

우리회사 웹으로 이해하는 프로그래밍 맛보기

JavaScript

Review

- Computational Thinking
- HTML
- CSS
- BootStrap

Recap Project

- HTML, CSS, Bootstrap을 활용해 카드 상세페이지 만들어보기
- Layout, Style, Grid는 모두 자유!
- 똑같이 만들어도 좋아요^^

JavaScript

JavaScript란?

- 객체 기반의 스크립트 프로그래밍 언어
- 웹페이지의 동적인 제어 목적
- Netscape의 Brendan Eich가 모카(Mocha)를 개발
- LiveScript -> JavaScript로 개명

HTML was like ..



And CSS was like ..



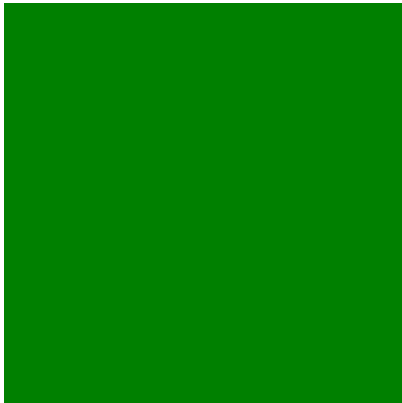
And javaScript is like ..



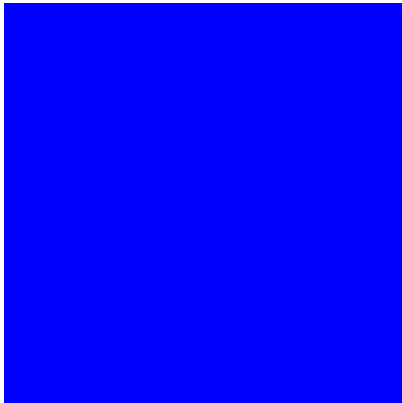
Static Web site - 1



Static Web site - 2



Static Web site - 3



Dynamic Web site



Red Green Blue

Java != javaScript

Java	vs	javaScript
Sun	개발	Brendan Eich
JVM	구동방식	Script Engine(Browser)
C	영향	C
인도	Like	인도네시아

Try "hello world!"

```
console.log("hello javaScript!");  
alert("hello javaScript!");  
document.write("hello javaScript!");
```

variable, statements, operation

```
// declare a,b,c  
var a,b,c;  
// assign a,b  
a = 3;  
b = 5;  
// assign statements with + operator  
c = a + b;
```


functions

```
function name(parameter1, parameter2, ..) {  
    // code to be executed  
}
```

functions

```
function printHello(name) {  
  console.log("hello, " + name);  
}
```

functions

```
function aweSum(num1, num2) {  
    return num1 + num2;  
}
```

Conditional statements - if, else

```
var a = 10;  
if (a===10){  
    console.log("a is 10");  
} else {  
    console.log("a is not 10");  
}
```

Conditional statements - if in else

```
var a = 10;
if (a===10){
    console.log("a is 10");
} else if (a===5){
    console.log("a is 5");
} else {
    console.log("a is neither 10 nor 5");
}
```

=? ==? ===??

- **=** : Assignment Operator(**a=10**)
- **==** : Equal Operator(**1=="1"**)
- **===** : Strict Equal Operator(**1===1**)

Conditional statements - switch

Null

```
switch (new Date().getDay()) {  
    case 0:  
    case 6:  
        console.log("Weekend!!!");  
        break;  
    case 1:  
    case 2:  
    case 3:  
    case 4:  
    case 5:  
        console.log("Weekday..");  
        break;  
}
```

loop - for

```
for (i = 1; i < 11; i++) {  
    console.log("hello for "+i+" times");  
}
```


loop - while

```
while (i<11){  
    console.log("hello");  
    i++;  
}
```

loop - break

```
for i in range(1,10+1):  
    if i == 5:  
        break  
    print("hello for "+i+" times")
```

```
for (i = 1; i < 11; i++) {  
    if (i===5) {break;}  
    console.log("hello for "+i+" times");  
}
```

loop - continue

```
for i in range(1,10+1):  
    if i%2==0:  
        continue  
    print("hello for "+i+" times")
```

```
for (i = 1; i < 11; i++) {  
    if (i%2===0) {continue;}  
    console.log("hello for "+i+" times");  
}
```

