

THE DOCUMENT-OBJECT-MODEL (DOM)

LET'S BUILD THE CODE FOR THIS LITTLE POLL IN 2 WAYS.

We all love Closures!

Closures are SO cool, I just love
closures

**THIS IS THE FIRST TIME WE WILL USE JAVASCRIPT
TO DO SOMETHING MEANINGFUL WITH THE HTML.**

Yes!

No!

WEB BROWSERS AND WEB SERVERS

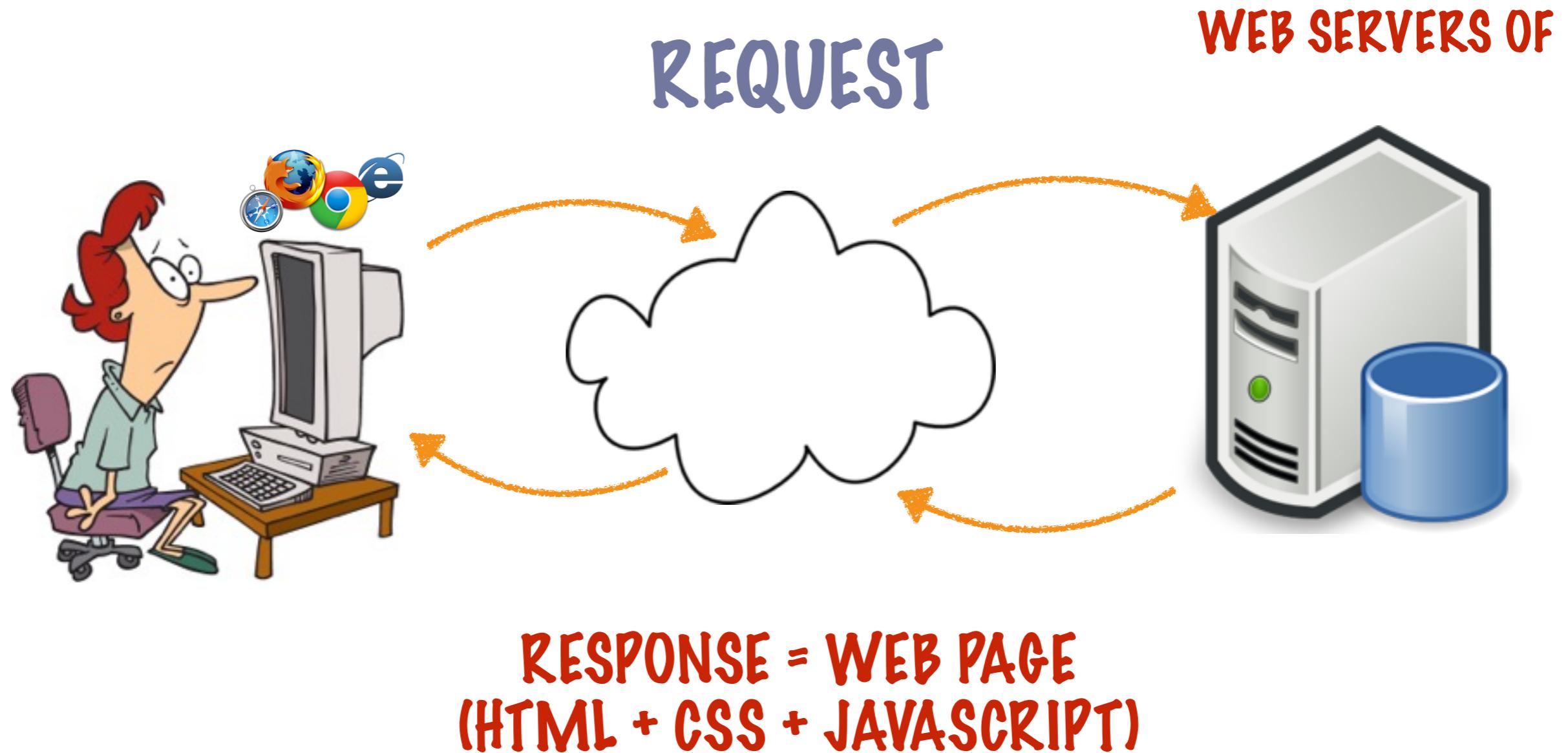
YOU WAKE UP IN THE MORNING AND
WANT TO READ THE NEWSPAPER

YOU OPEN UP YOUR FAVORITE
BROWSER

AND TYPE
WWW.NYTIMES.COM



WEB BROWSERS AND WEB SERVERS



THE WEB SERVER AT
WWW.NYTIMES.COM WILL
SEND BACK INFORMATION

TEXT
FORMATTING
IMAGES
VIDEOS...

