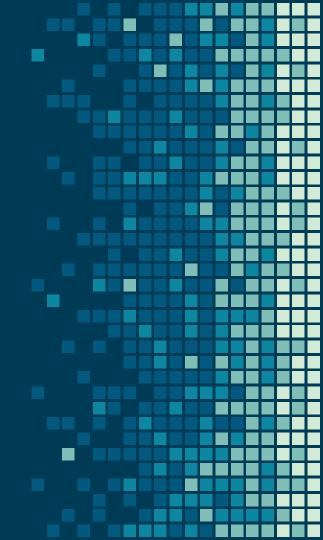
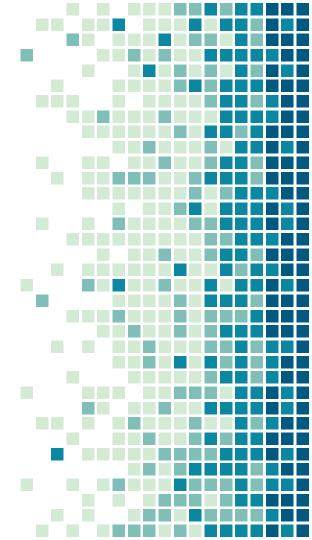
# IFS4103

V Yogeswarren Ensign InfoSecurity



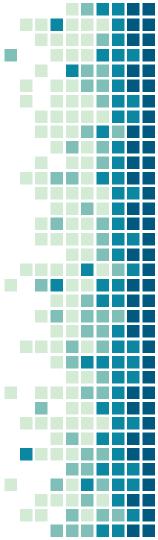
## Cross-Site Scripting

What is it?



#### XSS

- Web security vulnerability that allows attackers to compromise interaction that users have with the vulnerable web app.
- If successful, you can masquerade as the victim, carry out any actions that that user is able to, and access their data.



```
http://www.some.site/page.html?default=French
```

http://www.some.site/page.html?default=<script>alert(document.cookie)</script>

#### Where is the vulnerable part of the code?

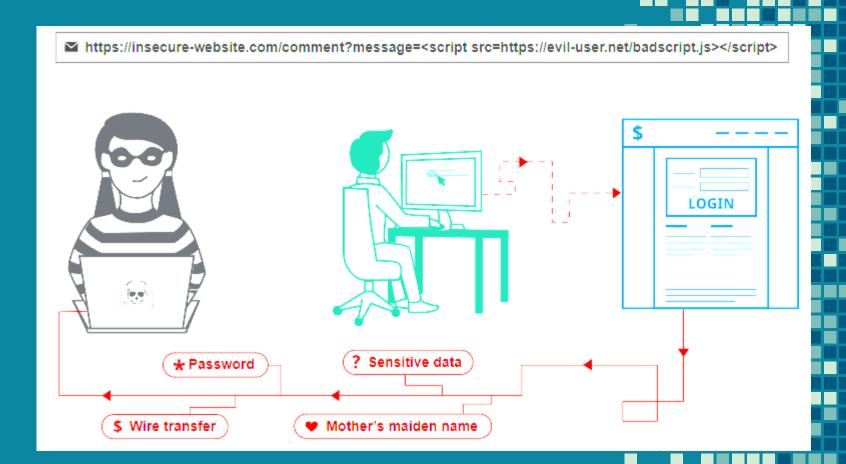
```
Select your language:

<select><script>

document.write("<0PTION
    value=1>"+decodeURIComponent(document.location.href.substring(document.location.href.indexOf("default=")+8))+"
    </OPTION>");

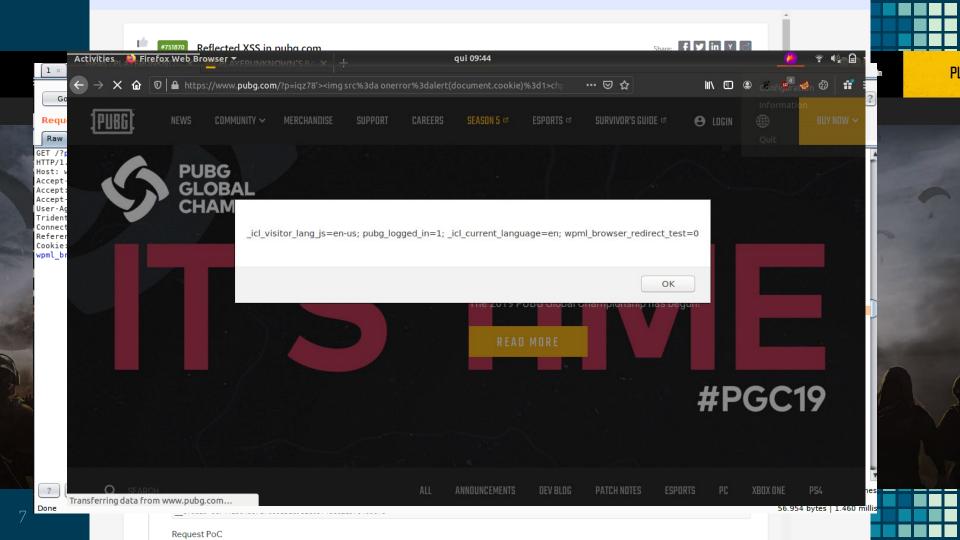
document.write("<0PTION value=2>English</0PTION>");

</script></select>
...
```



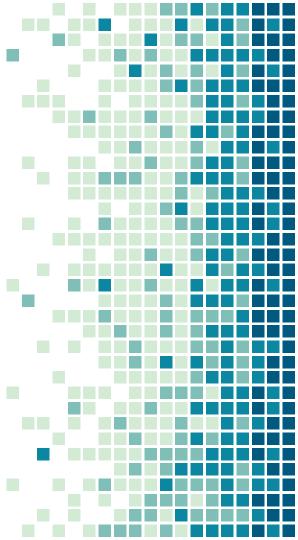
#### What can XSS be used for?

- Impersonate or masquerade as the victim user.
- Carry out any action that the user is able to perform.
- Read any data that the user is able to access.
- Capture the user's login credentials.
- Perform virtual defacement of the web site.
- Inject trojan functionality into the web site.



### How to fix XSS?





#### How to fix XSS?

- Validate input both on the client AND server side.
- Encode data on output. HTML encoding. Turning "<" to "&lt;"</li>
- Whitelist or blacklist inputs



### LAB TIME

- Visit <a href="https://lab.jubilian.io/index">https://lab.jubilian.io/index</a>
- Identify what kind of XSS is this
- Come up with a payload to prove that this site is vulnerable to XSS
- Try to write a simple report with the CVSS, Observations, POC, Implications, and Recommendations

