



Same-Origin-Policy Lab

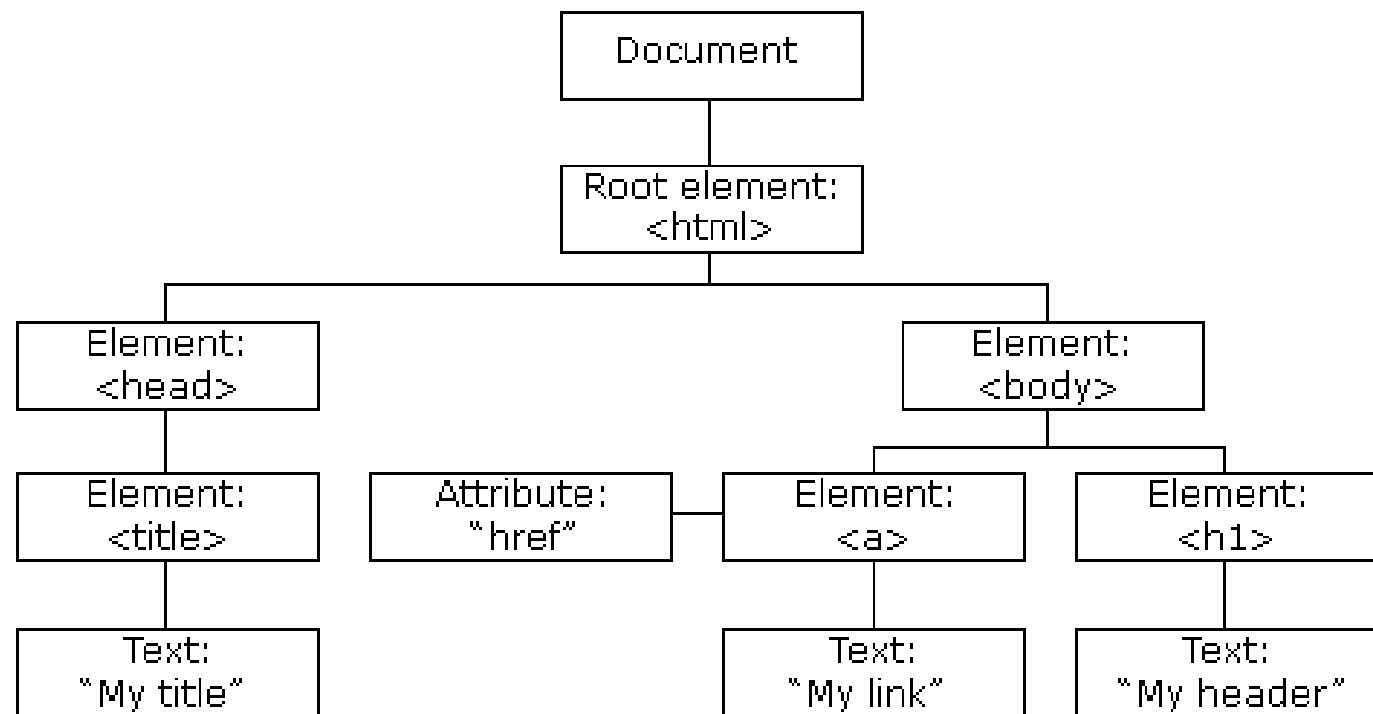
Computer Security

HTML and DOM

- DOM(Document Object Model) is a cross platform and language independent convention for representing and interacting with objects in HTML, XHTML and XML

Website and DOM

```
<html>
  <head>
    <title>My title</title>
  </head>
  <body>
    <a href="www.google.com">My
    Link</a>
    <h1>My Header</h1>
  </body>
</html>
```

Javascript

- Extremely versatile and flexible language
- Variable declarations not necessary
- Variables automatically typed

