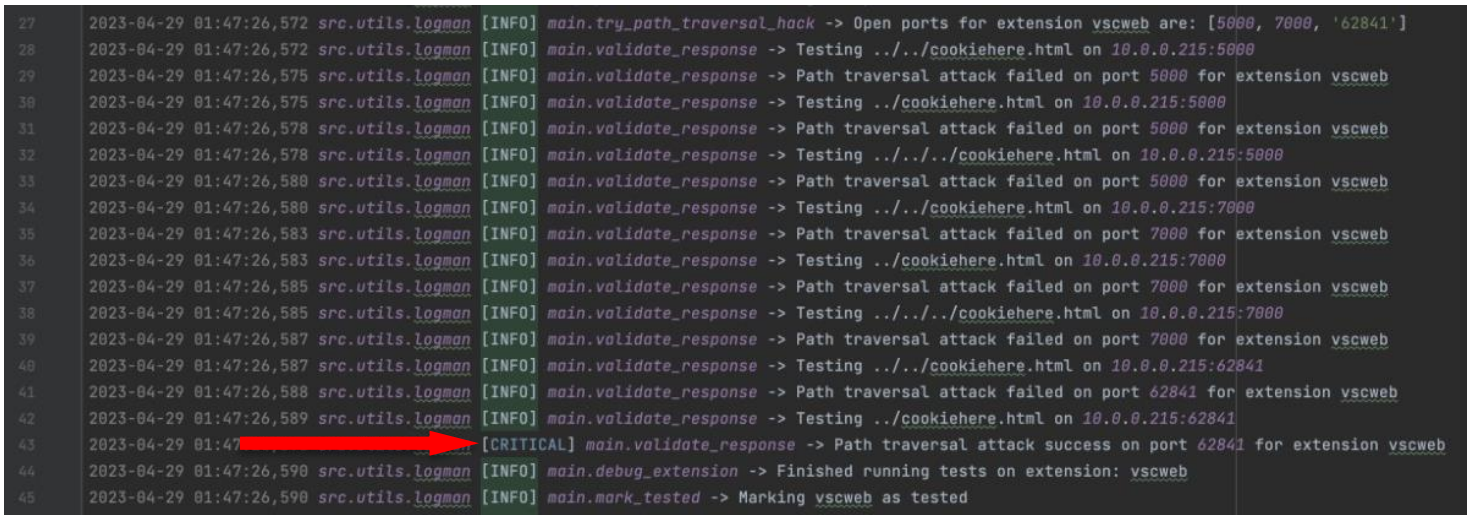
Results of running the tool on 250 extensions for identifying Path Traversal Vulnerability

The tool runs for all the extensions in the library. If the extension is not found vulnerable, then it just marks the extension as `tested : true` but does not add it to the list of vulnerable extensions. If it finds an extension vulnerable, then it creates a json file with following details about the extension:


```
{
    "path_traversal_attack": [{
        "vscweb": {
            "publisherName": "leadzen",
            "extensionName": "vscweb",
            "version": "0.0.3",
            "shortDescription": "A static Web Server for VS Code
development environment.",
            "publishedDate": "2018-03-23T17:26:48.8+00:00",
            "lastUpdated": "2018-04-05T01:02:39.42+00:00"
        },
        "fpack": {
            "publisherName": "SeyyedKhandon",
            "extensionName": "fpack",
            "version": "2.2.0",
            "shortDescription": "Frontend Development Essentials
Extension Pack for Visual Studio Code",
            "publishedDate": "2021-04-02T12:05:50.2+00:00",
            "lastUpdated": "2022-10-25T14:36:42.833+00:00"
        },
        "zpack": {
            "publisherName": "SeyyedKhandon",
            "extensionName": "zpack",
            "version": "2.1.1",
            "shortDescription": "An Opinionated collection/pack
of essentials extensions for Web Developers in VSCode (Better DX
in Mind)",
            "publishedDate": "2021-05-06T09:24:05.397+00:00",
            "lastUpdated": "2022-10-27T05:27:34.72+00:00"
        },
        "five-server": {
            "publisherName": "yandeu",
            "extensionName": "five-server",
            "version": "0.1.12",
            "shortDescription": "A better Live Server with
instant updates, highlights and PHP support.",
            "publishedDate": "2021-03-19T15:39:10.717+00:00",
            "lastUpdated": "2023-01-30T16:43:19.42+00:00"
        },
        "docsify-preview": {
            "publisherName": "dzylikecode",
```

```
            "extensionName": "docsify-preview",
            "version": "1.7.0",
            "shortDescription": "write docs easily with
docsify",
            "publishedDate": "2022-10-10T10:31:40.797+00:00",
            "lastUpdated": "2022-11-08T08:36:42.49+00:00"
        },
        "vscode-jscharting": {
            "publisherName": "JSCharting-JavaScript-Charts",
            "extensionName": "vscode-jscharting",
            "version": "0.0.3",
            "shortDescription": "A VSCode extension that adds
JavaScript chart visualization for JSCharting chart options in
JSON and JSON5 files.",
            "publishedDate": "2020-11-12T19:00:38.943+00:00",
            "lastUpdated": "2020-11-13T16:49:09.187+00:00"
        },
        "hq-live-server": {
            "publisherName": "hqjs",
            "extensionName": "hq-live-server",
            "version": "0.0.11",
            "shortDescription": "Lightning fast, zero
configuration, web application development server with
livereload",
            "publishedDate": "2019-08-26T11:59:45.397+00:00",
            "lastUpdated": "2020-12-19T11:16:31.263+00:00"
        },
        "p5-server": {
            "publisherName": "osteele",
            "extensionName": "p5-server",
            "version": "1.10.0",
            "shortDescription": "Create and run p5.js sketches,
browse and run collections. Includes a sketch-aware live server,
a tree view of a workspace's sketches, and automatic includes of
p5.js libraries.",
            "publishedDate": "2021-07-30T03:19:48.67+00:00",
            "lastUpdated": "2021-12-15T08:08:54.4+00:00"
        }
    }],
    "zip_slip_attack": [{
        "vscode-zipexplorer": {
            "publisherName": "slevesque",
            "extensionName": "vscode-zipexplorer",
            "version": "0.3.1",
            "shortDescription": "Display the content of a Zip
file in a Tree Explorer",
            "publishedDate": "2017-06-13T14:35:11.533+00:00",
            "lastUpdated": "2018-03-03T02:13:30.767+00:00"
        }
    }]
}
```

