

오픈소스 가드닝

Open Source Gardening

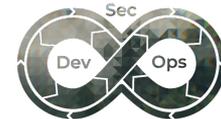
OWASP Seoul Chapter 2025.08 | @hahwul

WHO AM I

- ❑ HAHWUL ([@hahwul](#))
- ❑ Offensive Security Engineer
- ❑ Open Source Developer
 - ❑ Rust, Ruby, Go and Crystal
- ❑ OWASP Noir
 - ❑ [@owasp-noir](#)
 - ❑ h.lee@owasp.org

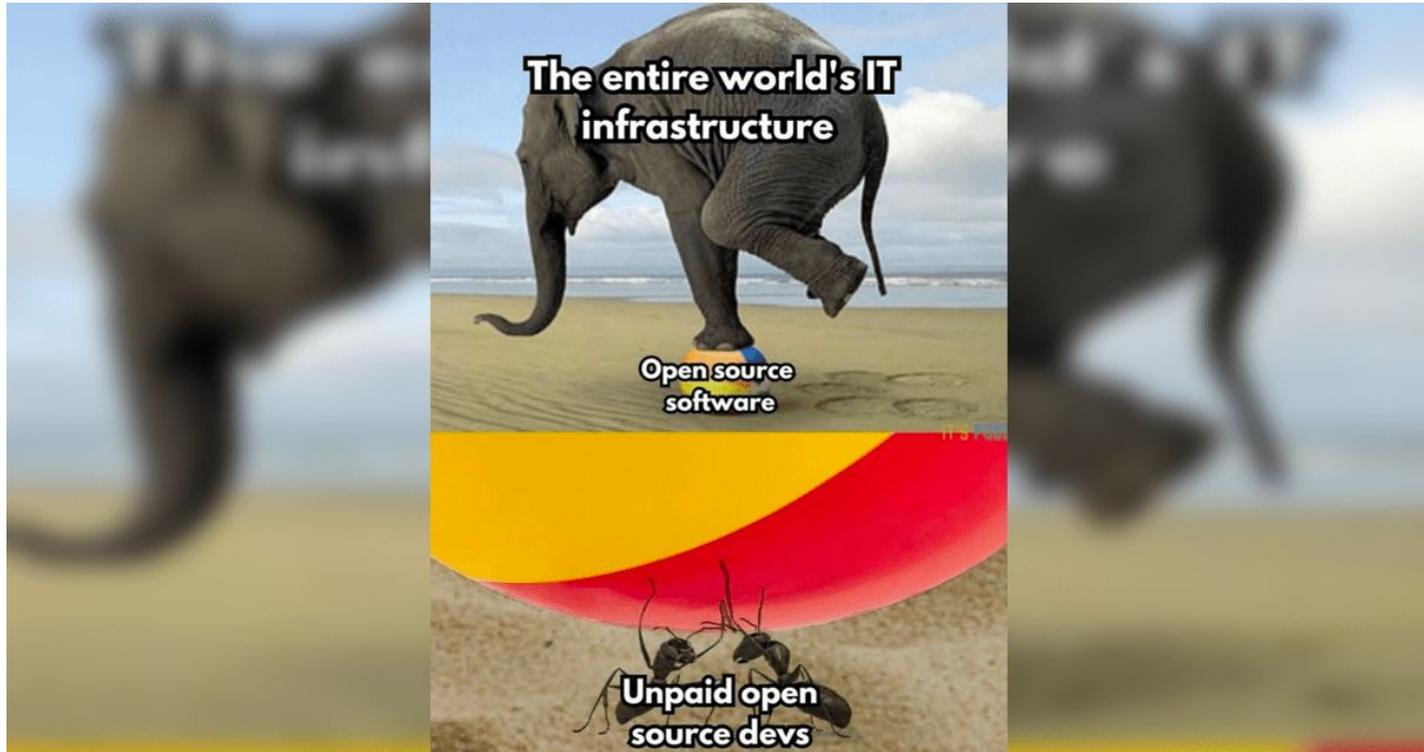


DALFOX



**Linux, Kubernetes,
OpenSSL, Vault,
Git**

Open Source Software



Open Source in Security



**오픈소스 기여해보신 적이
있나요?**



OWASP Noir

```
..hahwu!~/Projects/noir +
~/Projects/noir git:(dev)±3 (0.888s)
./bin/noir -b ./spec/functional_test/fixtures/crystal_kemal/ -T

NOIR (v0.17.0)
  Detecting technologies to base directory.
  ✓ Detected 1 technologies.
    └─ crystal_kemal
  Start code analysis based on the detected technology.
  Initializing analyzers
  ✓ 27 Analyzers initialized
  Analysis Started
  → Code Analyzer: 1 in use
  → Found 6 endpoints
  Optimizing endpoints.
  Adding path parameters by URL.
  Running all taggers.
  ✓ Finally identified 6 endpoints.
  Scan completed in 6.0 ms.
  Generating Report.

GET /
  headers:
    x-api-key:

POST /query
  cookies:
    my_auth=
  body: query=
  tags: sql

GET /token
  body: client_id=&redirect_url=&grant_type=
  tags: oauth

GET /socket [websocket]
  tags: websocket

GET /1.html

