Digital Interruption

Web Application Security

Web applications and the things that go wrong

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Quiz!

Phreaking

31337

White Hat

Handle

0-day

Pwned

Black Hat

whoami

Security Consultant at Digital Interruption

Runs Manchester Grey Hats

@jayHarris_Sec

Mobile | Radio | Reverse Engineering

Why?

Proud of our software

Protecting our customers data

Reputational damage

Compliance

Release on time

(Do you know how expensive an external consultant is?)

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What?

Hackazon

Sample of vulnerabilities

Questions? Ask!

Some technical content and explanation

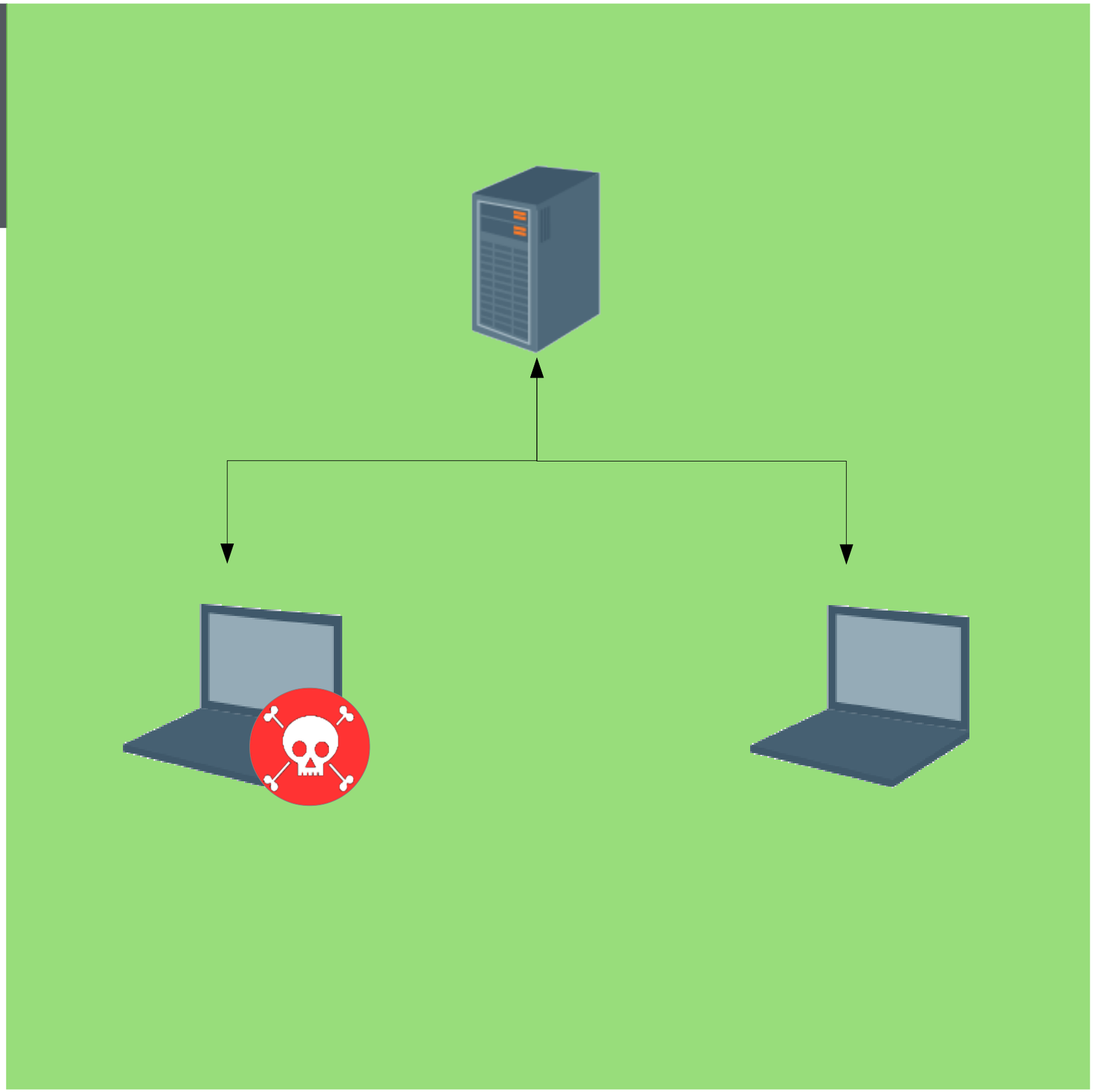
Disclaimer

ETHICAL hacking

Any actions and or activities related to the material contained within this presentation is solely your responsibility. The misuse of this information can result in criminal charges brought against the persons in question.