Logs generated during testing of the extension `vscweb`



Appendix D

Result of Semgrep and Snyk for 200 extensions selected for Path Traversal Vulnerability

S. No	Filename	Semgrep Path Traversal	Link to Results	Snyk Path Traversal	Link to Results
1	aaroncarneiro-recommended-frontend-extensions-0.1.0.txt	FALSE	Semgrep Result	FALSE	Snyk Result
2	adi-projects-crypto-0.0.1.txt	FALSE	Semgrep Result	FALSE	Snyk Result
3	adrianwilczynski-switcher-1.0.4.txt	TRUE	Semgrep Result	FALSE	Snyk Result
4	alanz-vscode-hie-server-0.2.1.txt	FALSE	Semgrep Result	FALSE	Snyk Result
5	alexdima-open-in-github-0.3.0.txt	TRUE	Semgrep Result	FALSE	Snyk Result
6	alexeaton-openscad-format-1.0.1.txt	TRUE	Semgrep Result	FALSE	Snyk Result
7	alfredolopez-chatgpt-theme-1.0.3.txt	FALSE	Semgrep Result	FALSE	Snyk Result
8	alipay-appx-axml-language-1.0.0.txt	FALSE	Semgrep Result	FALSE	Snyk Result
9	alistairchristie-open-reusables-1.7.1.txt	FALSE	Semgrep Result	FALSE	Snyk Result
10	angeloperera-vscode-open-in-fork-0.1.0.txt	TRUE	Semgrep Result	FALSE	Snyk Result

11	anka-213-gf-vscode-1.0.4.txt	TRUE	Semgrep Result	FALSE	Snyk Result
12	architect-architect-1.0.1.txt	FALSE	Semgrep Result	FALSE	Snyk Result
13	argutec-argutec-azure-repos-1.2007.15.txt	TRUE	Semgrep Result	FALSE	Snyk Result
14	artsy-artsy-studio-extension-pack-1.3.1.txt	FALSE	Semgrep Result	FALSE	Snyk Result
15	avei2evvvtrybuorhjjp4s3voldpdboq6vppugulxa6fv73q55cq-diana-coding-1.2.1.txt	FALSE	Semgrep Result	FALSE	Snyk Result
16	axetroy-vscode-http-proxy-0.1.3.txt	FALSE	Semgrep Result	FALSE	Snyk Result
17	axetroy-vscode-static-server-0.3.1.txt	FALSE	Semgrep Result	FALSE	Snyk Result
18	b0sh-asl-extension-1.1.0.txt	FALSE	Semgrep Result	FALSE	Snyk Result
19	badboy17g-clara-copilot-0.0.4.txt	FALSE	Semgrep Result	FALSE	Snyk Result
20	baladreams-markdown-readermode-0.0.1.txt	FALSE	Semgrep Result	FALSE	Snyk Result
21	batistebieler-blop-linter-1.0.34.txt	TRUE	Semgrep Result	FALSE	Snyk Result
22	bcanzanella-openmatchingfiles-0.5.4.txt	FALSE	Semgrep Result	FALSE	Snyk Result
23	beaglefoot-awk-ide-	FALSE	Semgrep Result	FALSE	Snyk Result

