

# THE ART AND SCIENCE OF WEB DEVELOPMENT

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# WHAT IS ACM



Association for Computing Machinery

Largest Student Chapter in the Nation

21 Special Interest Groups (SIGs)

Reflections|Projections & HackIllinois

# WHAT IS FRONT-END?

The side of the application that faces the user

HTML, CSS, Javascript

Visual Design

# THE WEB

Web Server

Web Browser

Web Page



# WEB SERVER

Web Server = Computer

Holds all of the files for website

Amazon Web Services (AWS)

Accessed By Uniform Resource Locator (URL)



# WEB BROWSER

Grabs all of the resources (files)

Chrome, Firefox, Safari, Opera, Internet Explorer

Creates webpage from files



### Usage share of all browsers for February 2015

Source ↕	Chrome ↕	Internet Explorer ↕	Firefox ↕	Safari ↕	Opera ↕	Others ↕
StatCounter <a href="#">↗</a>	50.15%	13.09%	11.56%	13.64%	3.79% <sup>††</sup>	6.97%

### Usage share of all browsers for December 2014

Source ↕	Chrome ↕	Internet Explorer ↕	Firefox ↕	Safari ↕	Opera ↕	Others ↕
StatCounter <a href="#">↗</a>	48.0%	15.21%	11.27%	14.0%	3.87% <sup>††</sup>	7.63%
Wikimedia <a href="#">↗</a>	46.42%	10.67%	14.97%	21.73%	2.33%	3.88% <sup>†</sup>

The following tables summarize the usage share of [desktop](#) web browsers for the indicated months.

### Usage share of desktop browsers for December 2014

Source ↕	Chrome ↕	Internet Explorer ↕	Firefox ↕	Safari ↕	Opera ↕	Others ↕
NetApplications <a href="#">↗</a>	22.7%	59.1%	11.9%	5.0%	0.9%	0.4%
StatCounter <a href="#">↗</a>	49.7%	24.6%	18.0%	4.7%	1.5%	1.6%
W3Counter <a href="#">↗</a>	42.5%	17.6%	15.6%	14.6%	3.2%	6.5%
Wikimedia <a href="#">↗</a>	48.1%	17.5%	16.7%	4.8%	1.5%	11.4% <sup>†</sup>

# WHAT WAS THE FIRST WEB BROWSER?





# THE WEB PAGE

HTML (Hypertext Markup Language)

CSS (Cascading Style Sheets)

Javascript



# LET'S MAKE A WEBSITE!



# HTML



**H**ypertext **M**arkup **L**anguage

Uses tags

```
<html><div><body><h1><button>
```

Forms structure of the website

# CSS



## Cascading **S**tyle **S**heets

Based on orders of specificity

Provides visual aspects to webpage

Brings “style” to the webpage



# JAVASCRIPT **VS** JAVA



WHO INVENTED JAVASCRIPT?

# JAVASCRIPT

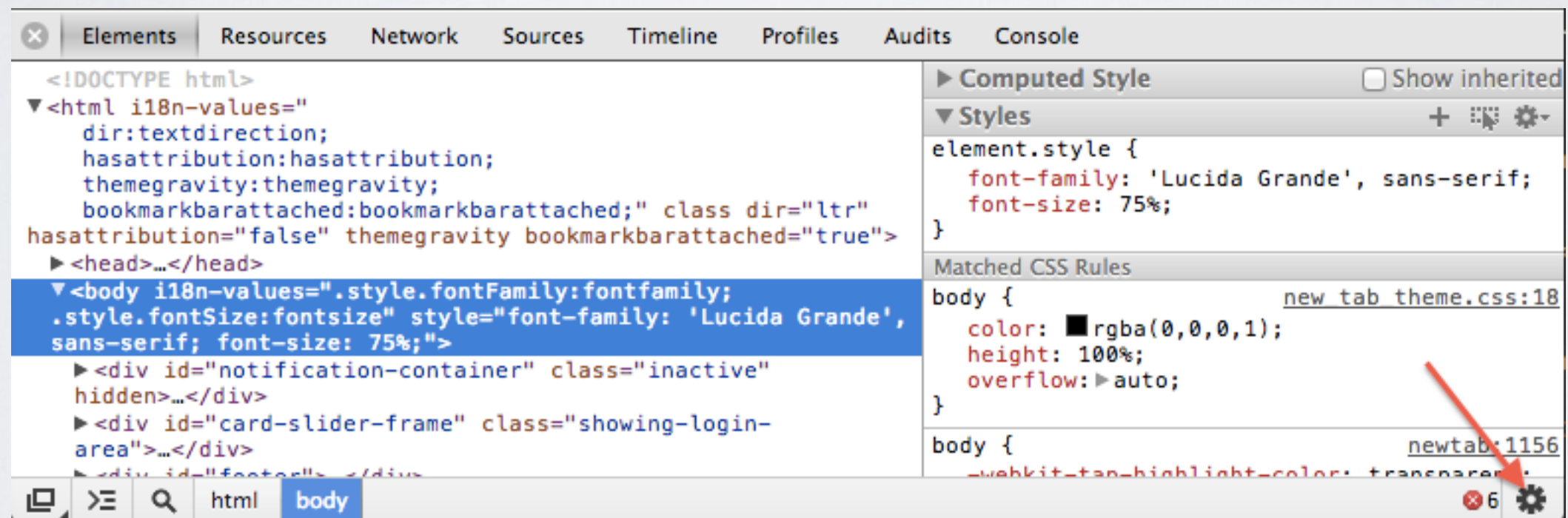


Programming language

Adds functionality to the page

Modify webpage

# HOW TO DEBUG & EXPLORE





# LIBRARIES & FRAMEWORKS

Bootstrap



Sass



AngularJS



jQuery



# RESOURCES

W3School

Mozilla Developer Network

Codeschool

Codecademy

Stackoverflow

Github Pages

THANK YOU!