Hack to learn. Don't learn to hack.

Attacking user(s)



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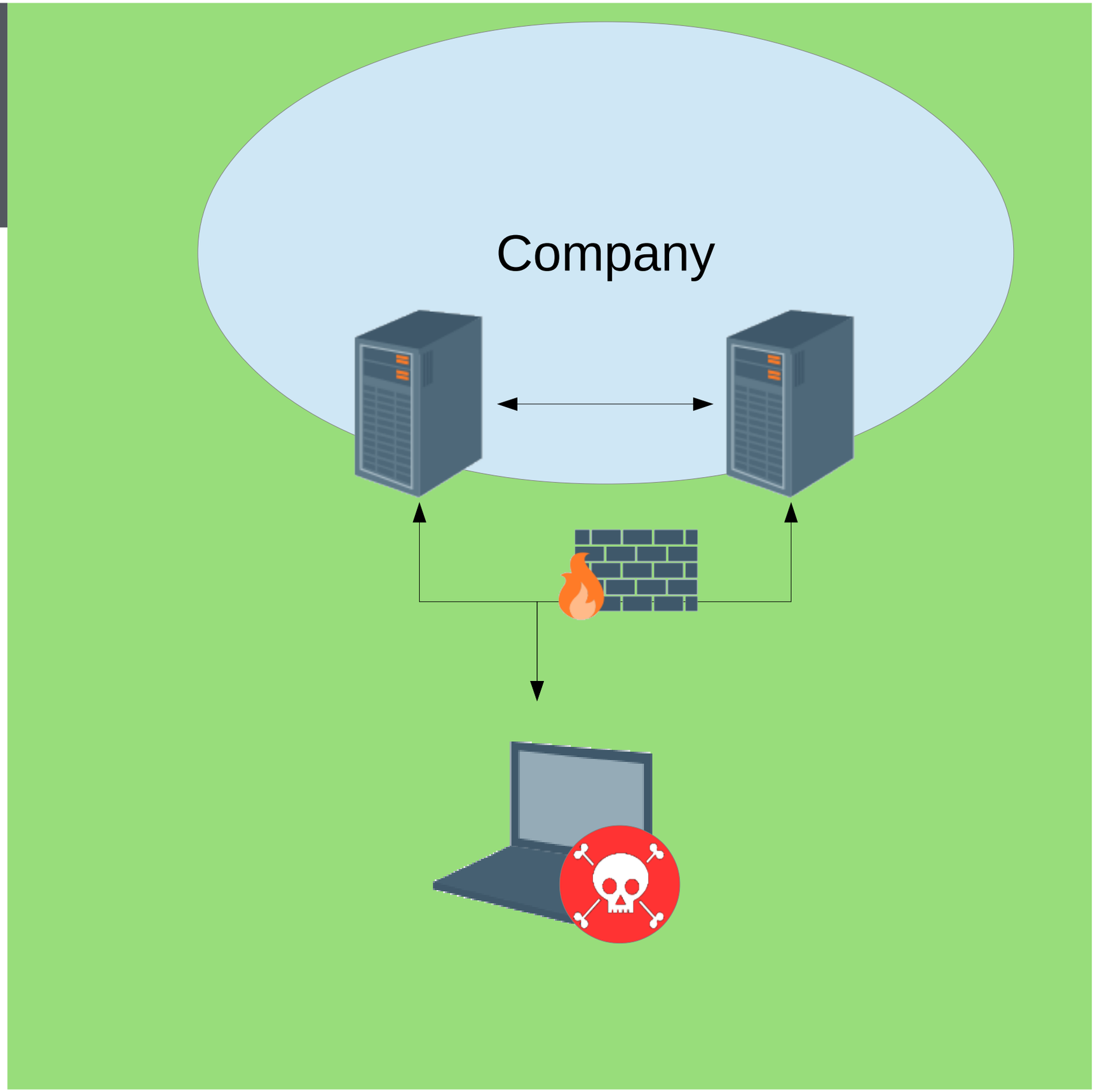
Attacking Servers