GET /2.html

~/Projects/noir git:(dev)±3
```

```
..hahwu!~/Projects/noir +
~/Projects/noir git:(dev)±3 (0.872s)
ls -T ./spec/functional_test/fixtures/crystal_kemal
./spec/functional_test/fixtures/crystal_kemal
├── custom_public
│   ├── 2.html
│   ├── 1.html
│   ├── shard.yml
│   └── src
└── testapp.cr

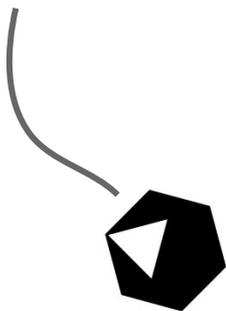
~/Projects/noir git:(dev)±3 (0.894s)
bat ./spec/functional_test/fixtures/crystal_kemal/src/testapp.cr

File: ./spec/functional_test/fixtures/crystal_kemal/src/testapp.cr
1 require "kemal"
2
3 get "/" do
4   env.request.headers["x-api-key"].as(String)
5   "Hello World!"
6 end
7
8 post "/query" do
9   env.request.cookies["my_auth"].as(String)
10  env.params.body["query"].as(String)
11 end
12
13 get "/token" do
14  env.params.body["client_id"].as(String)
15  env.params.body["redirect_url"].as(String)
16  env.params.body["grant_type"].as(String)
17 end
18
19 ws "/socket" do [socket]
20  socket.send "Hello from Kemal!"
21 end
22
23 public_folder "custom_public"
24
25 Kemal.run

~/Projects/noir git:(dev)±3
```

OWASP Noir

- ❑ 소스코드에서 Endpoint (API, Path, Param 등)을 추출
- ❑ For White-box Testing, DevSecOps Pipeline (DAST+)
- ❑ CLI Application
- ❑ Co-lead: [@hahwul](#) [@ksg97031](#)
- ❑ Crystal, Regex, Tokenizer/Lexer/Parser, LLM