THIS INFORMATION IS IN A FORM
THE BROWSER UNDERSTANDS

RESPONSE = WEB PAGE
(HTML + CSS + JAVASCRIPT)



**RESPONSE = WEB PAGE (HTML + CSS +
JAVASCRIPT)**



**THE BROWSER KNOWS HOW TO
INTERPRET HTML, CSS AND JAVASCRIPT**

THE BROWSER KNOWS HOW TO INTERPRET HTML, CSS AND JAVASCRIPT

AND
RENDER THE
WEBPAGE

, jobs, education, real estate, cars & more at

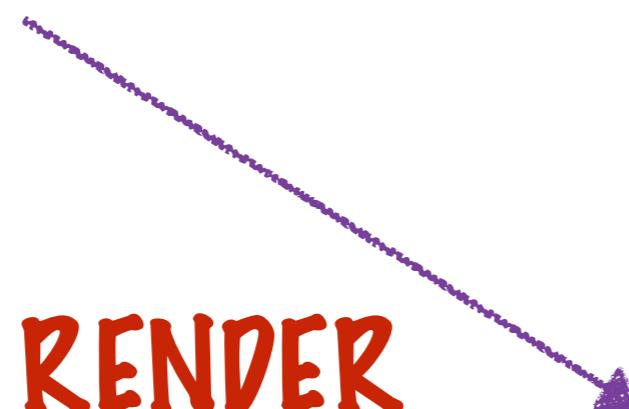
```
search.ico" />  
/icons/mostpopular.ico" />  
smw.ico" />
```

, books, jobs, education, real estate, cars & more

rolina,Nevada,Campaign Finance,Presidential
J.Cruz, Ted,Bush, Jeb,Rubio, Marco,Kasich, John
on of 2016,Primaries and
eference and Military Forces,Al Qaeda,Boko
States Politics and Government,Presidential
iciary, Supreme Court (US),Reid, Harry,McConnell,
Romney, George W,Bush, and McConnell,Congress

THE BROWSER KNOWS HOW TO INTERPRET HTML, CSS AND JAVASCRIPT

AND RENDER THE WEBPAGE



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Senators Ted Cruz and Marco Rubio urged the rest of the Republican Party to coalesce around their campaigns as Donald J. Trump gained momentum.

A Cash Advantage for Trump and Cruz By NICHOLAS CONFESSORE and SARAH COHEN

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Editorial Young Voters, Motivated Again So far, voters age 18 to 29 in both parties are turning out in numbers that rival 2008, contributing to some interesting results.

Charles M. Blow Bernie Sanders Hits a Roadblock Despite doing well with a number of voter groups, so far Sanders has not brought about nearly enough of the political upheaval he is counting on.

Maureen Dowd Escape From Bushworld A family of privilege can stop pretending that they're just folks.

Op-Ed: The European Dream: A Requiem

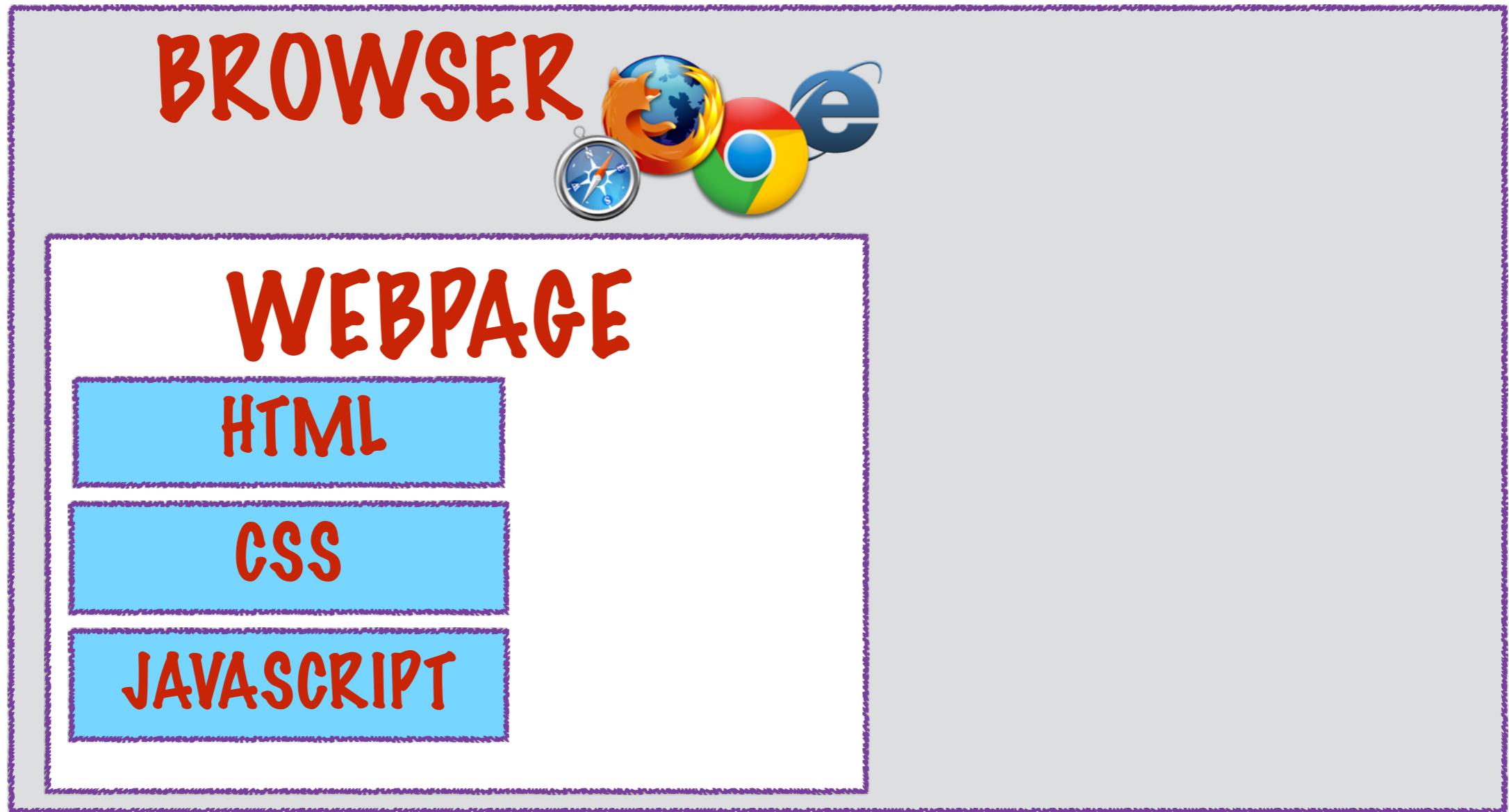
Reporters' Notebook Life, Death and Graft in Southeast Asia By THOMAS FULLER