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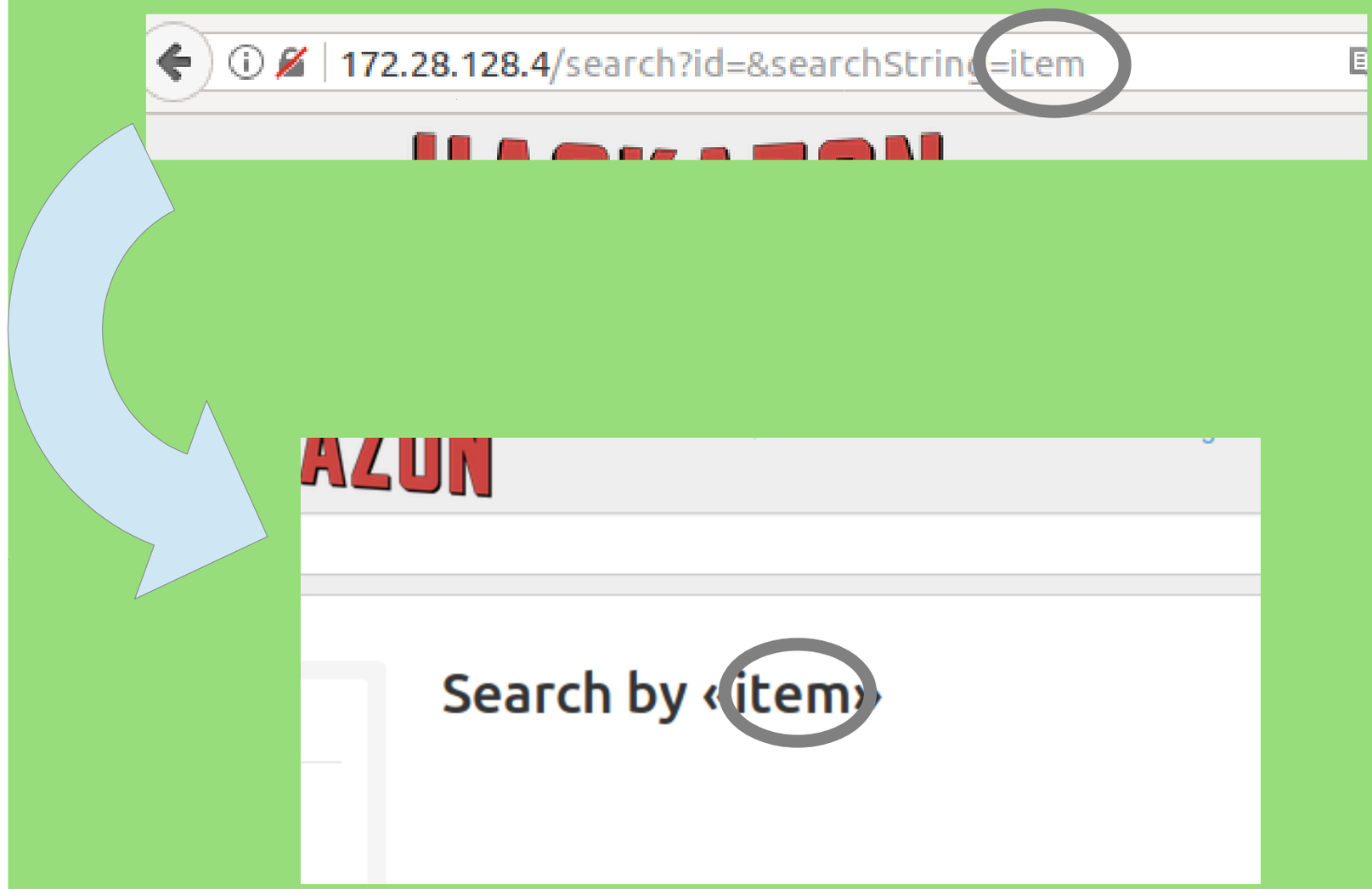
Let’s get hacking

