

JavaScript Essentials

JavaScript Overview



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Lesson Objectives

- Understand the high-level definition of JavaScript
- Understand what JavaScript do to our web page
- Understand the fundamentals of Programming
- Able to think like Programmer

Section 1

Overview

Overview – Fact about Computer

Computers are
incredibly powerful
machines

But deep down,
Computers are
actually pretty
dumb

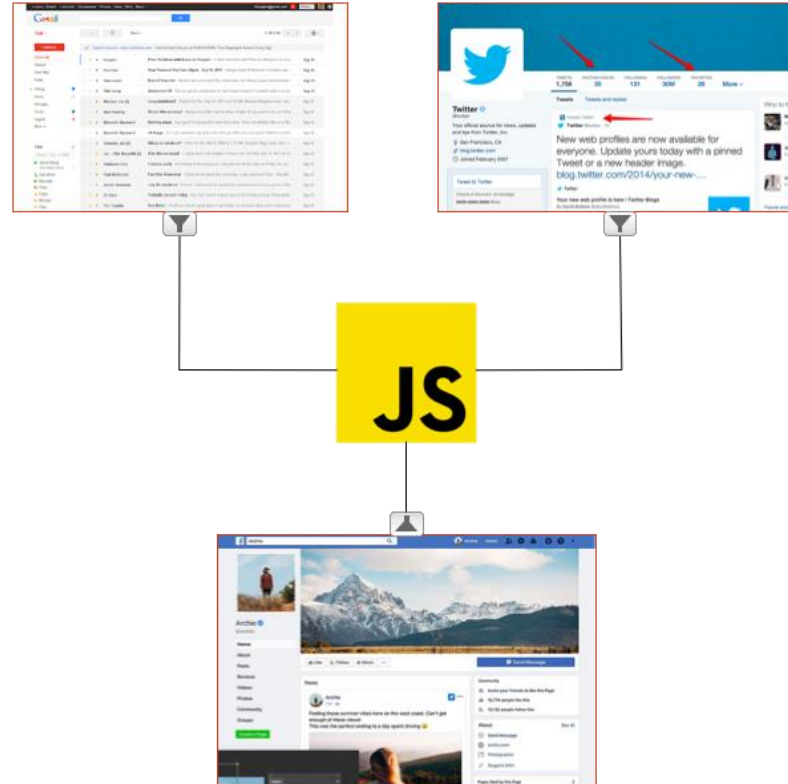


Computers can *only* do
exactly what we humans
tell them to do

Without programs,
computers can't do
anything at all!

- Even worse, computers can't understand English or any other spoken language.
- Computer programs are written in a *programming language* like JavaScript
- The JavaScript programming language is used to write programs that run in web pages.
- JavaScript can control how a web page looks or make the page respond when a viewer clicks a button or moves the mouse.

Overview – Who uses JavaScript



Overview – Much more

JavaScript lets you
create stunning
visual effect



JavaScript lets you
represent data in
more ways



JavaScript lets you
play fun games

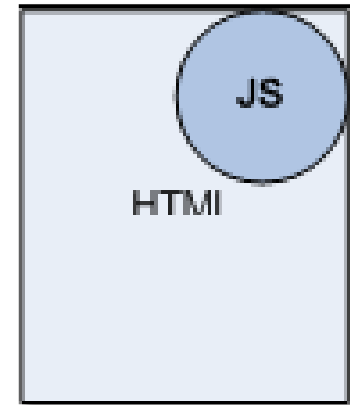


Overview – Why learn JavaScript?

- It's a lot easier (and more fun) to learn
- In order to write and run JavaScript programs, all you need is a web browser
- Share your JavaScript programs with other

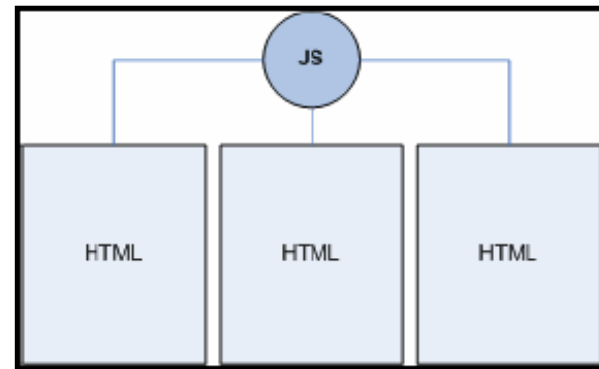
- **Internal JavaScript**
- **JavaScript** can be placed in the **<body>** and the **<head>** sections of an HTML page by using **<script>** tag
- **In the HTML page itself:**

```
<html>  
<head>  
  <script>  
    // JavaScript code here  
  </script>  
</head>
```