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THE CROSSWORD » Play Today's Puzzle

THE BROWSER KNOWS HOW TO INTERPRET HTML, CSS AND JAVASCRIPT
AND RENDER THE WEBPAGE



AS WE HAVE ALREADY SEEN - HTML HAS A NICE HIERARCHICAL STRUCTURE

```
<doctype html>  
<html lang="en">
```

```
<meta charset = "utf-8">  
<head>  
<title>Javascript Example 50</title>  
<script id = "code"></script>  
</head>
```

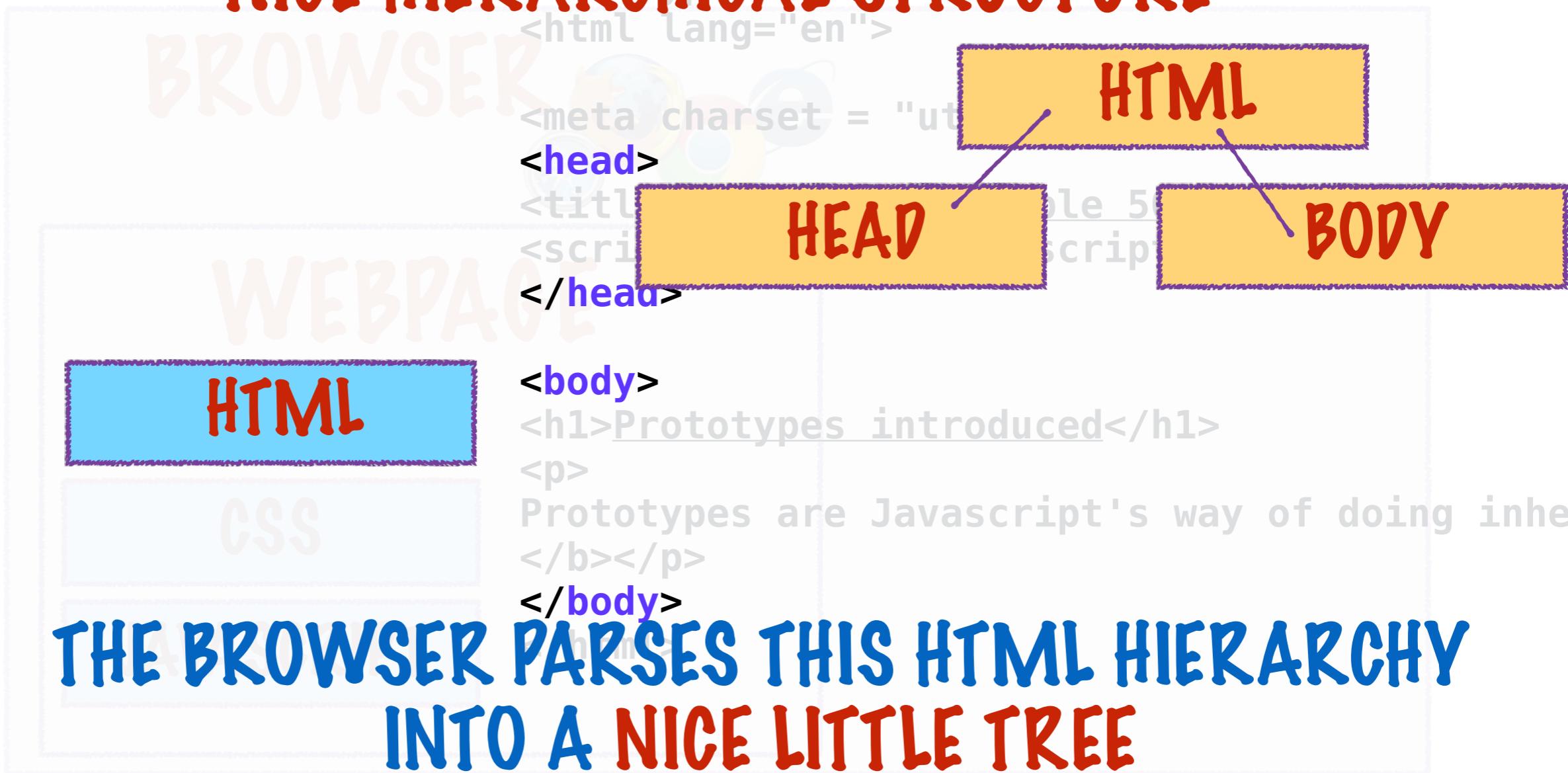
```
<body>  
<h1>Prototypes introduced</h1>  
<p>  
Prototypes are Javascript's way of doing inheritance.  
</p>  
</body>
```