Reflected XSS



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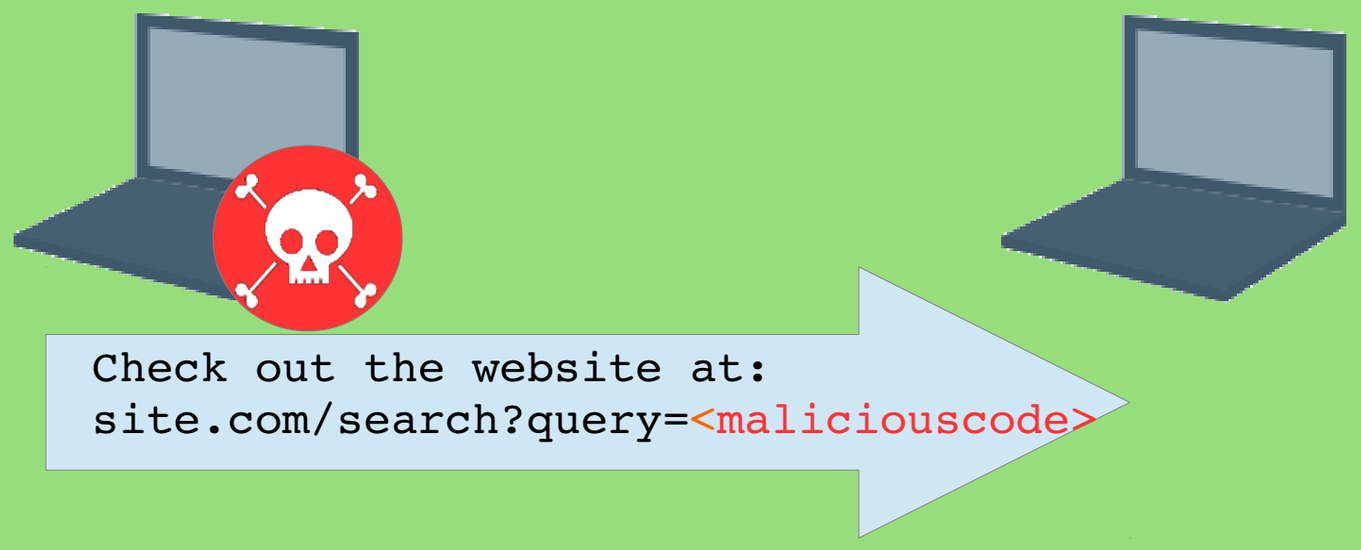
Reflected XSS



