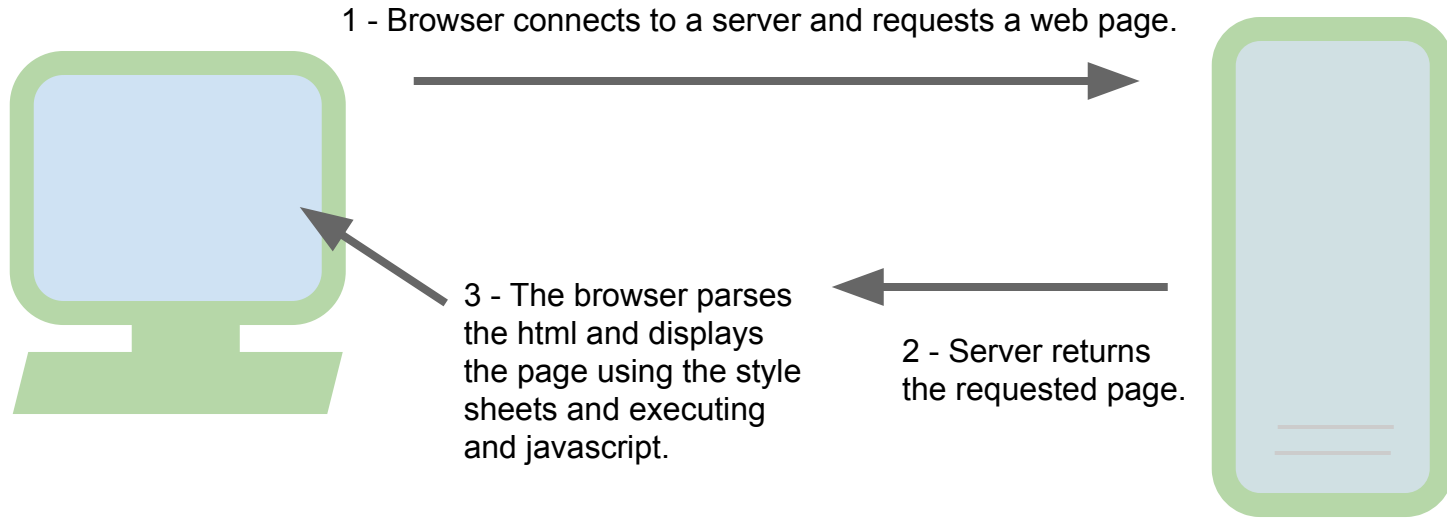


The contents of each web page on the internet is stored on a server somewhere in the world.

When you enter a url in a browser, this human-readable address needs to be converted to a numerical IP address for that server.

DNS servers (domain name server) have a large database of domain names and ip addresses to make that conversion.





HTML: HyperText Markup Language

HTML describes the structure of a web page. A web browser can read an html file and render them as a visible web page. (document content)

CSS: Cascading Style Sheets

Cascading Style Sheets is a style sheet language that describes how an html file is formatted in terms of look. Styles are applied to html elements. (document presentation)

Javascript

Javascript is a programming language supported by all modern browsers that is widely used to create interactive and responsive web content.

```
<!DOCTYPE html>
<html>
  <head>
    <title>This is a title</title>
  </head>
  <body>
    <p>Hello world!</p>
  </body>
</html>
```

HTML tags describe elements on the page. Each tag is encased by < > and most tags have an opening followed by content and then a closing tag with a forward slash </ >.

```
<body>  
<p>Hello World!!</p>  
</body>
```

Tags can also have attributes that are written inside the <> :

```
<image src="http://google.com/logo.png" />
```


Cascading Style Sheets have their own syntax and are included in an html document as either:

an external .css file linked to from the html head,

```
<link rel="stylesheet" type="text/css" href="theme.css" />
```

inside <style> </style> tags in an html page

or inside a particular html tag

```
<h1 style="font-weight:normal;">Hello</h1>
```

Basic CSS syntax:

```
p{  
  font-size: 12px;  
  padding: 0px;  
}
```

Selector →

```
p{  
  font-size: 12px;  
  padding: 0px;  
}
```

Attribute

Value

The diagram illustrates the components of a CSS rule. On the left, a complete rule is shown: `p{ font-size: 12px; padding: 0px; }`. An arrow labeled "Selector" points from the `p{` part to a second, more detailed view of the rule on the right. In this second view, the `p{` is highlighted in orange. The `font-size` and `padding` are highlighted in blue, and the `12px` and `0px` are highlighted in purple. An arrow labeled "Attribute" points from the word "Attribute" to the `font-size` attribute. Another arrow labeled "Value" points from the word "Value" to the `0px` value of the `padding` property.

Element selectors:

```
p{
  font-size: 12px;
  padding: 0px;
}

a{
  color: #ff0000;
}
```

```
<html>
<body>
<p>Hello World!</p>

<p>
<a href="http://google.com"
>Google Me</a>
</p>

</body>
</html>
```

Id selectors:

```
#primary{  
    width: auto;  
}
```

```
<html>  
<body>  
<article id="primary">  
Hello World!  
</article>
```

```
<article>  
How are you?  
</article>
```

```
</body>  
</html>
```

Class selectors:

```
.align-left{  
    float: left;  
}  
  
.entry{  
    color: #ff0000;  
}
```

```
<html>  
<body>  
<p>Hello World!</p>  
  
<p class="entry">  
  
</p>  
  
</body>  
</html>
```

Child + Descendent selectors:

```
article.entry{  
    color: #000;  
}
```

```
article p{  
    font-size: 14pt;  
}
```

Note: A more specific style
has precedence over others.

```
<html>
```

```
<body>
```

```
<article>
```

```
    <p>Hello World!</p>
```

```
</article>
```

```
<article class="entry">
```

```
    <p>
```

```
        My logo: 
```

```
    </p>
```

```
</article>
```

```
</body>
```

```
</html>
```

The Box Model

All elements on the page are considered to be a rectangle or box.

Every element can be adjusted in terms of its width, height, margins, borders...