	vscode-0.9.5.txt				
24	beeinger-ts-live-checks-1.0.0.txt	FALSE	Semgrep Result	FALSE	Snyk Result
25	benqy-bifrost-0.0.14.txt	TRUE	Semgrep Result	FALSE	Snyk Result
26	brano-b-theme-0.4.0.txt	FALSE	Semgrep Result	FALSE	Snyk Result
27	bridgecrew-checkov-1.0.94.txt	TRUE	Semgrep Result	FALSE	Snyk Result
28	broadcommfd-jcl-language-support-1.0.1.txt	FALSE	Semgrep Result	FALSE	Snyk Result
29	calcoph-hexpat-language-server-0.2.0.txt	TRUE	Semgrep Result	FALSE	Snyk Result
30	caradhras-uvls-code-0.0.11.txt	TRUE	Semgrep Result	FALSE	Snyk Result
31	chaliy-handlebars-preview-1.3.1.txt	FALSE	Semgrep Result	FALSE	Snyk Result
32	cheaty-sheet-pcheaty-0.3.2.txt	FALSE	Semgrep Result	FALSE	Snyk Result
33	chipcode-nl-picoprobe-mac-1.0.6.txt	FALSE	Semgrep Result	FALSE	Snyk Result
34	chjshen-lanteach-server-0.0.1.txt	FALSE	Semgrep Result	FALSE	Snyk Result
35	chogath-nest-server-tools-0.3.5.txt	TRUE	Semgrep Result	FALSE	Snyk Result
36	ckgrafico-icomoon-viewer-0.6.2.txt	FALSE	Semgrep Result	FALSE	Snyk Result

37	codechimp-lmsslim-snippets-1.0.0.txt	FALSE	Semgrep Result	FALSE	Snyk Result
38	coderfee-open-html-in-browser-0.1.21.txt	FALSE	Semgrep Result	FALSE	Snyk Result
39	confirmedvellas-quickclone-1.0.1.txt	TRUE	Semgrep Result	FALSE	Snyk Result
40	danielsanmedium-dscodegpt-2.1.3.txt	FALSE	Semgrep Result	FALSE	Snyk Result
41	dataopslive-dataops-0.3.1.txt	FALSE	Semgrep Result	FALSE	Snyk Result
42	david-reis-dockerlive-1.0.21.txt	FALSE	Semgrep Result	FALSE	Snyk Result
43	davnn-assistant-gpt3-0.2.0.txt	FALSE	Semgrep Result	FALSE	Snyk Result
44	demystifying-javascript-python-extensions-pack-1.0.2.txt	FALSE	Semgrep Result	FALSE	Snyk Result
45	derekdavenport-vscode-plonefs-0.4.8.txt	FALSE	Semgrep Result	FALSE	Snyk Result
46	did1335-opencv-intellisense-0.0.4.txt	FALSE	Semgrep Result	FALSE	Snyk Result
47	dimacrafter-vs-collab-0.1.3.txt	FALSE	Semgrep Result	FALSE	Snyk Result
48	dinusv-liveelements-0.1.1.txt	FALSE	Semgrep Result	FALSE	Snyk Result
49	distinction-dev-sls-snippets-1.3.1.txt	TRUE	Semgrep Result	FALSE	Snyk Result

50	dzylikecode-docsify-preview-1.7.0.txt	TRUE	Semgrep Result	FALSE	Snyk Result
51	elltg-open-current-file-in-new-window-1.0.0.txt	FALSE	Semgrep Result	FALSE	Snyk Result
52	ezshine-rainbow-fart-waifu-0.0.20.txt	FALSE	Semgrep Result	FALSE	Snyk Result
53	fagnercarvalho-redis-lsp-1.0.2.txt	FALSE	Semgrep Result	FALSE	Snyk Result
54	filipesabella-live-p5-1.4.3.txt	TRUE	Semgrep Result	FALSE	Snyk Result
55	filiptronicek-open-in-gitpod-1.0.1.txt	FALSE	Semgrep Result	FALSE	Snyk Result
56	florianjosefreheis-open-my-calendar-1.0.3.txt	FALSE	Semgrep Result	FALSE	Snyk Result
57	fragcys-asp-net-core-switcher-2.0.2.txt	TRUE	Semgrep Result	FALSE	Snyk Result
58	fraser-live-coder-1.0.2.txt	TRUE	Semgrep Result	FALSE	Snyk Result
59	gimparm-autoopenworkspace-1.0.0.txt	FALSE	Semgrep Result	FALSE	Snyk Result
60	gj-server-gj-build-0.4.10.txt	FALSE	Semgrep Result	FALSE	Snyk Result
61	gplane-vscode-beefweb-0.5.0.txt	FALSE	Semgrep Result	FALSE	Snyk Result
62	group-server-minecraft-tools-1.1.2.txt	FALSE	Semgrep Result	FALSE	Snyk Result