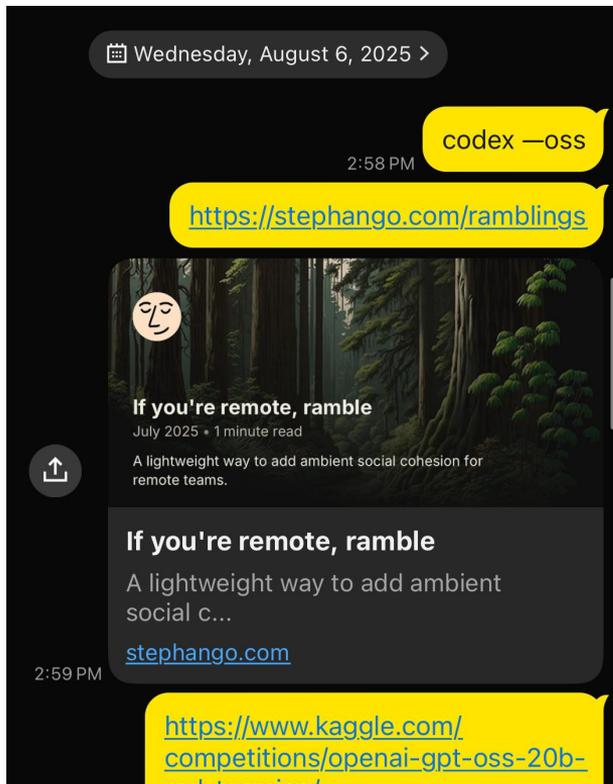
**오픈소스 프로젝트를
만들어 보고 싶어!**



씨앗 뿌리기

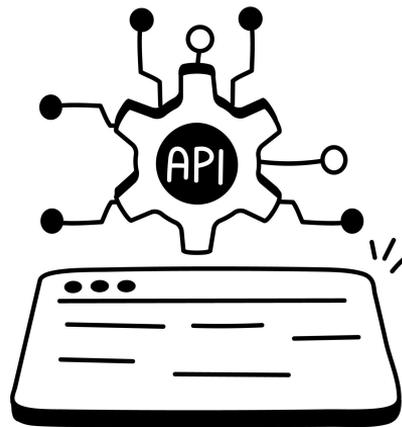
모든 것은 작은 불편함에서 시작되었다.

아이디어는 갑자기 찾아온다



Roadmap

- ❑ 아이디어의 구체화
- ❑ 소스코드 수명
- ❑ Simple is Best



White-box testing

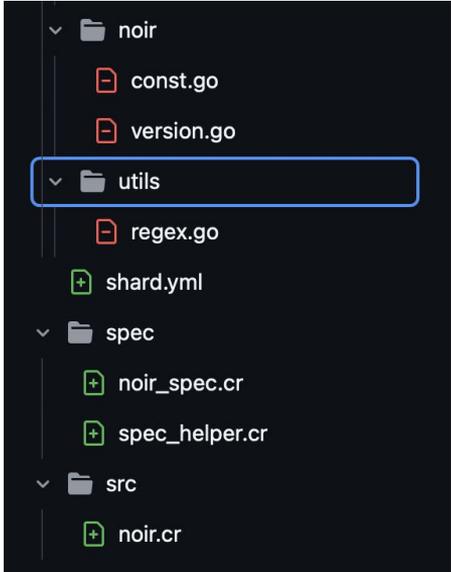
Shadow API

Prototyping model

- ❑ 피드백 중심 모델
- ❑ 가능성 시험의 구간
- ❑ Noir에선 Golang으로 프로토타입, Crystal로 실제 개발

First step

hahwul committed on May 14, 2023



```

├── noir
│   ├── const.go
│   ├── version.go
│   └── utils
│       └── regex.go
├── shard.yml
├── spec
│   ├── noir_spec.cr
│   └── spec_helper.cr
├── src
│   └── noir.cr

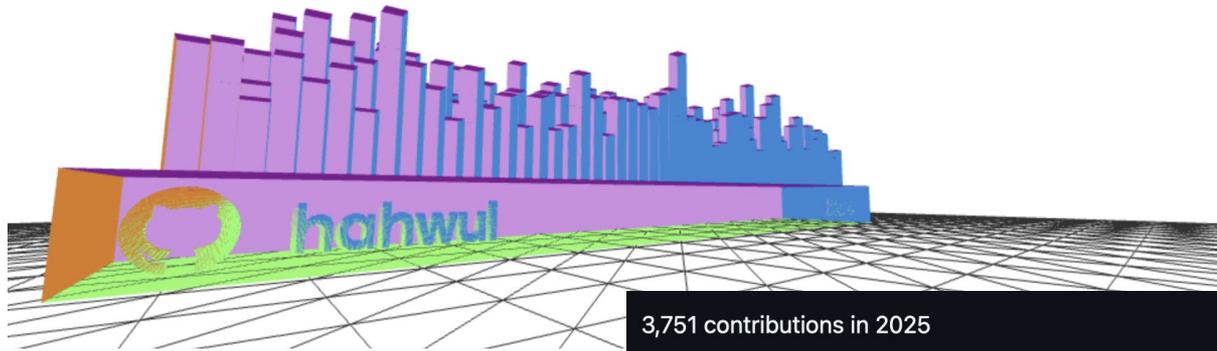
```



씩 티우기

지속적인 관심과 개발, 글작성이 필요합니다.