THE BROWSER PARSSES THIS HTML HIERARCHY
INTO A NICE LITTLE TREE

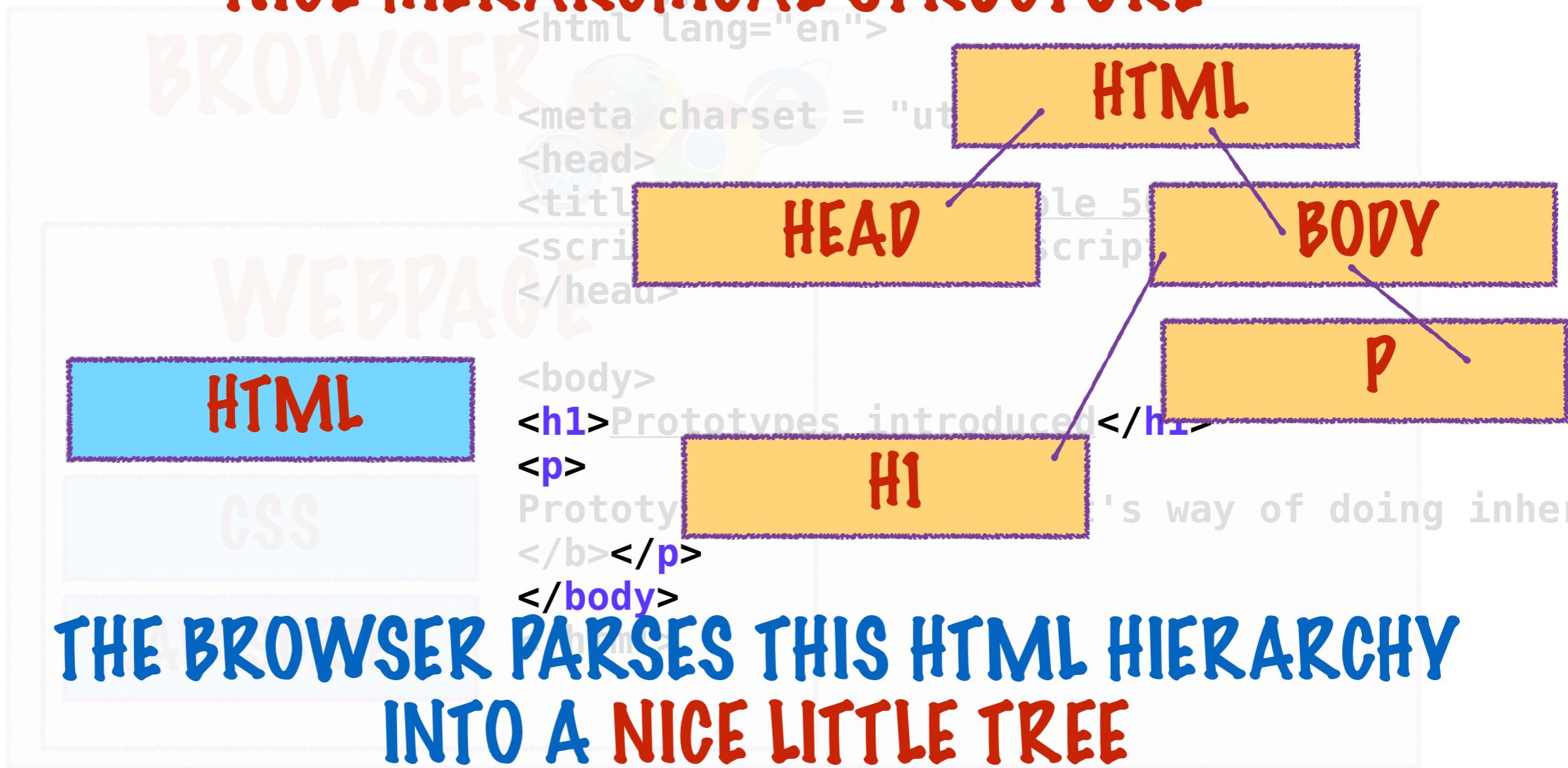
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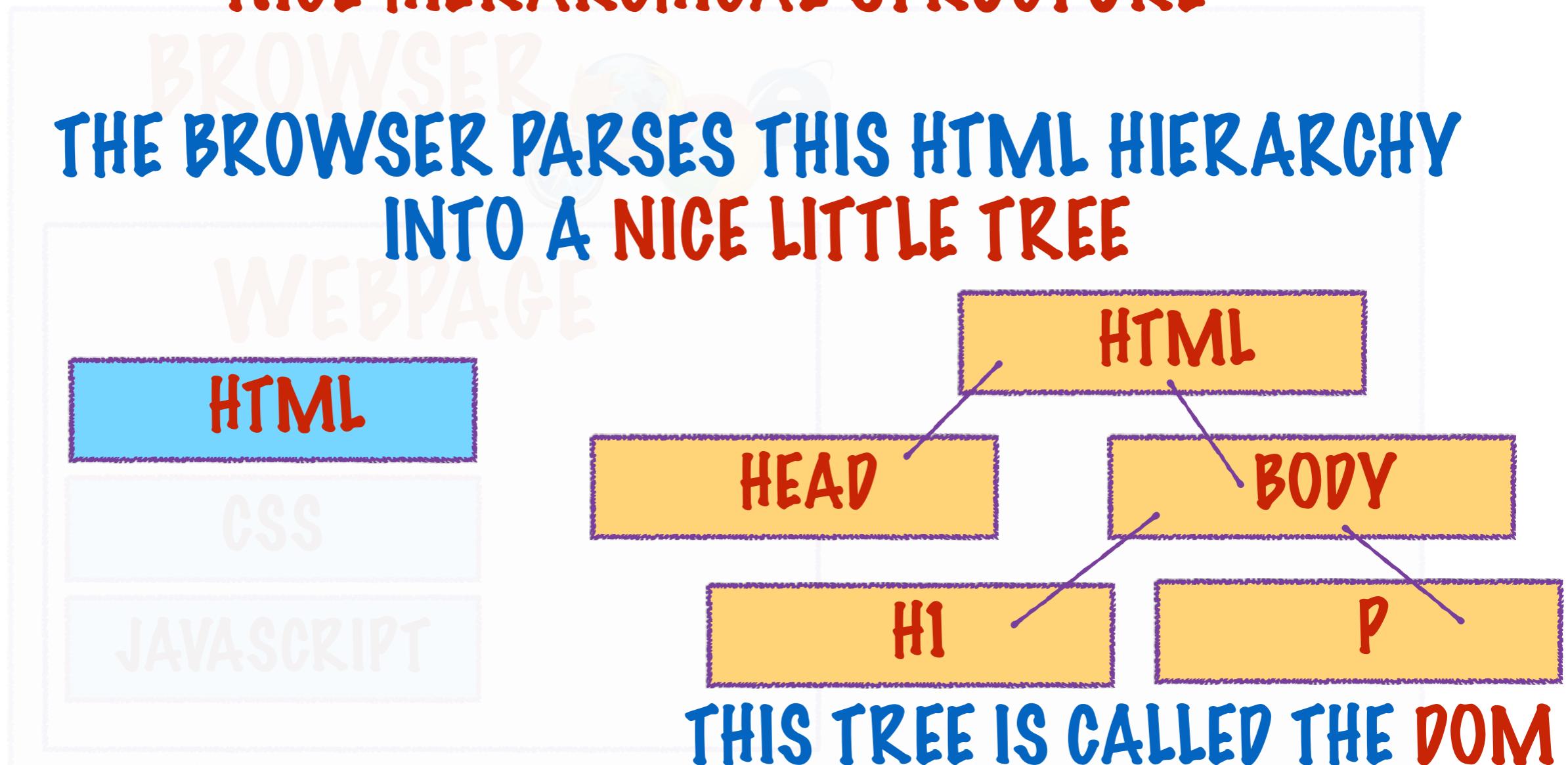