63	haskell-haskell-2.2.2.txt	FALSE	Semgrep Result	FALSE	Snyk Result
64	hejmsdz-search-file-under-cursor-1.0.0.txt	FALSE	Semgrep Result	FALSE	Snyk Result
65	herdingbits-file-focus-1.5.4.txt	FALSE	Semgrep Result	FALSE	Snyk Result
66	hookyqr-createmodule-0.0.5.txt	FALSE	Semgrep Result	FALSE	Snyk Result
67	horaciogutierrez-rest-api-server-0.5.0.txt	FALSE	Semgrep Result	FALSE	Snyk Result
68	hoskinson-ml-lean-chat-vscode-0.0.3.txt	TRUE	Semgrep Result	FALSE	Snyk Result
69	hosseinagha-vscode-livescript-snippets-0.1.0.txt	FALSE	Semgrep Result	FALSE	Snyk Result
70	hosseinagha-vscode-open-react-component-style-0.3.0.txt	FALSE	Semgrep Result	FALSE	Snyk Result
71	hqjs-hq-live-server-0.0.11.txt	TRUE	Semgrep Result	TRUE	Snyk Result
72	i2k21205209-opengl-0.0.2.txt	FALSE	Semgrep Result	FALSE	Snyk Result
73	ihuke-devserver-0.0.4.txt	TRUE	Semgrep Result	FALSE	Snyk Result
74	inferrinizzard-prettier-sql-vscode-1.6.0.txt	FALSE	Semgrep Result	FALSE	Snyk Result

75	intersystems-language-server-2.3.2.txt	FALSE	Semgrep Result	FALSE	Snyk Result
76	ishirkhan-shirkhan-markdown-preview-enhanced-1.1.0.txt	TRUE	Semgrep Result	FALSE	Snyk Result
77	itn3000-open-nuget-site-0.0.1.txt	FALSE	Semgrep Result	FALSE	Snyk Result
78	jatekpet76-thymeleaf-peek-0.0.4.txt	FALSE	Semgrep Result	FALSE	Snyk Result
79	jcasc-developers-jcasc-plugin-0.0.4.txt	FALSE	Semgrep Result	FALSE	Snyk Result
80	jeffreymanzione-jeff-vm-language-server-0.0.4.txt	FALSE	Semgrep Result	FALSE	Snyk Result
81	jeremyrajan-browsersync-2.2.2.txt	FALSE	Semgrep Result	FALSE	Snyk Result
82	jeswr-shaclc-language-server-0.0.1.txt	FALSE	Semgrep Result	FALSE	Snyk Result
83	jevakallio-vscode-hacker-typer-0.1.1.txt	FALSE	Semgrep Result	FALSE	Snyk Result
84	jit-y-vscode-ghq-open-0.0.2.txt	FALSE	Semgrep Result	FALSE	Snyk Result
85	jptarquino-postgresql-0.0.2.txt	FALSE	Semgrep Result	FALSE	Snyk Result
86	jscharting-javascript-charts-vscode-	TRUE	Semgrep Result	FALSE	Snyk Result

	jscharting-0.0.3.txt				
87	june07-nims-0.1.2.txt	FALSE	Semgrep Result	FALSE	Snyk Result
88	junseokahn-vs-linker-1.1.6.txt	TRUE	Semgrep Result	FALSE	Snyk Result
89	k5hh-pdf-4.2.3.txt	FALSE	Semgrep Result	FALSE	Snyk Result
90	karyfoundation-idf-3.0.0.txt	FALSE	Semgrep Result	FALSE	Snyk Result
91	kazukiisogai-fs-live-viewer-0.0.4.txt	TRUE	Semgrep Result	FALSE	Snyk Result
92	kazukitash-esa-1.0.1.txt	FALSE	Semgrep Result	FALSE	Snyk Result
93	kevinjp-cf-filefinder-0.0.2.txt	FALSE	Semgrep Result	FALSE	Snyk Result
94	kevinrose-line-link-0.0.1.txt	FALSE	Semgrep Result	FALSE	Snyk Result
95	kirchner-trevor-shopify-liquid-preview-2.1.0.txt	FALSE	Semgrep Result	FALSE	Snyk Result
96	klaviyo-live-share-klaviyo-vscode-extension-0.5.0.txt	FALSE	Semgrep Result	FALSE	Snyk Result
97	kumar-harsh-graphql-for-vscode-1.15.3.txt	TRUE	Semgrep Result	TRUE	Snyk Result
98	kutear-search-compare-0.0.3.txt	FALSE	Semgrep Result	FALSE	Snyk Result
99	leadzen-vscweb-0.0.3.txt	FALSE	Semgrep Result	FALSE	Snyk Result
100	lennardv-livewire-goto-	FALSE	Semgrep Result	FALSE	Snyk Result