Dev



3,751 contributions in 2025

Contribution settings ▾



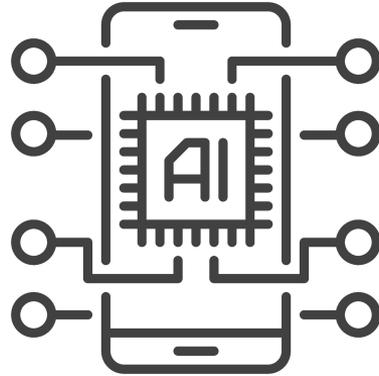
[Learn how we count contributions](#)

Less ■ ■ ■ More

Dev with AI

AGENTS.md

Goal

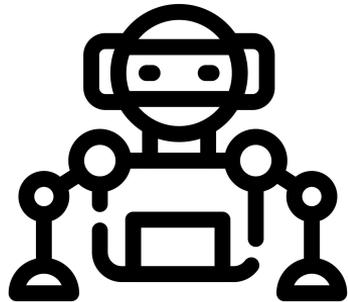


Tools

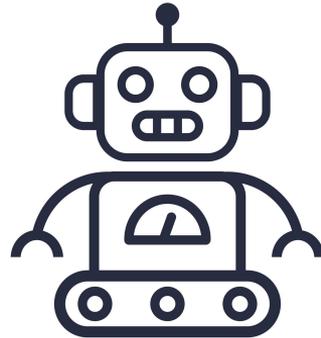
Task

Prompt < Context

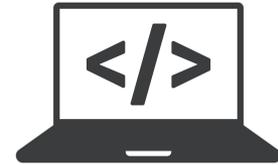
AI Team



Research



Coding Agent



IDE

이정도면 괜찮을까?

First Release

```
grep "RequestMapping" *  
rg "GetMapping"
```



```
                                <A>  
                                </A>  
                                v0.1.0  
[*] Detecting technologies.  
[I] Detected 1 technologies.  
    java_spring  
[*] Initiate code analysis based on the detected technology.  
[*] Starting analysis of endpoints  
    8 Analyzers initialized  
    Analysis to 1 technologies  
    20 endpoints found  
[*] Optimizing endpoints.  
[I] Finally identified 19 endpoints.  
[*] Generating Report.  
GET http://localhost:3000/vet.html  
GET http://localhost:3000/vet  
GET http://localhost:3000/owner/{ownerId}/pet/{petId}/viit/new  
POST http://localhost:3000/owner/{ownerId}/pet/{petId}/viit/new
```

Dogfooding은 필수

Community Building

- ❑ Social network (e.g. X, Thread, ETC)
- ❑ Github Discussions, Discord
- ❑ Kitploit
- ❑ Awesome Series
- ❑ Blog Post

AUGUST 03, 2023 (UPDATED: JAN 31, 2025) ENGLISH

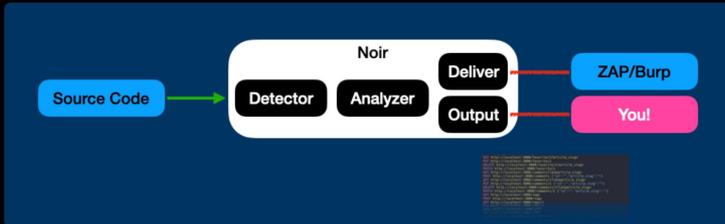
Hello Noir 🖐️

Attack surface detector that identifies endpoints by static analysis

Noir partnered with OWASP in June 2024 and has since become OWASP Noir. Consequently, I have updated some parts of this post to reflect this change.