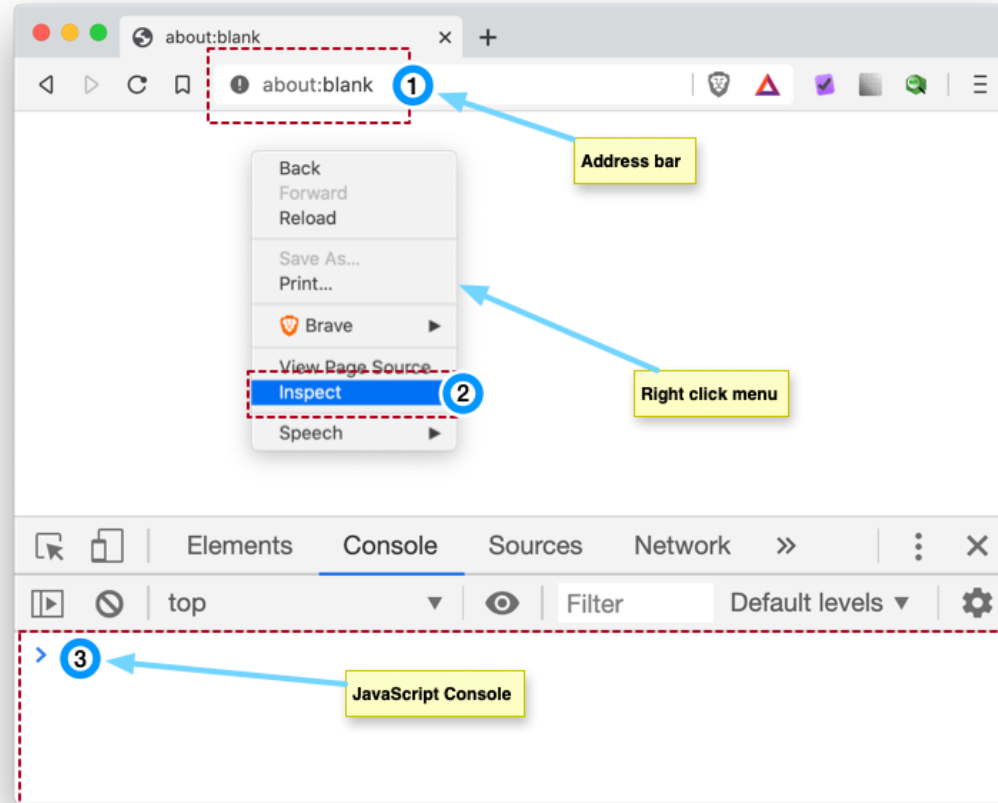
- **External JavaScript**
- **As a file, linked from the HTML page:**

```
<head>  
  <script src="script.js">  
  </script>  
</head>
```