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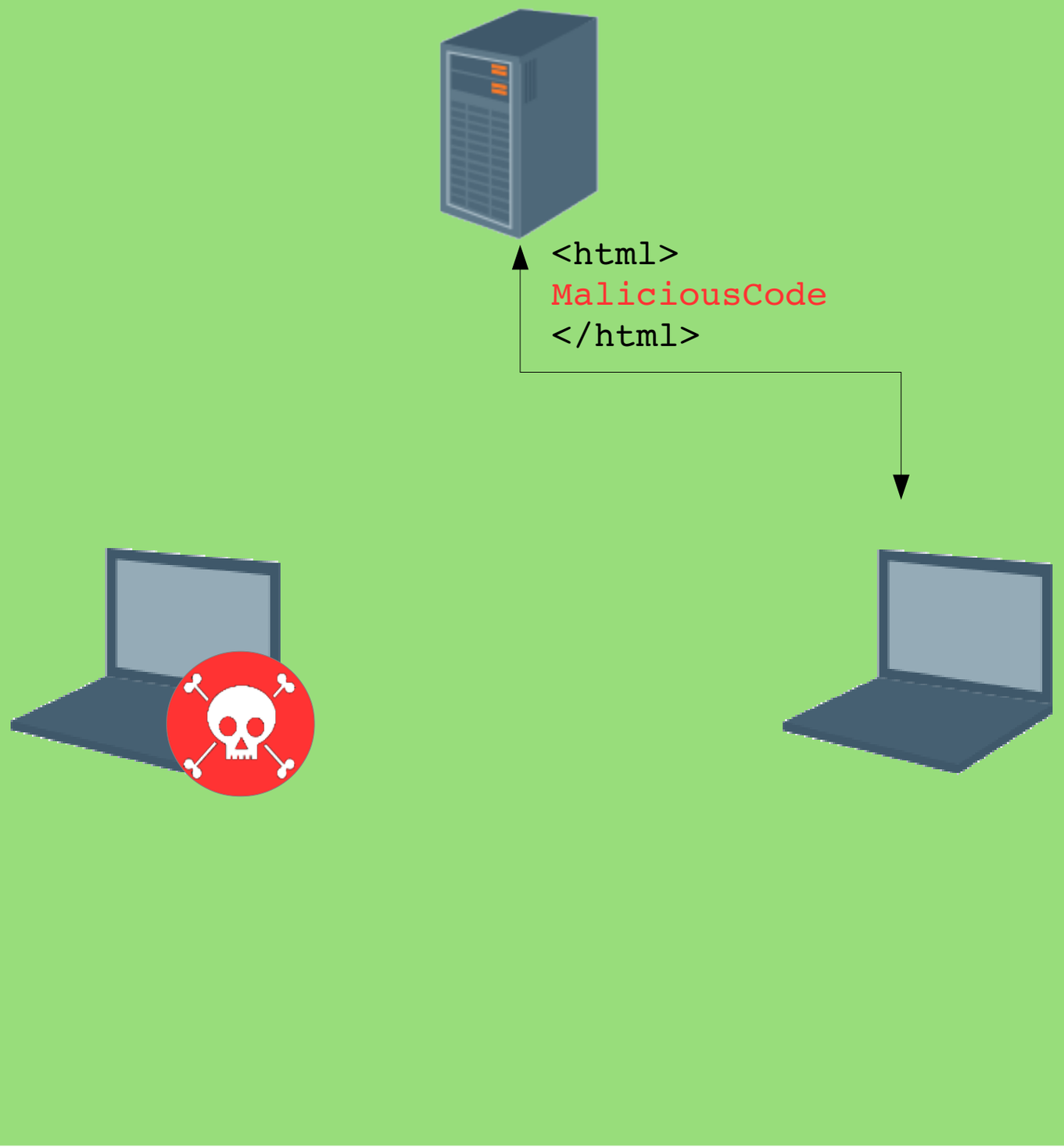
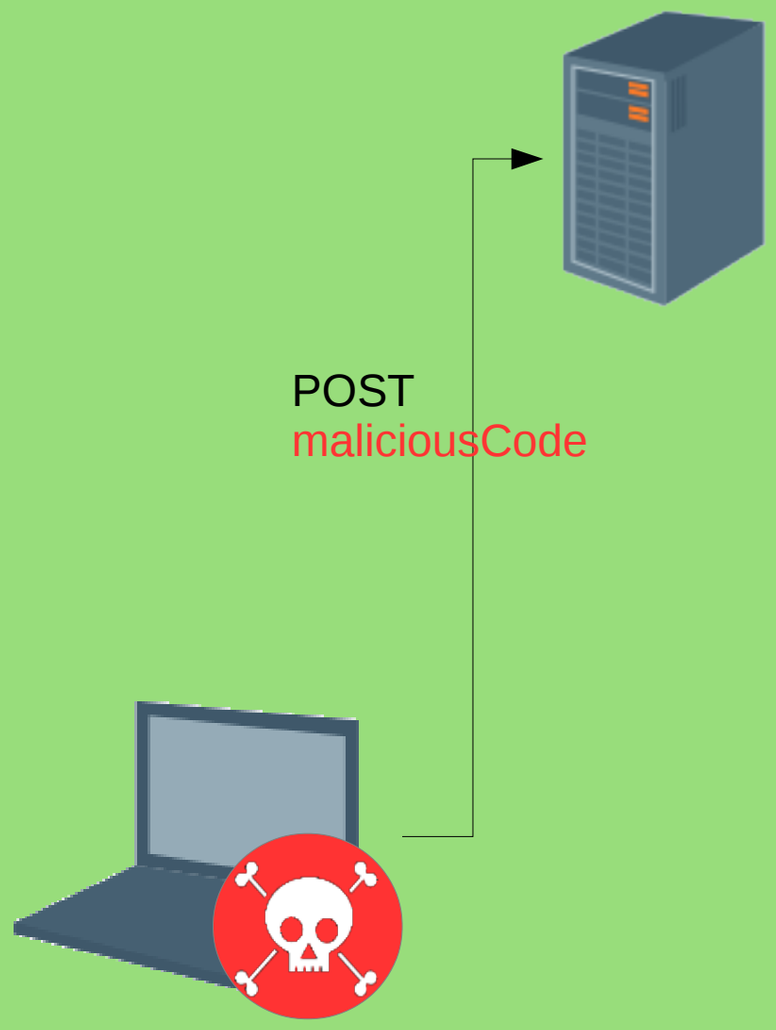
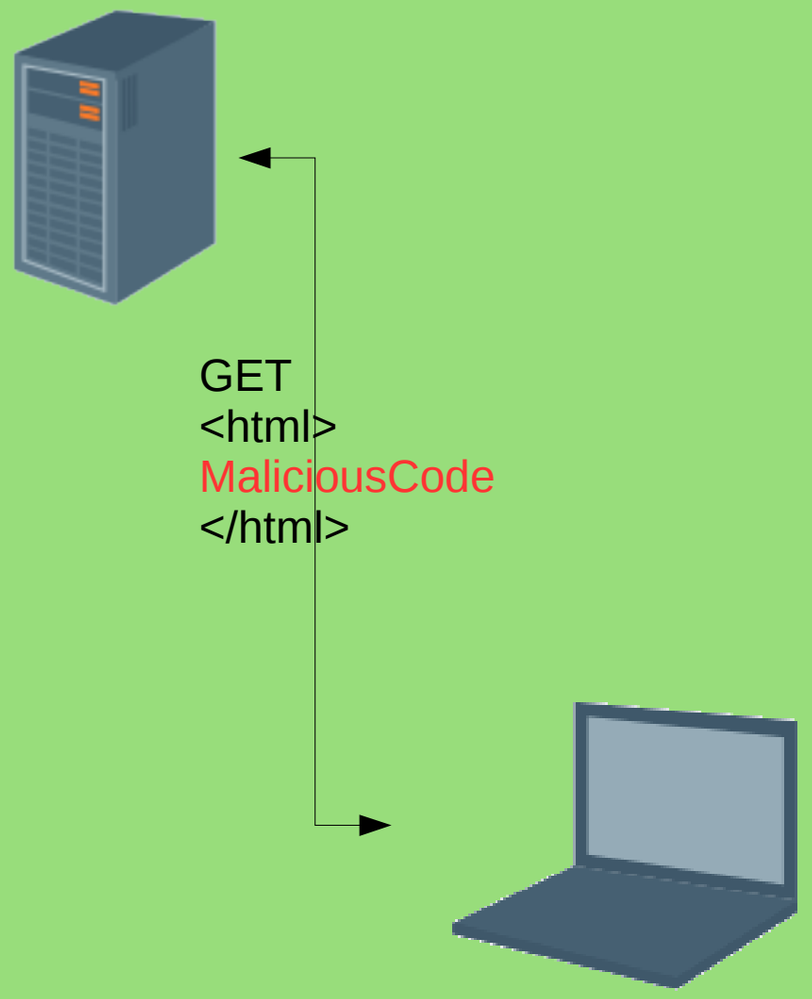
Reflected XSS