Hi all! I am excited to announce the release of my toy project called 'Noir' 🦊🦉

Noir is a source code analysis tool that identifies API endpoints, methods, parameters, and more within the source code, providing various formats of output. Today, I'll give you a brief description of this tool.

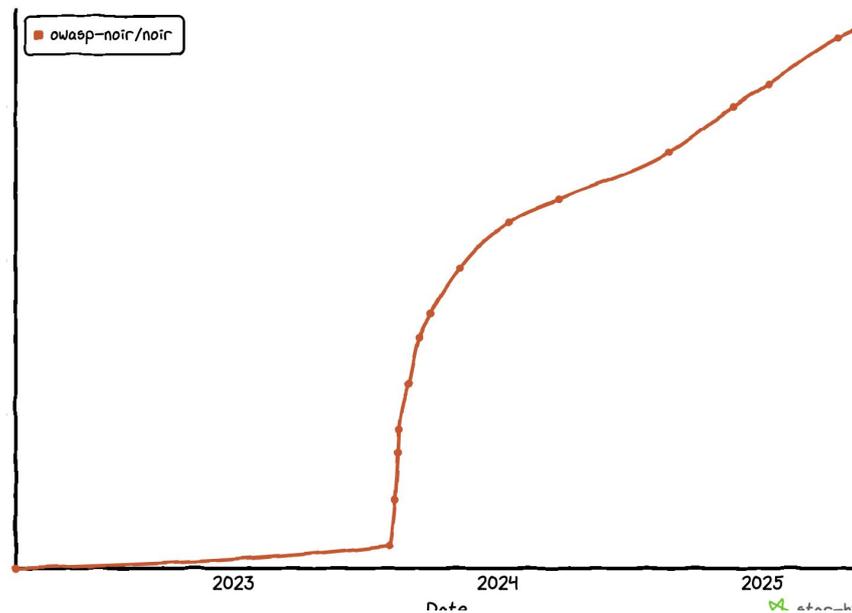


```
graph LR; SC[Source Code] --> Noir; subgraph Noir; direction LR; D[Detector]; A[Analyzer]; end; Noir --> O[Output]; O --> Z[ZAP/Burp]; O --> Y[You!];
```

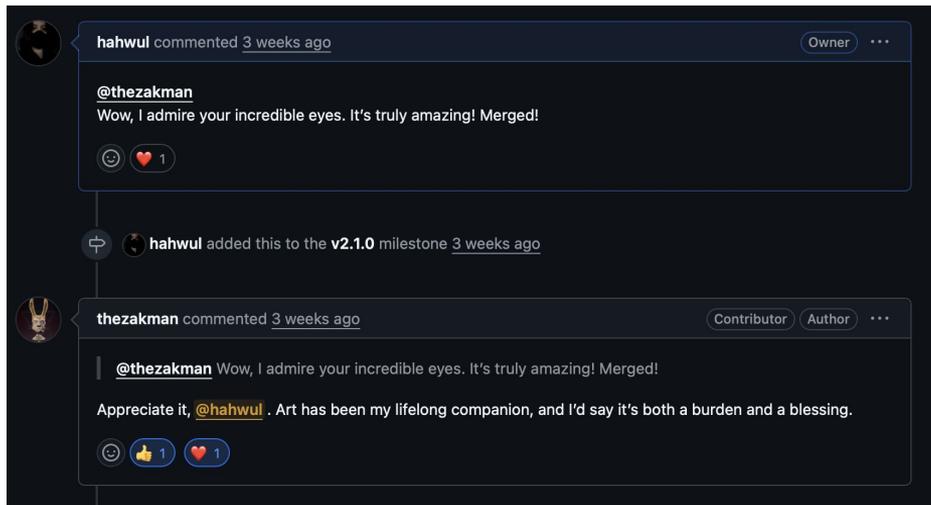
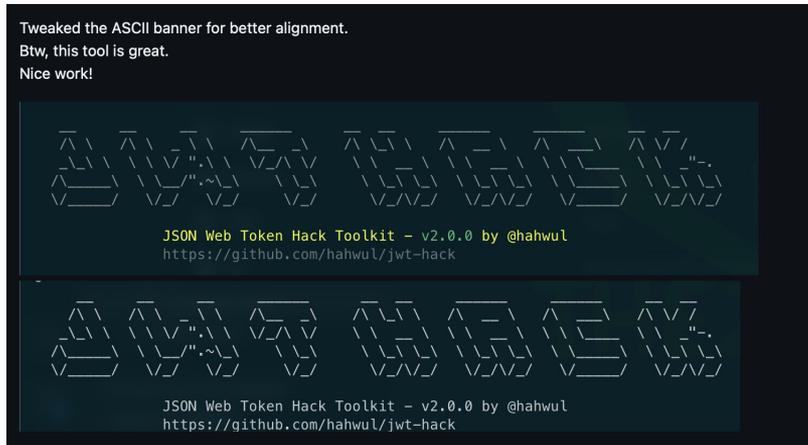
The diagram illustrates the workflow of the Noir tool. It starts with 'Source Code' (blue box) which is processed by the 'Noir' tool. The 'Noir' tool is represented as a white rounded rectangle containing 'Detector' and 'Analyzer' (black boxes). The output of the tool is 'Output' (black box), which is then used by 'ZAP/Burp' (blue box) and 'You!' (pink box). A small code snippet is visible in the bottom right corner of the diagram area.

