

• • •

```
$ ./start_workshop.sh
```

Penetration Testing Game Day

Learning Web Security with OWASP

Jono Finger_

Southern California Linux Expo 2026 - UpScale

\$ whoami



Jono Finger · Software engineer

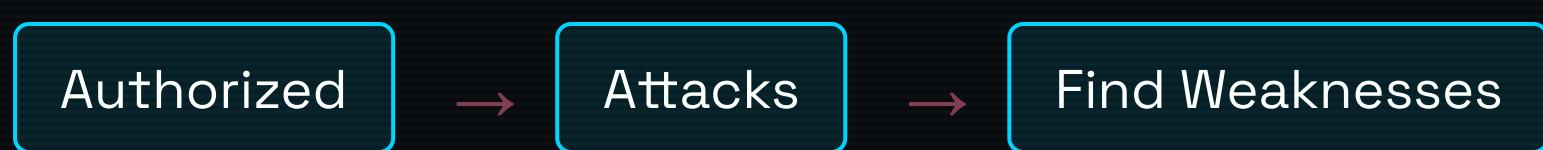
github.com/jonocodes

Why Devs Should Care

• • •

```
if (you.write(code)) {  
    understand(how_it_breaks);  
}
```

Penetration Testing



Legal & ethical security testing

Why Practice?



Learn faster by **exploiting**
Than by reading guidelines

🧪 Safe practice
environments matter

What Is OWASP?

Open Web Application Security Project



Global Free Open
Community Resources Standards

OWASP Top 10



The most common
Most **impactful**
Web app vulnerabilities

Top 10 Categories

A01 Broken Access Control

A02 Crypto Failures

A03 Injection

A04 Insecure Design

A05 Misconfig

A06+...

A03: Injection

User Input



Executable Code



Backend

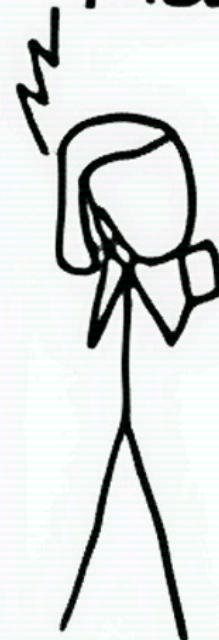
Input isn't separated from logic

SQL Injection

Still happens today.

ORMs can only help so much.

DID YOU REALLY
NAME YOUR SON
Robert'); DROP
TABLE Students;-- ?



— OH, YES. LITTLE
BOBBY TABLES,
WE CALL HIM.

A01: Broken Access Control



Users do things they shouldn't

”But the UI doesn’t show that button”
≠ security

Cross-Site Scripting (XSS)

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Comment:

```
<script>evil()</script>
```

Attacker injects JS



Victims execute it

OWASP Is Always Evolving

REST → GraphQL → ???



Cloud



APIs



AI/ML

Same problems, new surfaces

Your Browser Is a Tool



Network
Tab

Console

Extensions

A lot of hacking needs no fancy tools



OWASP ZAP

(Zed Attack Proxy)

Free & Open Source Web Security Tool!

Interceping Proxy

Dynamic DAST Tool

OWASP Open Source!

Fast & Security

FAST Tools

PROXY

Intercept & Modify
HTTP/S Traffic



SPIDER CRAWLER

Discover & Map Web Content



SCANNING

Active & Passive
Vulnerability Scans



FUZZER

Test with Custom Payloads



REPORTS & ALERTS

Vulnerability Alerts & Reports



Proxy Intercept Time Timeline





OWASP Juice Shop



Intentionally Vulnerable

Modern web app

Built for learning security

github.com/juice-shop/juice-shop



All Products



Apple Juice
(1000ml)
1.99€

Welcome to OWASP Juice Shop!

Being a web application with a vast number of intended security vulnerabilities, the OWASP Juice Shop is supposed to be the opposite of a best practice or template application for web developers: It is an awareness, training, demonstration and exercise tool for security risks in modern web applications. The OWASP Juice Shop is an open-source project hosted by the non-profit Open Web Application Security Project (OWASP) and is developed and maintained by volunteers. Check out the link below for more information and documentation on the project.

<https://owasp-juice.shop>

Help getting started

Dismiss



Banana Juice
(1000ml)
1.99€

WIP



Only 1 left

Best Juice Shop
Salesman Artwork
5000€



Carrot Juice
(1000ml)
2.99€



Eggfruit Juice
(1000ml)

This website uses fruit cookies to ensure you get the juiciest tracking experience. But me well!

Me want it!

Challenges & Scoring

1337



Covers OWASP Top 10

Progressive difficulty · Instant feedback

Scoreboard

Top 5 Teams



Place	Team	Score
1	Steven	4100
2	Roy	4021
3	Carol	3889
4	Diana	3676
5	James	3513
6	Harry	3400
7	Louis	3354
8	Mildred	3305

Where to Go Next

Web is just one slice 

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Kali Linux

Metasploit

• • •



CTF Events

DEF CON

• • •



Ghost in the
Wires

Kevin Mitnick

www.dgt.is/docs/pen-testing-game-day