	updated-1.1.0.txt				
101	liascript-liascript-preview-web-0.2.10.txt	FALSE	Semgrep Result	FALSE	Snyk Result
102	lifeart-vscode-ember-unstable-3.0.48.txt	FALSE	Semgrep Result	FALSE	Snyk Result
103	lishengqiu-lina-language-server-1.5.21.txt	FALSE	Semgrep Result	FALSE	Snyk Result
104	liubailin-bl-chat-0.0.6.txt	FALSE	Semgrep Result	FALSE	Snyk Result
105	liuyang-mock-0.0.1.txt	TRUE	Semgrep Result	FALSE	Snyk Result
106	live-stylus-pub-live-stylus-compiler-0.0.4.txt	TRUE	Semgrep Result	FALSE	Snyk Result
107	livecolor-dark-0.0.1.txt	FALSE	Semgrep Result	FALSE	Snyk Result
108	livelucky-snippet-retyper-0.0.5.txt	FALSE	Semgrep Result	FALSE	Snyk Result
109	lochbrunner-vscode-hdf5-viewer-0.0.3.txt	FALSE	Semgrep Result	FALSE	Snyk Result
110	mabenan-herp-server-0.0.1.txt	FALSE	Semgrep Result	FALSE	Snyk Result
111	madeline-rwxml-language-server-insider-0.9.2.txt	FALSE	Semgrep Result	FALSE	Snyk Result
112	magicus-openjdk-devel-1.1.0.txt	FALSE	Semgrep Result	FALSE	Snyk Result

113	manhen-github-linker-0.0.11.txt	TRUE	Semgrep Result	FALSE	Snyk Result
114	marcfreiheit-gs-topaz-0.1.0.txt	FALSE	Semgrep Result	FALSE	Snyk Result
115	matt-rudge-auto-open-preview-panel-0.0.6.txt	FALSE	Semgrep Result	FALSE	Snyk Result
116	mattn-openvim-0.0.8.txt	FALSE	Semgrep Result	FALSE	Snyk Result
117	mbehr1-vsc-lfs-1.4.1.txt	FALSE	Semgrep Result	FALSE	Snyk Result
118	metaconcproject-effortless-language-servers-0.8.1.txt	TRUE	Semgrep Result	FALSE	Snyk Result
119	miguel-savignano-middleman-partial-trasporter-0.0.3.txt	FALSE	Semgrep Result	FALSE	Snyk Result
120	minim-tools-m-ls-0.11.8.txt	FALSE	Semgrep Result	FALSE	Snyk Result
121	momo-live-fes-tools-0.0.1.txt	FALSE	Semgrep Result	FALSE	Snyk Result
122	msedge-dev-gnls-0.1.3.txt	FALSE	Semgrep Result	FALSE	Snyk Result
123	mtsmfm-ruby-lsc-0.1.1.txt	FALSE	Semgrep Result	FALSE	Snyk Result
124	mtxr-sqltools-driver-mssql-0.4.1.txt	FALSE	Semgrep Result	FALSE	Snyk Result
125	mukundan-nodejs-docs-0.2.2.txt	FALSE	Semgrep Result	FALSE	Snyk Result
126	mute-mips-0.0.2.txt	FALSE	Semgrep Result	FALSE	Snyk Result

127	mutsuntsai-jsdoc-link-0.2.1.txt	FALSE	Semgrep Result	FALSE	Snyk Result
128	nightrains-robloxlsp-1.6.7.txt	FALSE	Semgrep Result	FALSE	Snyk Result
129	nikhil-patil-auto-tfs-1.3.5.txt	TRUE	Semgrep Result	FALSE	Snyk Result
130	nodename-vscode-hacker-typer-fork-0.2.4.txt	FALSE	Semgrep Result	FALSE	Snyk Result
131	omagerio-tabsort-1.1.5.txt	FALSE	Semgrep Result	FALSE	Snyk Result
132	omurakazuaki-path2github-0.0.3.txt	FALSE	Semgrep Result	TRUE	Snyk Result
133	opentext-ot2-vscode-cms-modeler-23.1.5.txt	FALSE	Semgrep Result	FALSE	Snyk Result
134	osteele-p5-server-1.10.0.txt	TRUE	Semgrep Result	FALSE	Snyk Result
135	parsaur-parsaurlanguageserver-0.1.8.txt	FALSE	Semgrep Result	FALSE	Snyk Result
136	phu1237-live-reload-1.1.1.txt	TRUE	Semgrep Result	FALSE	Snyk Result
137	platformio-aceinna-ide-0.1.2.txt	FALSE	Semgrep Result	FALSE	Snyk Result
138	popstas-ansible-server-sites-0.5.1.txt	FALSE	Semgrep Result	FALSE	Snyk Result
139	pranaysingh-phabview-1.0.1.txt	FALSE	Semgrep Result	FALSE	Snyk Result
140	project-mu-open-in-webview-web-extension-0.0.4.txt	FALSE	Semgrep Result	FALSE	Snyk Result