생각보다 큰 효과

- ❑ X & Blog 공개 이후 빠르게 향상
- ❑ 비례하여 커뮤니티 관심도도 높아짐
- ❑ 버그/이슈 제보 수도 같이 상승



기억에 남는 Pull Request

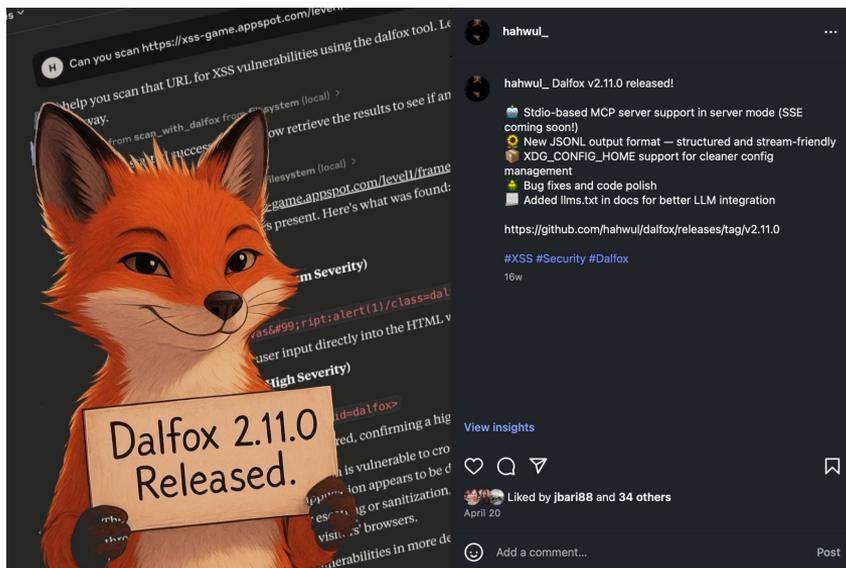


TIP: Github Issue to Pull Request

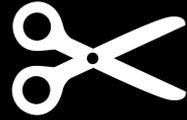
- ❑ 이슈를 제보 받기만 보단 PR로 바꿀 수 있는 것도 중요
- ❑ 점차 Contributor를 늘려나갈 수 있는 방법

TIP: Only Text? Image & Video!

- ❑ 릴리즈를 알리는 행위는 중요
- ❑ 텍스트 보단 이미지, 영상이 흥미를 유발
- ❑ GenAI 이후 쉬워진 작업



힘들다



가지치기

건강한 성장을 위해선 가지를 쳐야합니다.