Stored XSS



Stored XSS



SQL Injection

```
string command = 'do something
on/with' + untrustedData;

execute(command);
```

SQL Injection

```
select * from tbl_users where
username=test_user and
password=123456
```

ID	username	password	Login Disabled
23	test_user	123456	no

SQL Injection

```
select * from tbl_users where
username='name' or 1=1 – and
password=<password>
```

ID	username	password	Login Disabled
1	admin	password	no
2	jsmith	p@55word	no
3	Amy	letmein	yes
..	..	..	..
23	test_user	password	no

SQL Injection

```
select * from tbl_products
where productName like %product
union select * from tbl_users%
```

ID	username	password	Login Disabled
1	admin	password	no
2	jsmith	p@55word	no
3	Amy	letmein	yes
..	..	..	..
23	test_user	password	no

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Protections?

Follow good coding practices

Perform regular Penetration Testing and security code reviews

Encourage a “security champion”

Train developers & testers

Adopt Secure SDLC and/or DevSecOps

Involve everyone! Security should be embedded at all levels

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More?

Get in contact – we can help (blogs, whitepapers, talks)

OWASP

Web Application Hackers Handbook (Humble Book Bundle currently available)

Manchester InfoSec/Manchester Grey Hats

Twitter/reddit/linkedin etc

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Questions?

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