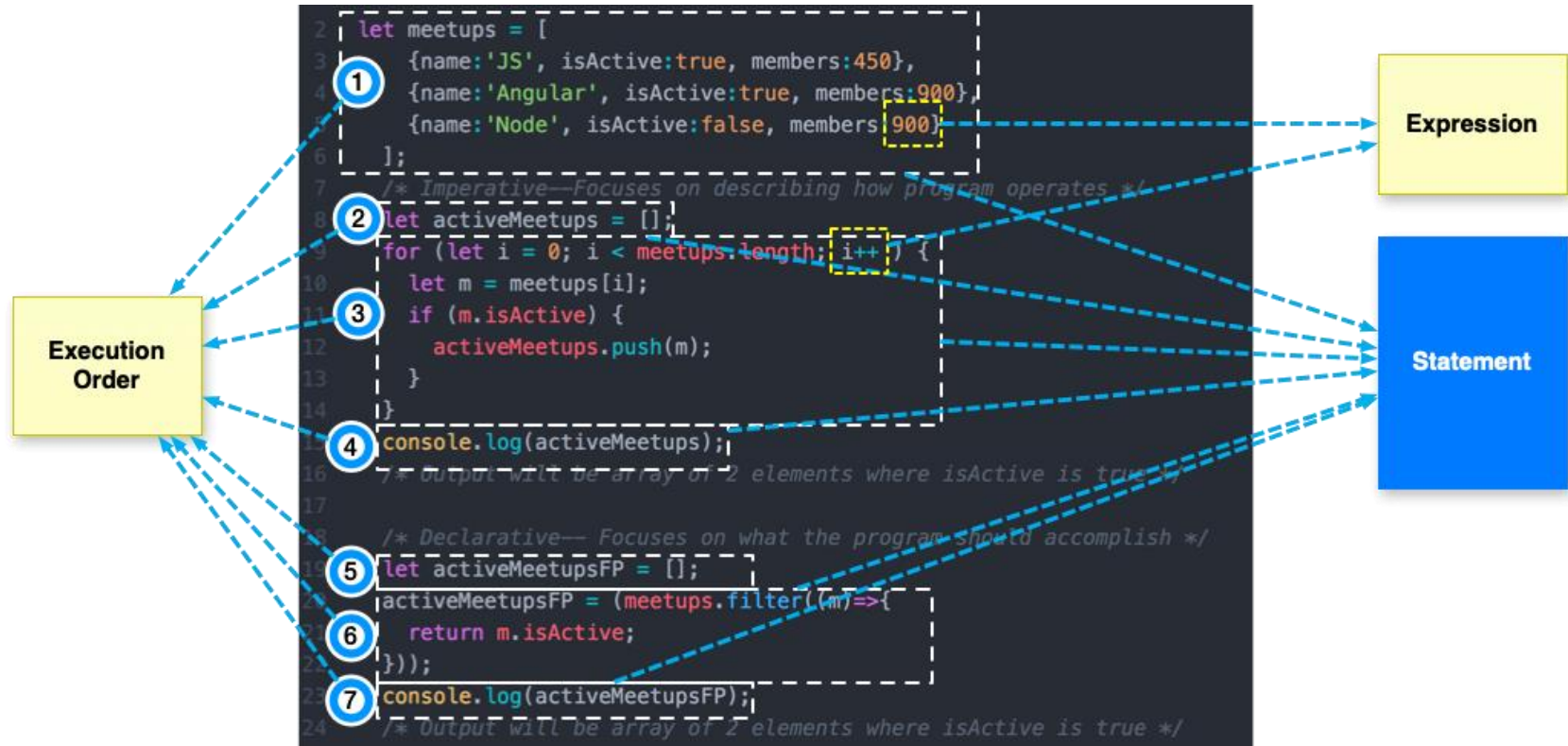
Overview – To test JavaScript

- Open Chrome browser
- Navigate to about:blank
- Right Click and choose **Inspect**
- Got to JavaScript Console by click on **Console** tab in
- Start typing JavaScript code and press **Enter**
- Example: type `3 + 4`; then press Enter