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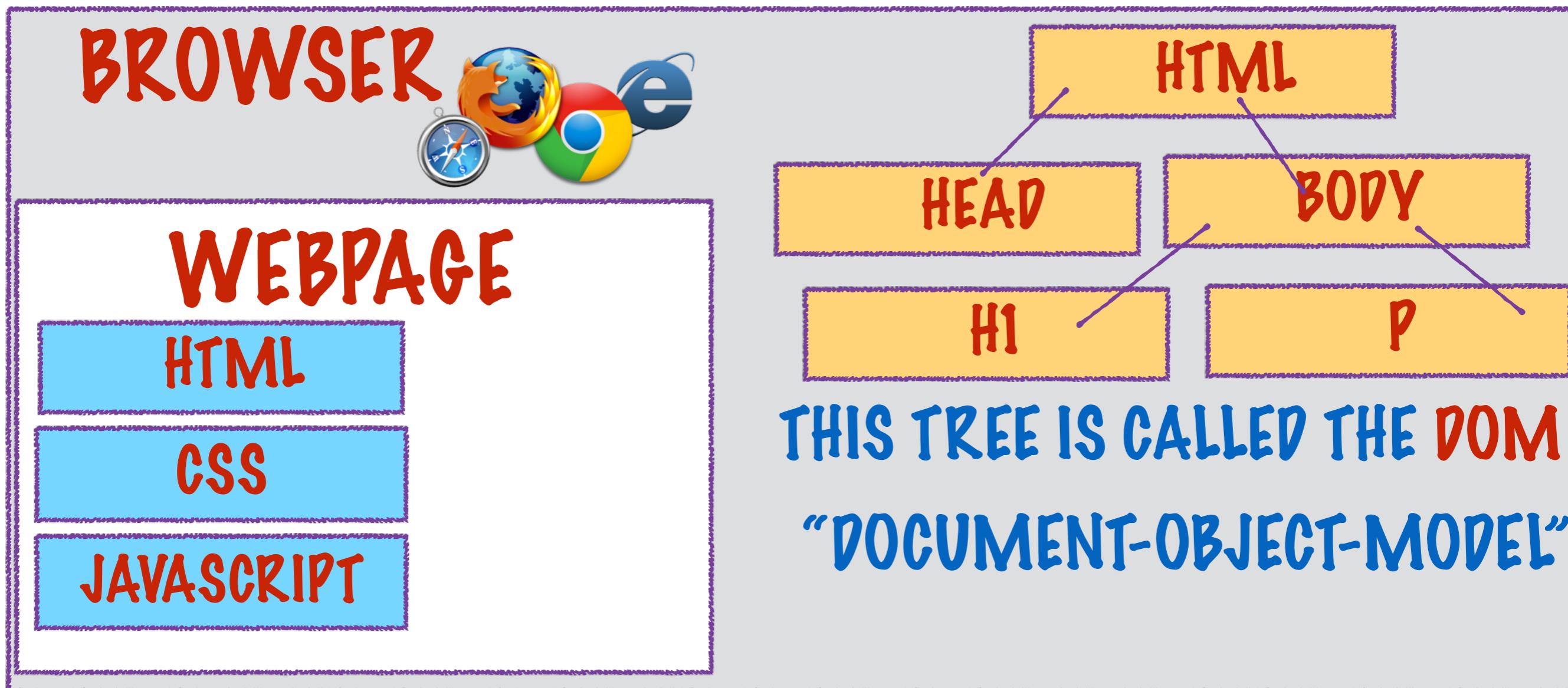