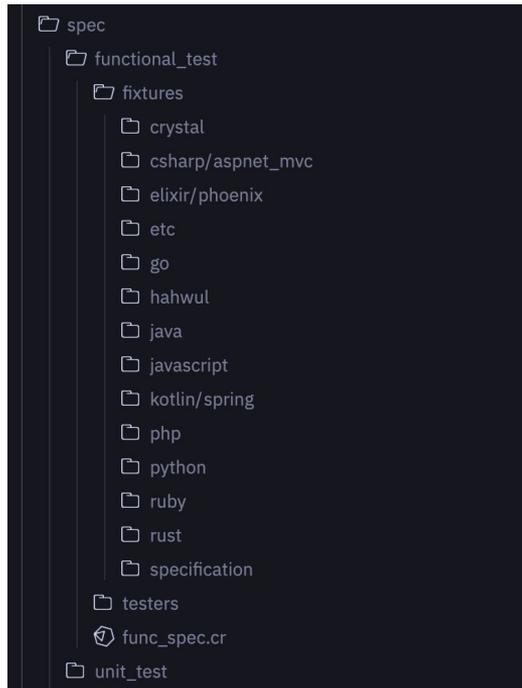
OWASP, Co-lead

- ❑ OWASP Project
- ❑ Co-lead



TDD(Test-Driven Development)

- ❑ 소스코드 품질을 위해서 중요
- ❑ 버그를 줄이고 성능을 개선하는데 긍정적 효과
- ❑ AI IDE/Agent 협업 시 필수
- ❑ Noir에선 Unit Test와 Functional Test 모두 수행



```
.....  
.....  
Finished in 263.66 milliseconds  
1471 examples, 0 failures, 0 errors, 0 pending 34
```

Automation (CI/CD)

- ❑ Build & Test
- ❑ Coding Convention
- ❑ Release
 - ❑ Homebrew
 - ❑ Docker Hub
 - ❑ GHCR
 - ❑ Snapcraft
 - ❑ Etc
- ❑ Contributions
 - ❑ 안내서
 - ❑ 체크리스트

Enhance Spring analyzer's HTTP header handling 236a41c

CI
on: pull_request_target

- ✓ build-crystal (1.14.1)
- ✓ build-crystal (1.15.0)
- ✓ build-crystal (1.16.0)
- ✓ build-crystal (1.17.0)
- ✓ build-docker (linux/amd64)
- ✓ build-docker (linux/arm64)
- ✓ lint
- ✓ tests

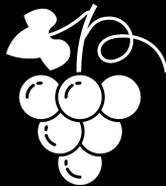
> Pull Request Labeler
on: pull_request_target

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개발자도 사람입니다. 휴식과 관리가 필요해요.

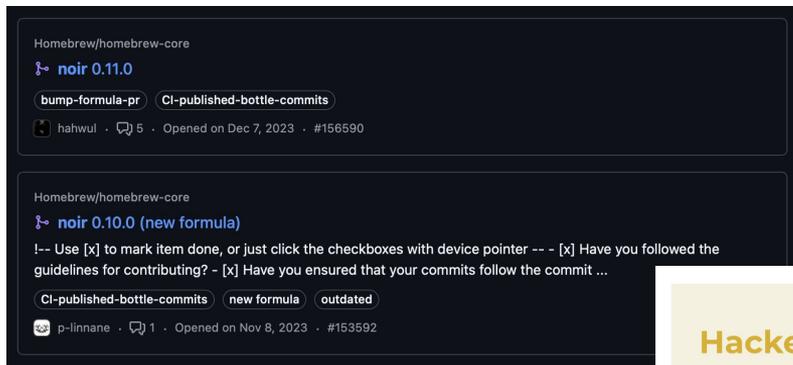
TIP: Spammer는 무시

- ❑ 생각보다 오픈소스에 대한 Spam은 많아요.
- ❑ Mail, Github Issue, Discussions
- ❑ 무시하는게 좋아요.