141	pselibas-livescript-0.1.1.txt	FALSE	Semgrep Result	FALSE	Snyk Result
142	pugduddly-vexcode-tux-0.1.4.txt	FALSE	Semgrep Result	FALSE	Snyk Result
143	pxgamer-hgwo-1.1.2.txt	FALSE	Semgrep Result	FALSE	Snyk Result
144	q-vscode-refactor-by-js-0.0.16.txt	FALSE	Semgrep Result	FALSE	Snyk Result
145	qualc-http-server-0.0.1.txt	TRUE	Semgrep Result	FALSE	Snyk Result
146	qualityclouds-livecheckqualityforsalesforce-1.5.0.txt	FALSE	Semgrep Result	FALSE	Snyk Result
147	rad-mehrad-0.0.1.txt	FALSE	Semgrep Result	FALSE	Snyk Result
148	rafaelmartinez-svelte-preview-2.6.1.txt	FALSE	Semgrep Result	FALSE	Snyk Result
149	rahulmutt-hsinspect-0.0.1.txt	FALSE	Semgrep Result	FALSE	Snyk Result
150	remirobichet-open-single-sibling-1.0.2.txt	FALSE	Semgrep Result	FALSE	Snyk Result
151	rhenium-neos-live-editor-0.0.1.txt	FALSE	Semgrep Result	FALSE	Snyk Result
152	riyadh144-openas-0.5.0.txt	FALSE	Semgrep Result	FALSE	Snyk Result
153	robocorp-robotframework-lsp-1.9.2.txt	TRUE	Semgrep Result	FALSE	Snyk Result
154	romainmenke-css-gradients-preview-1.1.0.txt	FALSE	Semgrep Result	FALSE	Snyk Result
155	rootzjs-rootzjs-	FALSE	Semgrep Result	FALSE	Snyk Result

	snippets-1.0.4.txt				
156	rosshamish-kuskus-kusto-language-server-1.0.31.txt	FALSE	Semgrep Result	FALSE	Snyk Result
157	royaldevstheme-royal-devs-theme-0.1.0.txt	FALSE	Semgrep Result	FALSE	Snyk Result
158	rust-lang-rust-0.7.9.txt	TRUE	Semgrep Result	FALSE	Snyk Result
159	salesforce-salesforce-docs-markdown-preview-1.3.3.txt	TRUE	Semgrep Result	FALSE	Snyk Result
160	sapse-sap-ux-annotation-modeler-extension-1.9.3.txt	FALSE	Semgrep Result	FALSE	Snyk Result
161	satiromarra-vscode-php-test-explorer-docker-1.0.5.txt	FALSE	Semgrep Result	FALSE	Snyk Result
162	sdttttt-bangumiopen-2.2.8.txt	FALSE	Semgrep Result	FALSE	Snyk Result
163	seyyedkhandon-fpack-2.2.0.txt	FALSE	Semgrep Result	FALSE	Snyk Result
164	seyyedkhandon-zpack-2.1.1.txt	FALSE	Semgrep Result	FALSE	Snyk Result
165	sfodje-perlcritic-1.3.8.txt	FALSE	Semgrep Result	FALSE	Snyk Result
166	shopify-rubocop-lsp-0.1.2.txt	FALSE	Semgrep Result	FALSE	Snyk Result

167	simonsiefke-html-preview-2.0.6.txt	FALSE	Semgrep Result	FALSE	Snyk Result
168	simonsiefke-svg-preview-2.8.3.txt	FALSE	Semgrep Result	FALSE	Snyk Result
169	slevesque-vscode-link-1.0.0.txt	FALSE	Semgrep Result	FALSE	Snyk Result
170	sprkldev-sprkl-vscode-0.0.70.txt	FALSE	Semgrep Result	FALSE	Snyk Result
171	sqf-vm-sqf-vm-language-server-0.1.20.txt	FALSE	Semgrep Result	FALSE	Snyk Result
172	squaredup-scaffold-serverless-service-vscode-1.0.6.txt	FALSE	Semgrep Result	FALSE	Snyk Result
173	ssigwart-vscode-smarty-1.0.14.txt	TRUE	Semgrep Result	FALSE	Snyk Result
174	stevenbrons-spl-language-server-1.0.0.txt	FALSE	Semgrep Result	FALSE	Snyk Result
175	sunspot-evening-sky-theme-1.1.0.txt	FALSE	Semgrep Result	FALSE	Snyk Result
176	swift-lsp-dev-swift-lsp-dev-0.0.1.txt	FALSE	Semgrep Result	FALSE	Snyk Result
177	takagimeow-chatgpt-editor-1.0.4.txt	FALSE	Semgrep Result	FALSE	Snyk Result
178	takumii-markdown-previewstyle-0.0.1.txt	FALSE	Semgrep Result	FALSE	Snyk Result