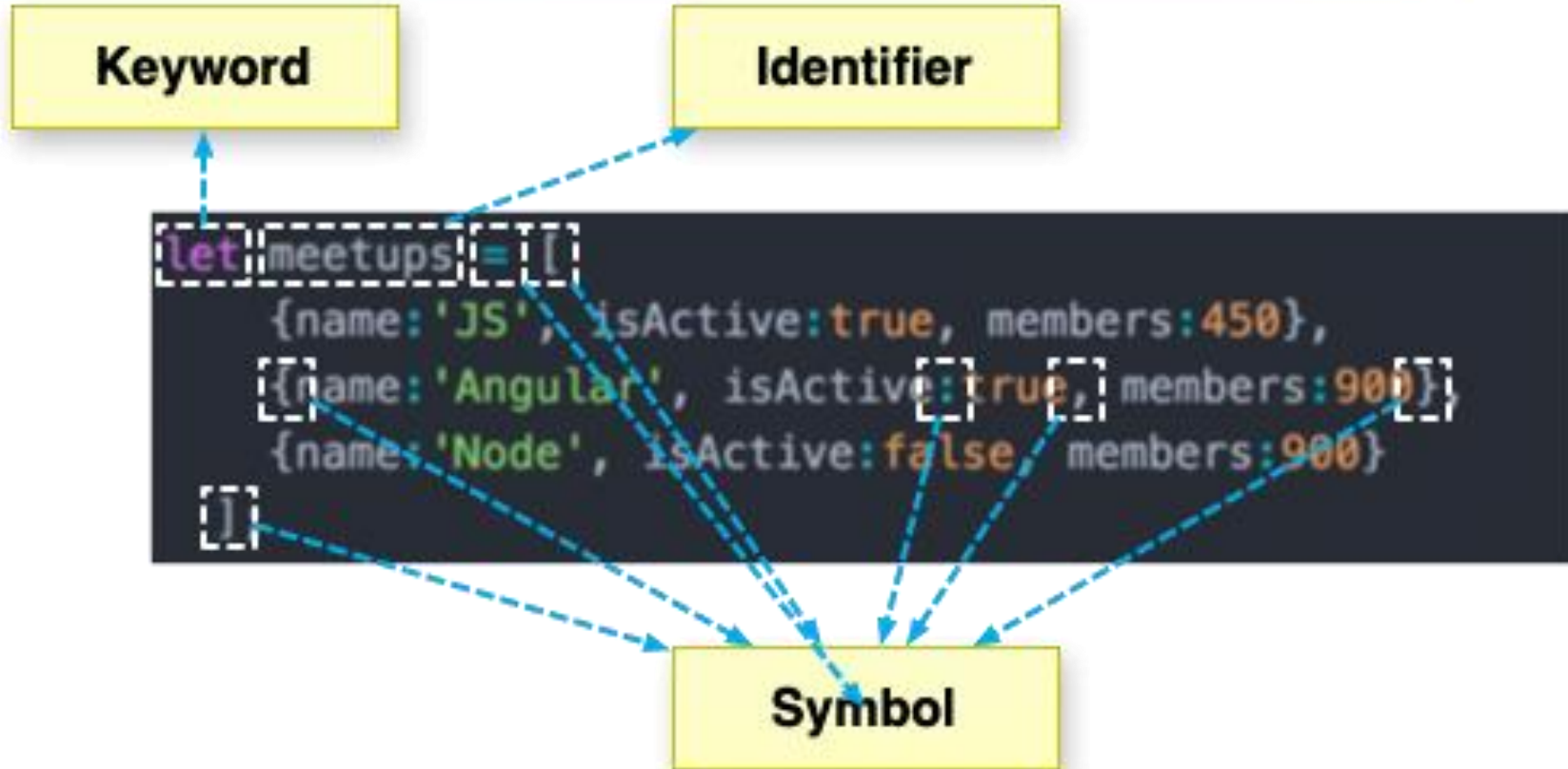


Demo: Add JavaScript to your web page

Overview – Structure of JavaScript Program

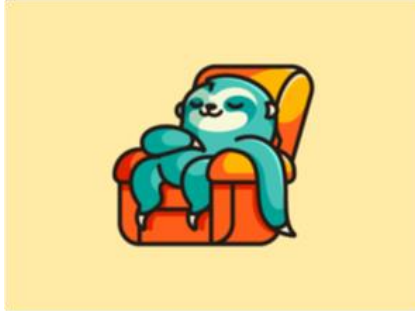


Overview – What is Syntax?



Overview – Think like a Programmer

Be lazy



Divide and Conquer



Care about your code



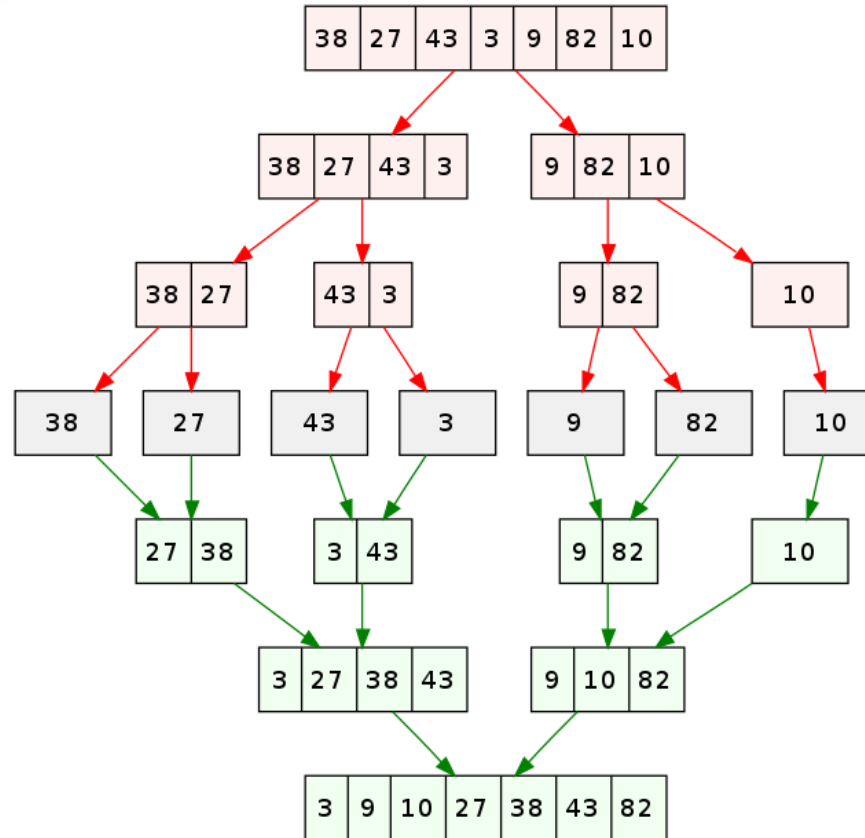
I choose a lazy person
to do a hard job. Because
a **lazy person** will find
an **easy way** to do it.

– Bill Gates

AZ QUOTES



Overview – Divide and Conquer



Always code as if the guy who
ends up maintaining your code
will be a violent psychopath who
knows where you live. - Martin Golding

- JavaScript program is built out of **statements**, which themselves sometimes contain more **statements**.
- Statements tend to contain **expressions**, which themselves can be built out of smaller **expressions**.
- JavaScript lets us build interactive, stunning web page
- To think like a Programmer, you have to be **lazy**, **divide** the problem into smaller trunks, always **care** about your Code

Thank you

Q&A