열매 맺기

Collaboration



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Hacker tools

Dalfox - XSS Scanning Made Easy

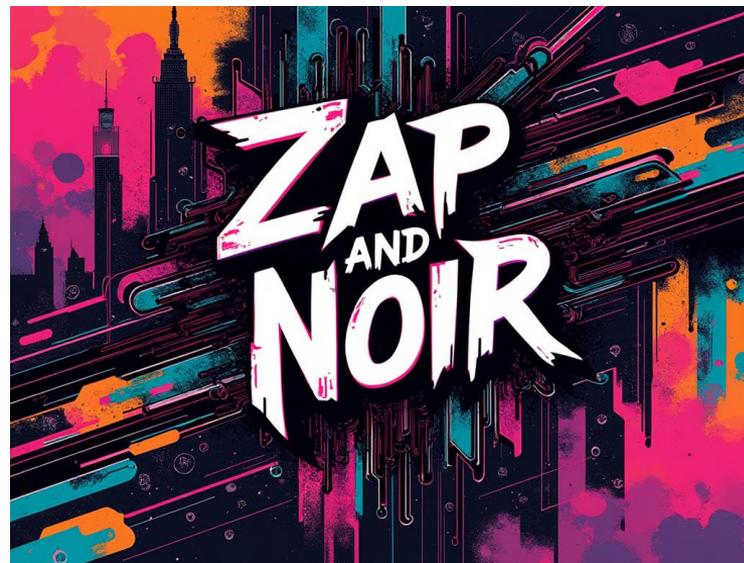
 TOOL AUTHOR  hahwul CURATED BY  INTIGRITI

Dalfox – Hacker Tools: XSS Scanning Made Easy 📖

HACKING TOOLS · SEPTEMBER 14, 2021

Finding XSS can sometimes be a repetitive and laborious task. Many attempts at automating the process have been made, yet very little actually come close to gettin...

Continue reading →



개발자 이벤트

Google Summer of Code

GSoC Coding Period is underway

GSoC 2025

What is Google Summer of Code?

Google Summer of Code is a global, online program focused on bringing new contributors into open source software development. GSoC Contributors work with an open source organization on a 12+ week programming project under the guidance of mentors.

[Learn more](#)

21K+	123	46M+
New Contributors	Countries	Lines of Code
1000+	20K+	20
Open Source Organizations	Mentors	Years

Hacktoberfest [OCT 1-31, 2025]

In a few short months... Hacktoberfest returns!

Hacktoberfest is one of the biggest global celebrations of open-source software online, bringing together hundreds of thousands of open-source-loving developers across the world to contribute, connect, and collaborate.

Last year saw nearly 160,000 participants from 150+ countries, and thousands of repositories energized with meaningful—and useful—contributions from users all over the world.

Powered by DigitalOcean

2025 HACKTOBERFEST 2025 HACKTOBERFEST 2025
BY TO SHIP SUPPORT OPEN SOURCE

Open Source Developer

재정지원



I'll treat you to a coffee.





정원 가꾸기

오픈소스는 마라톤

Contributors

Fixed Typo



Code

Documentation

Idea

Bug Report

AI는 좋은 협업자



Echo System

Bug Bounty

Offensive Security

Programming

Documentation

CLI Application

Web Application

DevSecOps

A Fellow Farmer's Message

As an individual it's hard to make a significant contribution to security, even if you work at a security vendor. The one exception is Open Source.

Anyone can get involved in Open Source, and Open Source is used everywhere!

ZAP is the world's most popular web scanner, and as a community project we encourage people to get involved.

Everyone on the ZAP Core Team has had (and accepted) job offers thanks to their ZAP contributions, so not only can you make the online world a slightly safer place, you can also boost your career! If you'd like to get involved in ZAP then see <https://zapproxy.org/docs/contribute/>

Simon Bennetts의 메시지 (ZAP Project Leader)

Just do it!

초보자를 위한 첫걸음

- ❑ 자주 사용하는 도구, 문서의 Repository 살펴보기
- ❑ 'Good First Issue' 로 찾아보기
- ❑ 간단한 오타자 수정 > PR 보내기



씨앗 뿌릴 준비 되셨나요?