179	tejanium-blame-pr-1.0.5.txt	FALSE	Semgrep Result	FALSE	Snyk Result
180	tenraneko-pubspec-dependency-opener-1.0.2.txt	FALSE	Semgrep Result	FALSE	Snyk Result
181	tgreen7-open-file-command-0.0.1.txt	FALSE	Semgrep Result	FALSE	Snyk Result
182	thebearingedge-livereload-server-0.2.6.txt	FALSE	Semgrep Result	FALSE	Snyk Result
183	tonyliu-opennewwindow-0.0.1.txt	FALSE	Semgrep Result	FALSE	Snyk Result
184	treinaweb-tw-dev-server-1.0.1.txt	FALSE	Semgrep Result	FALSE	Snyk Result
185	tristanmuller-ableton-live-theme-1.1.0.txt	FALSE	Semgrep Result	FALSE	Snyk Result
186	twopoint-cnv-lsp-cnv-0.0.5.txt	FALSE	Semgrep Result	FALSE	Snyk Result
187	utsavvaria-goog-search-0.0.2.txt	FALSE	Semgrep Result	FALSE	Snyk Result
188	vlaraort-opencoverage-0.0.6.txt	FALSE	Semgrep Result	FALSE	Snyk Result
189	voilalex-open-in-ipython-1.0.1.txt	FALSE	Semgrep Result	FALSE	Snyk Result
190	vvzen-vscode-foxdot-darktheme-0.0.2.txt	FALSE	Semgrep Result	FALSE	Snyk Result
191	walkme-haml-extension-pack-1.0.0.txt	FALSE	Semgrep Result	FALSE	Snyk Result

192	with-one-vision-livecoder-1.0.1.txt	FALSE	Semgrep Result	FALSE	Snyk Result
193	wya-lsp-wls-1.0.10.txt	TRUE	Semgrep Result	FALSE	Snyk Result
194	xertrov-openplanet-angelscript-0.2.24.txt	TRUE	Semgrep Result	FALSE	Snyk Result
195	xuzn-pikchr-markdown-preview-0.0.5.txt	FALSE	Semgrep Result	FALSE	Snyk Result
196	yandeu-five-server-0.1.12.txt	FALSE	Semgrep Result	FALSE	Snyk Result
197	yechunan-json-color-token-1.3.2.txt	FALSE	Semgrep Result	FALSE	Snyk Result
198	yy0931-gitconfig-lsp-0.9.3.txt	FALSE	Semgrep Result	FALSE	Snyk Result
199	zaderrox1111-white-oak-chillhop-1.0.3.txt	FALSE	Semgrep Result	FALSE	Snyk Result
200	zhangjiangqige-checkerframework-language-server-0.2.0.txt	TRUE	Semgrep Result	FALSE	Snyk Result

Result of Semgrep and Snyk for 50 extensions selected for Zip Slip Vulnerability

S. No	Filename	Semgrep ZipSlip	Link to Results	Snyk ZipSlip	Link to Results
1	adamraichu-zip-viewer-3.9.2.txt	FALSE	Semgrep Result	FALSE	Snyk Result
2	anchovystudios-zip-extract-all-1.2.0.txt	FALSE	Semgrep Result	FALSE	Snyk Result
3	arcanis-vscode-zipfs-3.0.0.txt	FALSE	Semgrep Result	FALSE	Snyk Result
4	atomliu-fast-zip-1.0.1.txt	FALSE	Semgrep Result	FALSE	Snyk Result
5	avive-archive-viewer-0.0.1.txt	FALSE	Semgrep Result	FALSE	Snyk Result
6	badre429-bmgvscodepowertools-1.6.10.txt	FALSE	Semgrep Result	FALSE	Snyk Result
7	benedly-csscomb-formatter-0.1.1.txt	FALSE	Semgrep Result	FALSE	Snyk Result
8	betwo-vscode-linux-binary-preview-2.4.0.txt	FALSE	Semgrep Result	FALSE	Snyk Result
9	bevara-bevara-code-editor-0.0.8.txt	FALSE	Semgrep Result	FALSE	Snyk Result

