EP 1 : Get start with JavaScript

Why JavaScript?

BACKBONE

METEOR

EMBER

REACT

AURELIA

VUE

ANGULAR

NODE

REASON

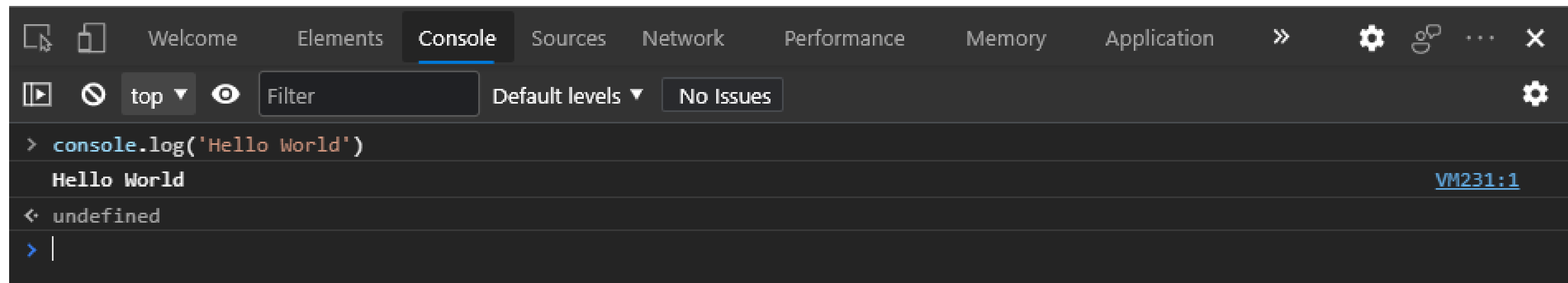SVELTE

ELM

PREACT

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ECMAScript Editions

Allows trailing commas for function parameters

Ver	Official Name	Description
ES1	ECMAScript 1 (1997)	First edition
ES2	ECMAScript 2 (1998)	Editorial changes
ES3	ECMAScript 3 (1999)	Added regular expressions Added try/catch Added switch Added do-while
ES4	ECMAScript 4	Never released
ES5	ECMAScript 5 (2009) Read More	Added "strict mode" Added JSON support Added String.trim() Added Array.isArray() Added Array iteration methods Allows trailing commas for object literals
ES6	ECMAScript 2015 Read More	Added let and const Added default parameter values Added Array.find() Added Array.findIndex()
	ECMAScript 2016 Read More	Added exponential operator (**) Added Array.includes()
	ECMAScript 2017 Read More	Added string padding Added Object.entries() Added Object.values() Added async functions Added shared memory
	ECMAScript 2018 Read More	Added rest / spread properties Added asynchronous iteration Added Promise.finally() Additions to RegExp

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JavaScript เป็นภาษาที่สามารถใช้งานบนเบราว์เซอร์ได้

```
Welcome    Elements    Console    Sources    Network    Performance    Memory    Application    »    ⚙    ⚙    ⋯    ✕

top ▼   ⊘   👁   Filter          Default levels ▼   No Issues                                              ⚙

> console.log('Hello World')
  Hello World                                                                                        VM231:1
< undefined
> |
```
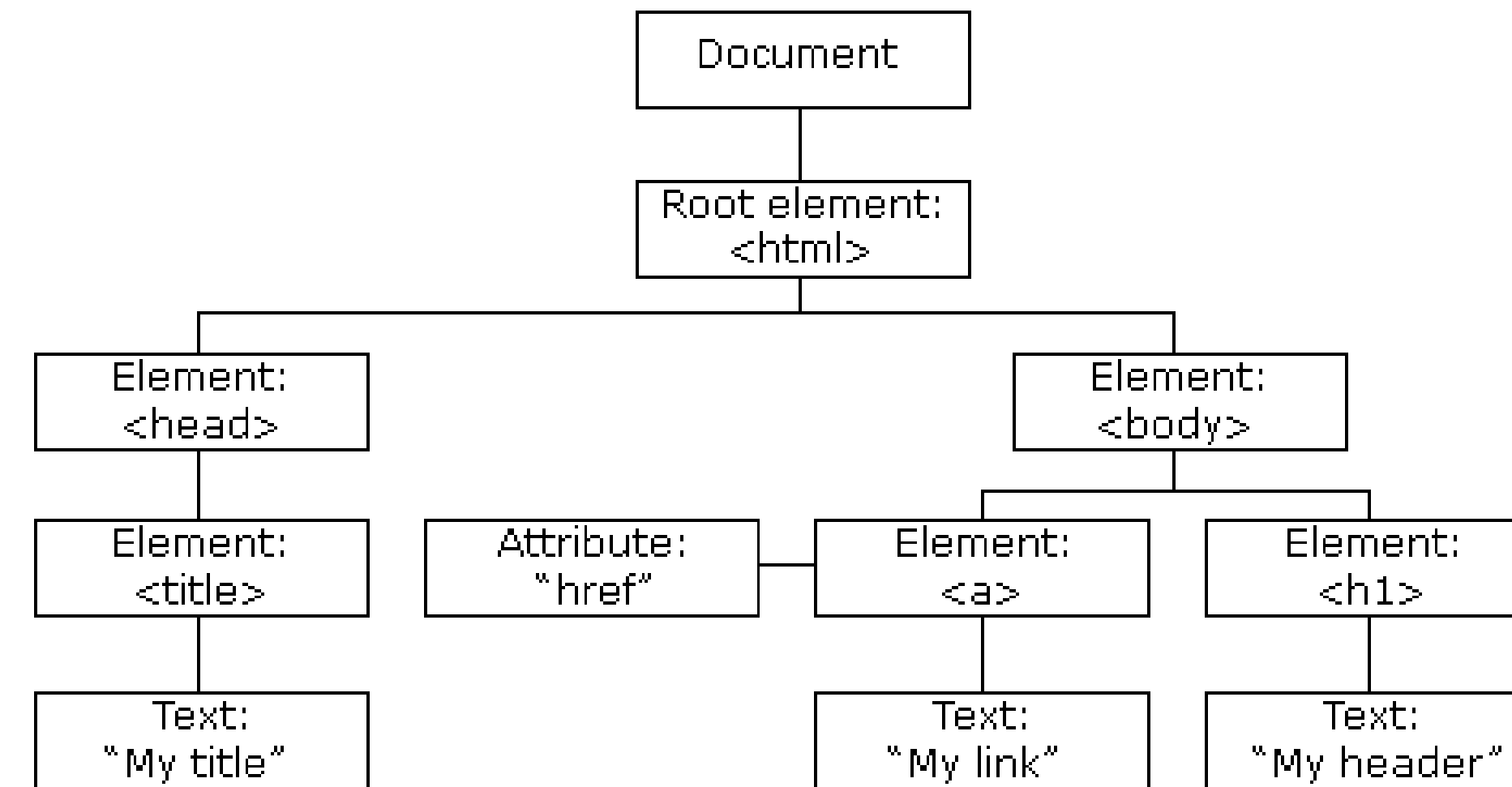
JS HTML DOM