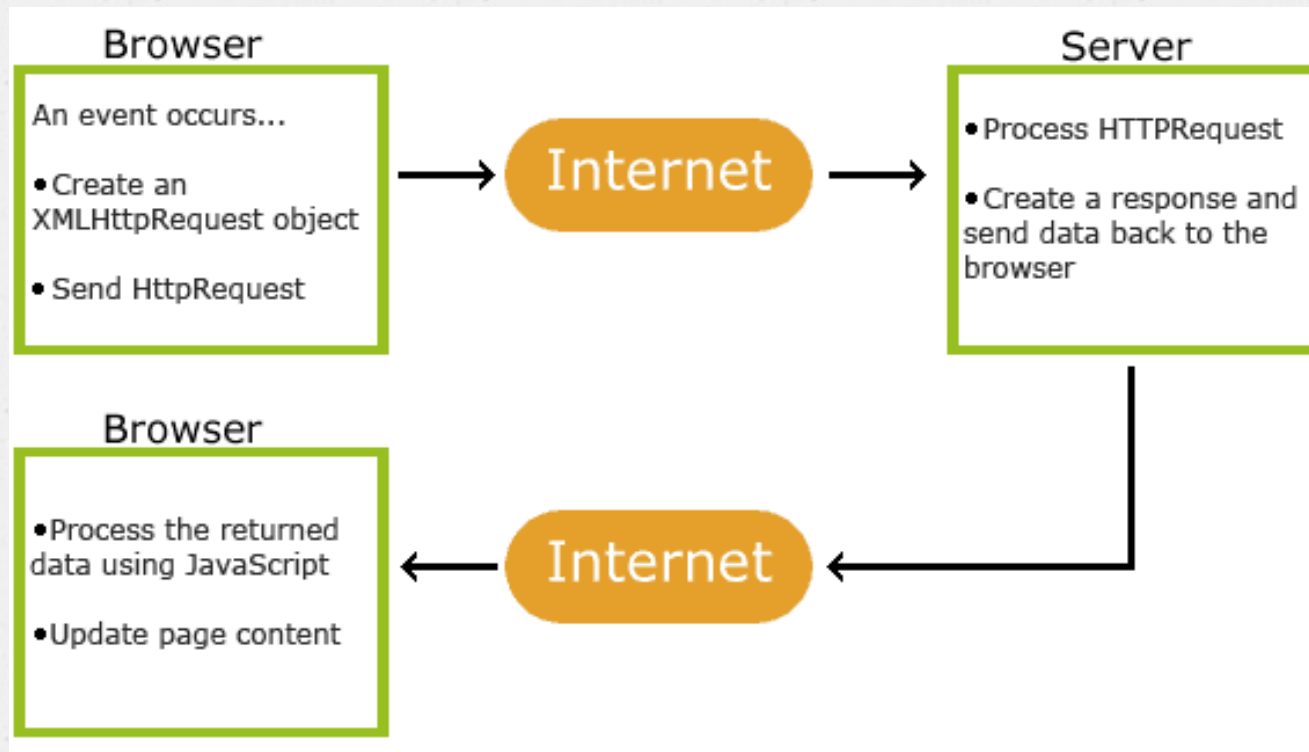
Javascript

- Written inside `<script></script>` tags in HTML file
- Can manipulate DOM objects
- DOM access through global “document” object
- Example: SOP.html

AJAX

- Asynchronous Javascript and XML
- Asynchronous nature lets page make request and not worry about time taken for response to return

AJAX



AJAX Steps

1. Create XMLHttpRequest object
2. Assign object's onreadystatechange method to a function (analogous to C/C++ function pointers)
3. Call open() with appropriate method and target
4. Call send()

Example

http://www.w3schools.com/ajax/tryit.asp?filename=tryajax_first

Live HTTP Headers

- HTTP is a defined protocol used by browser for any sort of remote request (webpages/images/scripts/files/...)
- Header is usually hidden from the user but sent by browser during every request
- Example of how to use LiveHTTPHeaders firefox extension to view HTTP Header info

SEED Ubuntu Image Apache

- o Multiple web servers stored locally
 - o www.soplab.com
 - o www.soplabattacker.com
 - o www.soplabcollabtive.com
- o Refer to lab manual for how it's done