10	bluetheme-blue-archive-0.0.1.txt	FALSE	Semgrep Result	FALSE	Snyk Result
11	coders-workspace-archive-1.0.24.txt	FALSE	Semgrep Result	FALSE	Snyk Result
12	docsmsft-docs-images-1.0.0.txt	FALSE	Semgrep Result	FALSE	Snyk Result
13	ecmel-vscode-archiver-0.0.27.txt	FALSE	Semgrep Result	FALSE	Snyk Result
14	edp1096-vscode-style-compressor-0.0.1.txt	FALSE	Semgrep Result	FALSE	Snyk Result
15	eridem-vscode-nupkg-1.0.1.txt	FALSE	Semgrep Result	TRUE	Snyk Result
16	estelleyyp-usmart-vscode-compress-0.0.1.txt	FALSE	Semgrep Result	TRUE	Snyk Result
17	gep13-chocolatey-vscode-0.7.2.txt	FALSE	Semgrep Result	FALSE	Snyk Result
18	gnoijli-vscode-dragonbones-preview-0.4.0.txt	FALSE	Semgrep Result	FALSE	Snyk Result

19	goloveychuk-yarn-pnp-extension-0.1.3.txt	FALSE	Semgrep Result	FALSE	Snyk Result
20	heqiang-pit-picture-compress-1.0.1.txt	FALSE	Semgrep Result	FALSE	Snyk Result
21	hliujie-compress-image-0.0.9.txt	FALSE	Semgrep Result	FALSE	Snyk Result
22	hotq-gkd-0.2.34.txt	FALSE	Semgrep Result	FALSE	Snyk Result
23	indiealistic-zippy-lang-0.5.0.txt	FALSE	Semgrep Result	FALSE	Snyk Result
24	informagico-vscode-lua-minify-1.3.1.txt	FALSE	Semgrep Result	FALSE	Snyk Result
25	intelneuralcompressor-neural-coder-ext-vscode-0.0.10.txt	FALSE	Semgrep Result	FALSE	Snyk Result
26	internetarchive-coderunr-vscode-1.6.5.txt	FALSE	Semgrep Result	FALSE	Snyk Result
27	jackpanyj-zip-preview-0.0.4.txt	FALSE	Semgrep Result	FALSE	Snyk Result
28	kalifun-lazyswitch-0.1.3.txt	FALSE	Semgrep Result	FALSE	Snyk Result

29	lcs-png2webp-0.1.25.txt	FALSE	Semgrep Result	FALSE	Snyk Result
30	lilu1814-compressimage-0.0.3.txt	FALSE	Semgrep Result	FALSE	Snyk Result
31	minifigone-archive-browser-0.3.2.txt	FALSE	Semgrep Result	FALSE	Snyk Result
32	monasticpanic-hrx-syntax-1.0.1.txt	FALSE	Semgrep Result	FALSE	Snyk Result
33	morissonmaciel-typescript-auto-compiler-0.7.0.txt	FALSE	Semgrep Result	FALSE	Snyk Result
34	pdamianik-folder-archiver-0.0.5.txt	FALSE	Semgrep Result	FALSE	Snyk Result
35	sandipchitale-vscode-multipane-explorer-0.0.15.txt	FALSE	Semgrep Result	FALSE	Snyk Result
36	selectivainc-selectmeta-0.0.1.txt	FALSE	Semgrep Result	FALSE	Snyk Result
37	shinyypig-md-paste-image-2.7.5.txt	FALSE	Semgrep Result	FALSE	Snyk Result
38	shudun-vszip-1.2.1.txt	FALSE	Semgrep Result	FALSE	Snyk Result

39	slevesque-vscode-zipexplorer-0.3.1.txt	FALSE	Semgrep Result	TRUE	Snyk Result
40	unclebeast-har-viewer-0.0.2.txt	FALSE	Semgrep Result	FALSE	Snyk Result
41	wmanth-jar-viewer-1.2.0.txt	FALSE	Semgrep Result	FALSE	Snyk Result
42	xballoy-gzip-unzip-text-0.3.0.txt	FALSE	Semgrep Result	FALSE	Snyk Result
43	xiaxia-bbimg-0.3.1.txt	FALSE	Semgrep Result	FALSE	Snyk Result
44	xxicao-compressed-upload-1.2.0.txt	FALSE	Semgrep Result	FALSE	Snyk Result
45	yanqc-image-compression-0.0.3.txt	FALSE	Semgrep Result	FALSE	Snyk Result
46	yutengjing-vscode-archive-0.3.2.txt	FALSE	Semgrep Result	FALSE	Snyk Result
47	zhenfan0753-tinypng2cos-0.0.3.txt	FALSE	Semgrep Result	FALSE	Snyk Result
48	zhukunpeng-vscode-tinypng-pro-0.0.1.txt	FALSE	Semgrep Result	FALSE	Snyk Result
49	ziphil-zenml-0.0.1.txt	FALSE	Semgrep Result	FALSE	Snyk Result