"The W3C Document Object Model (DOM) is a platform and language-neutral interface that allows programs and scripts to dynamically access and update the content, structure, and style of a document."

HTML DOM

คือโครงสร้างวัตถุและ Programming Interface สำหรับ HTML

- ทุก HTML elements คือ Objects
- มี Properties ในทุก HTML elements
- มี Methods เพื่อใช้งานร่วมกับ HTML elements
- ทุก HTML elements มี Events

HTML DOM Methods

ส่วนที่เรากระทำ (Actions) กับ HTML elements ได้

HTML DOM Properties

คุณสมบัติและ/หรือองค์ประกอบต่างๆใน HTML elements
สามารถเข้าถึงได้โดยใช้ Get/Set หรือ วิธีที่ง่ายที่สุดคือ
innerHTML

Finding HTML Elements

Method	Description
document.getElementById(*id*)	Find an element by element id
document.getElementsByTagName(*name*)	Find elements by tag name
document.getElementsByClassName(*name*)	Find elements by class name

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Changing HTML Elements

Property	Description
element.innerHTML = *new html content*	Change the inner HTML of an element
element.attribute = new value	Change the attribute value of an HTML element
element.style.property = new style	Change the style of an HTML element

Method	Description
element.setAttribute*(attribute, value)*	Change the attribute value of an HTML element

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Adding and Deleting Elements

Method	Description
document.createElement(*element*)	Create an HTML element
document.removeChild(*element*)	Remove an HTML element
document.appendChild(*element*)	Add an HTML element
document.replaceChild(*new, old*)	Replace an HTML element
document.write(*text*)	Write into the HTML output stream

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Adding Events Handlers

Method	Description
document.getElementById(*id*).onclick = function(){*code*}	Adding event handler code to an onclick event

Common HTML Events

Here is a list of some common HTML events:

Event	Description
onchange	An HTML element has been changed
onclick	The user clicks an HTML element
onmouseover	The user moves the mouse over an HTML element
onmouseout	The user moves the mouse away from an HTML element
onkeydown	The user pushes a keyboard key
onload	The browser has finished loading the page

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Operators

JavaScript Arithmetic Operators

Arithmetic operators are used to perform arithmetic on numbers:

Operator	Description
+	Addition
-	Subtraction
*	Multiplication
**	Exponentiation (ES2016)
/	Division
%	Modulus (Division Remainder)
++	Increment
--	Decrement

JavaScript Assignment Operators

Assignment operators assign values to JavaScript variables.

Operator	Example	Same As
=	x = y	x = y
+=	x += y	x = x + y
-=	x -= y	x = x - y
*=	x *= y	x = x * y
/=	x /= y	x = x / y
%=	x %= y	x = x % y
**=	x **= y	x = x ** y

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JavaScript Comparison Operators

Operator	Description
==	equal to
===	equal value and equal type
!=	not equal
!==	not equal value or not equal type
>	greater than
<	less than
>=	greater than or equal to
<=	less than or equal to
?	ternary operator

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