AS WE HAVE ALREADY SEEN - HTML HAS A NICE HIERARCHICAL STRUCTURE

THE BROWSER PARSES THIS HTML HIERARCHY INTO A NICE LITTLE TREE



THE BROWSER KNOWS HOW TO INTERPRET HTML, CSS AND JAVASCRIPT AND RENDER THE WEBPAGE



THE BROWSER KNOWS

AND



WEBPAGE

THE DOM ("DOCUMENT-OBJECT-MODEL") IS HOW THE
JAVASCRIPT CAN INTERACT WITH THE HTML OF THE PAGE

JAVASCRIPT



"DOCUMENT-OBJECT-MODEL"

THE BROWSER KNOWS

AND

BROWSER

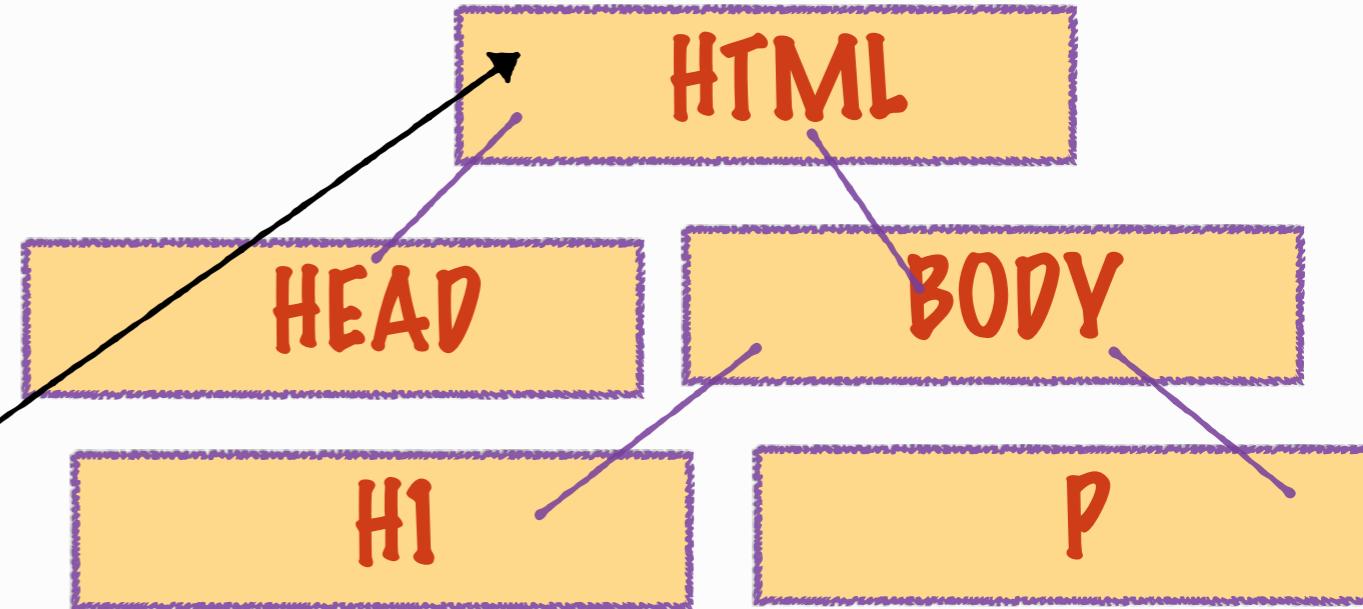


WEBPAGE

HTML

CSS

JAVASCRIPT



ACCESS EVERY NODE OF THE TREE AS A
JAVASCRIPT OBJECT

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THE BROWSER KNOWS

AND

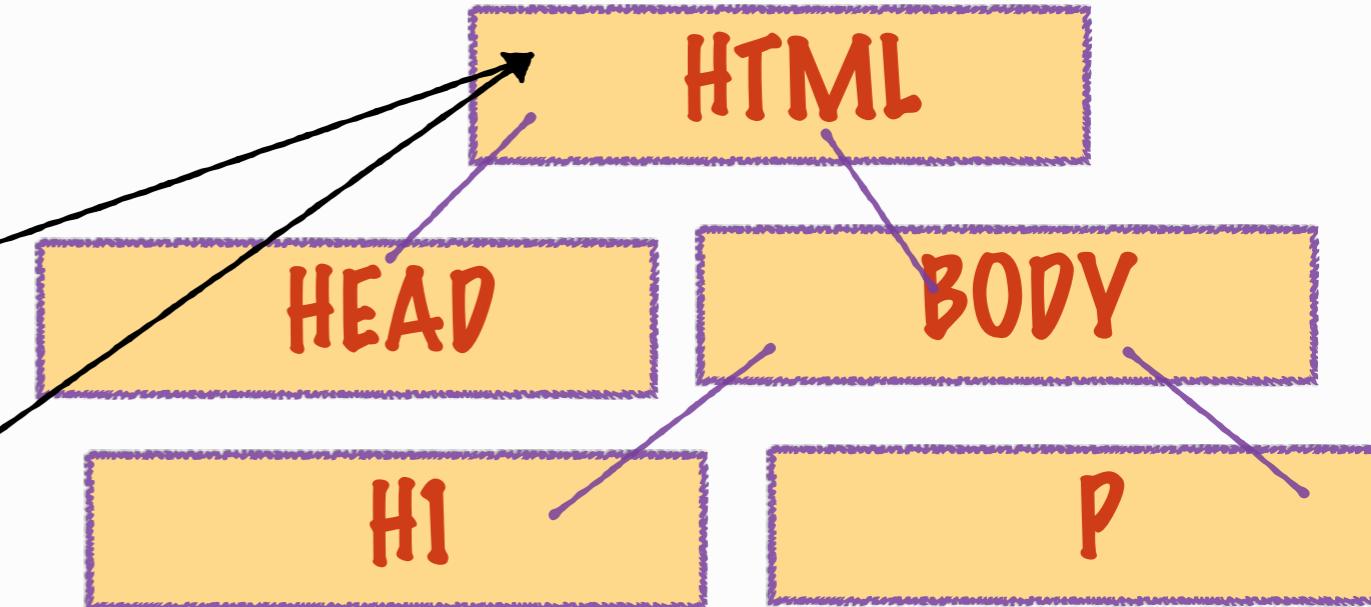
THOSE CHANGES WILL
REFLECT IN THE HTML

WEBPAGE

HTML

CSS

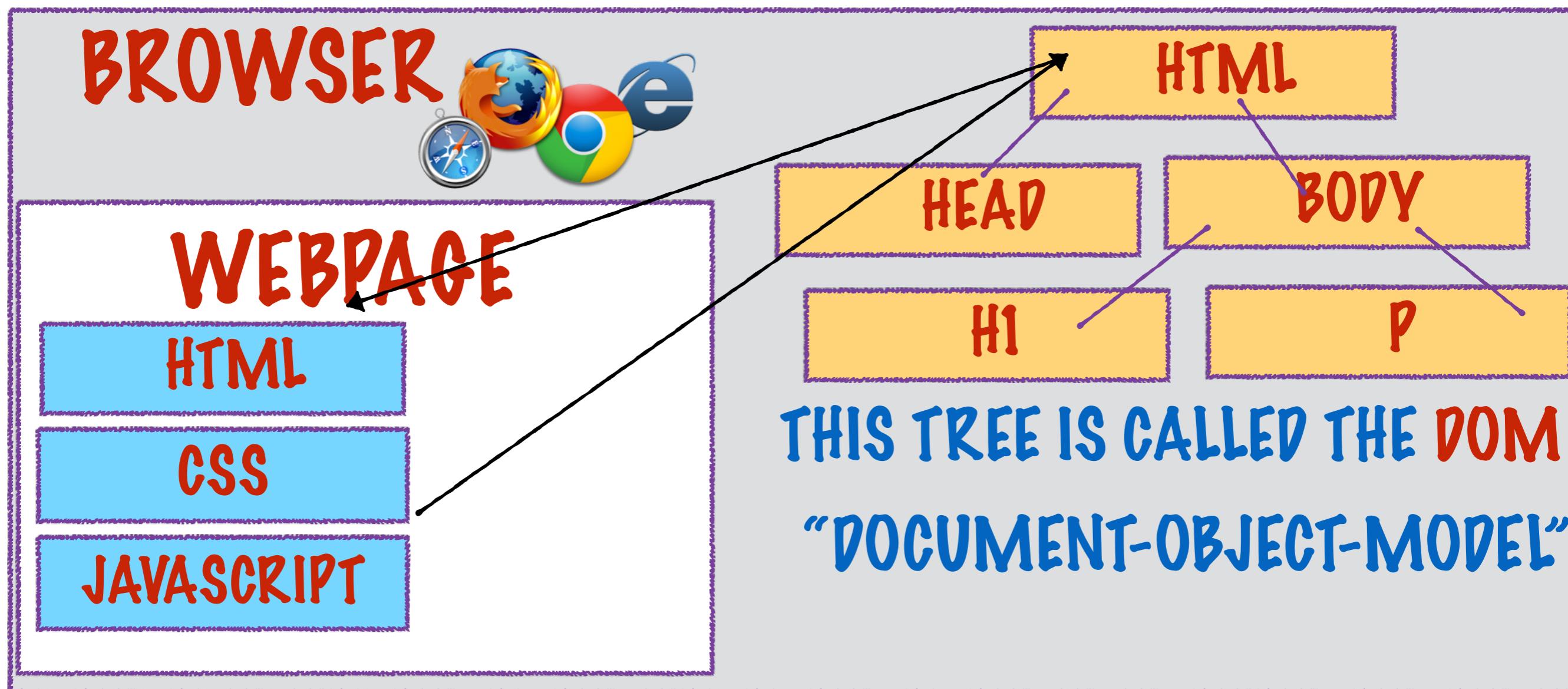
JAVASCRIPT



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THE WAY JAVASCRIPT INTERACTS WITH THE DOM IS VIA A

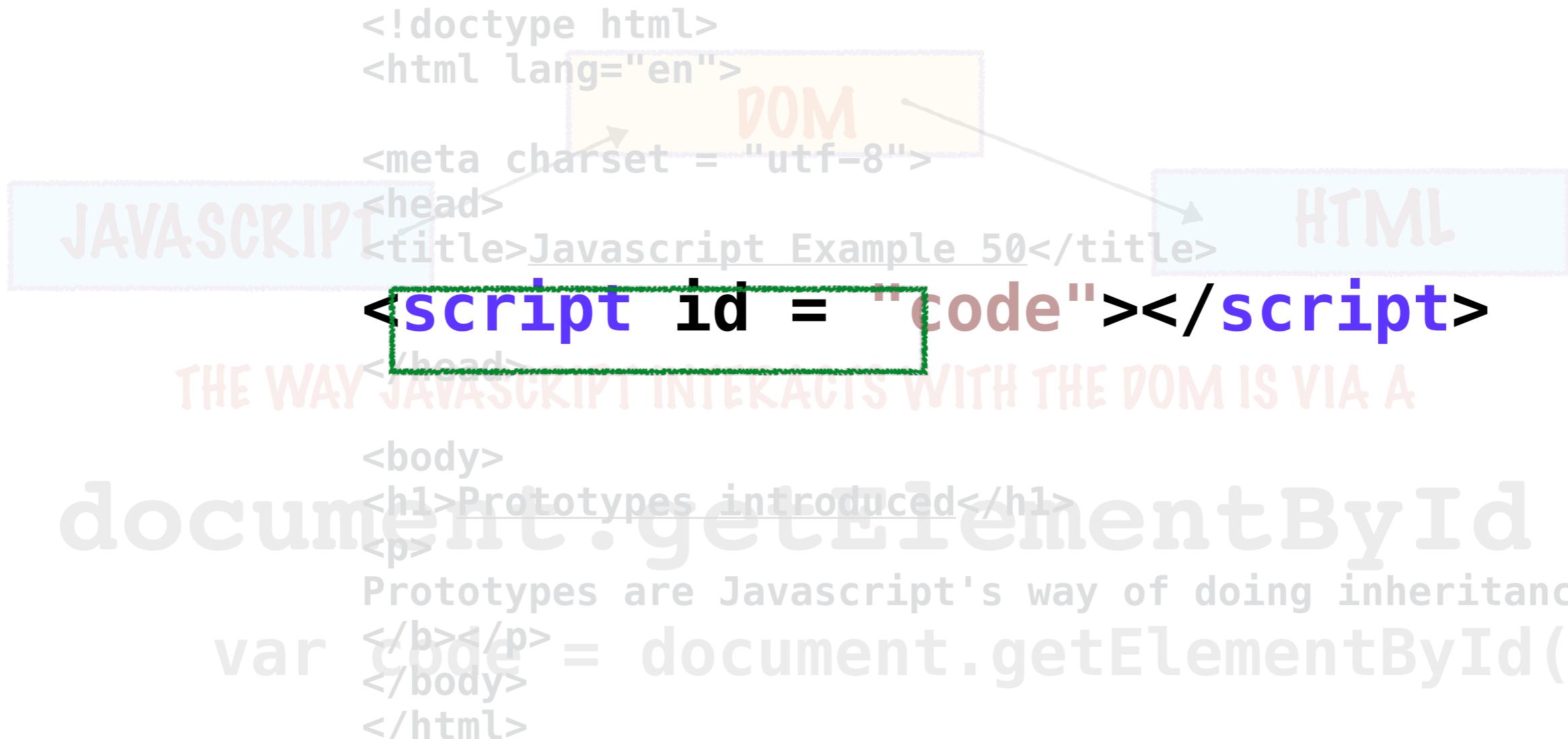
document . getElementById

`var code = document.getElementById("cod`

WHAT IS THIS ID? ITS AN ID SPECIFIED IN
THE HTML FOR SPECIFIC HTML ELEMENTS

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  <meta charset = "utf-8">
  <head>
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    <script id = "code"></script>
  </head>
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DOM = “DOCUMENT-OBJECT-MODEL”

**THE DOM IS A WAY OF ACCESSING ANY PART OF THE
HTML OF A WEBPAGE AS A JAVASCRIPT OBJECT.**

**THEN, THE APPEARANCE OF THE HTML CAN BE MODIFIED BY
ALTERING THE PROPERTIES OF THE “HTML” ELEMENT OBJECT.**

DOM = “DOCUMENT-OBJECT-MODEL”

**THE DOM IS A WAY OF ACCESSING ANY PART OF THE
HTML OF A WEBPAGE AS A JAVASCRIPT OBJECT.**

**THE ENTIRE HTML DOCUMENT IS TREATED AS
ONE BIG OBJECT CALLED `document`**

**THIS `document` OBJECT IS AVAILABLE, BY DEFAULT, INSIDE THE
SCRIPT ELEMENTS (WHERE ALL JAVASCRIPT CODE RESIDES)**

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