우리회사 javaScript 알아보기

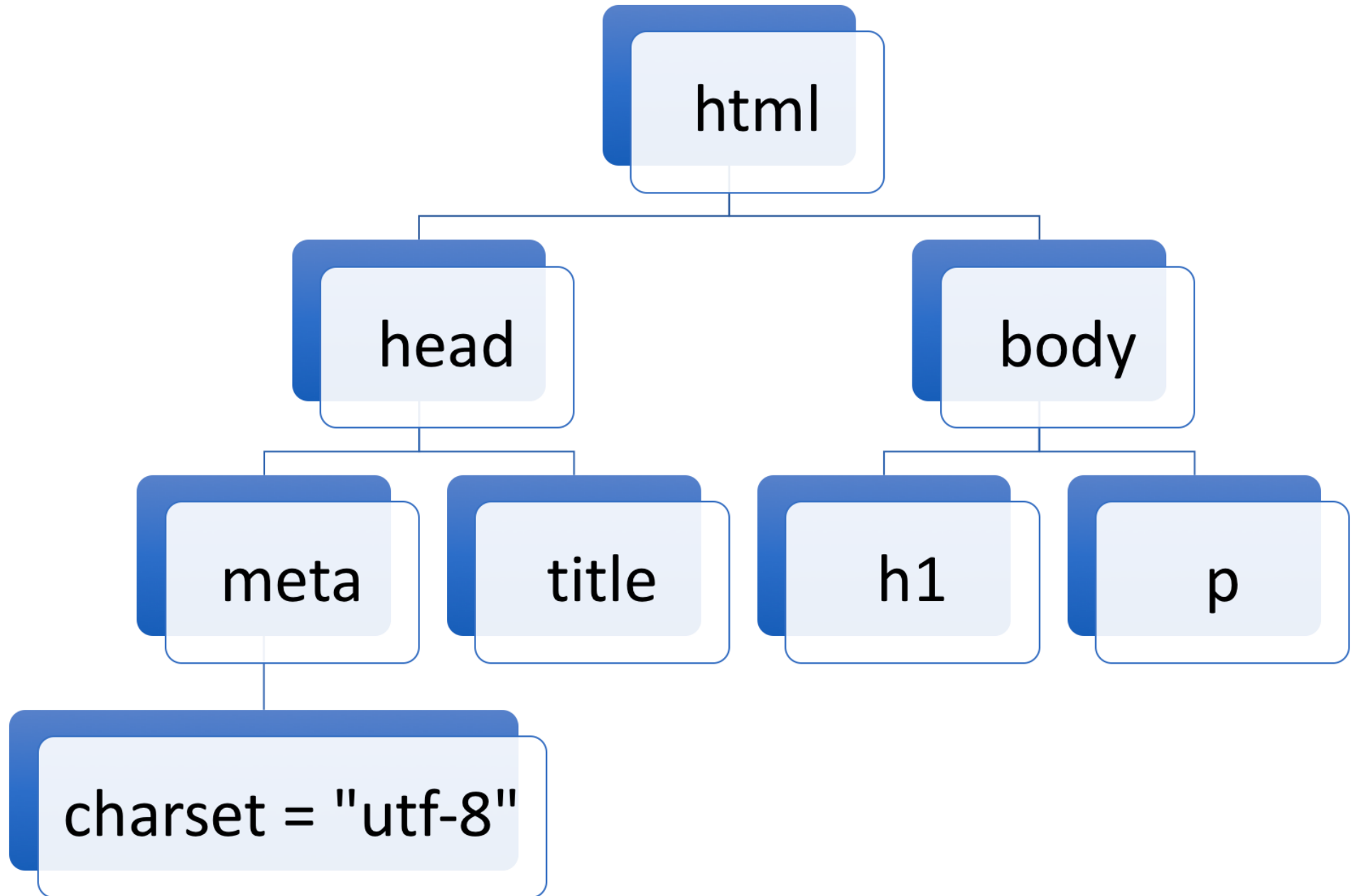
JavaScript HTML DOM

DOM

Document Object Model

```
<!doctype html>
<html>
  <head>
    <meta charset="utf-8">
    <title>My page</title>
  </head>
  <body>
    <h1>Home</h1>
    <p>Hello there!</p>
  </body>
</html>
```

DOM



with HTML DOM, javaScript can ..

- HTML 요소, 속성 생성, 변경, 삭제
- HTML 이벤트 수행
- CSS 스타일 변경

HTML Document Object

- window는 브라우저의 탭 또는 창을 의미합니다.
- document는 웹페이지의 모든 요소의 소유자입니다.
- element는 document의 하위 요소를 의미합니다.
- attribute는 element의 속성을 의미합니다.

Set document

```
<!doctype html>
<html>
  <head>
    <meta charset="utf-8">
    <title>DOM Practice</title>
  </head>
  <body>
    <div id="container">
      <h1 id="article-title"></h1>
      <p class="article-text"></p>
    </div>
  </body>
</html>
```

Find Element

```
document.getElementById(id)  
document.getElementsByTagName(tagname)  
document.getElementsByClassName(classname)
```

```
var mainArticle = document.querySelectorAll("div.main-article");
```

Change Element

```
element.innerHTML = 'new content'  
element.{{attribute}} = 'new value'  
element.setAttribute(attribute, value)  
element.style.{{property}} = 'new style'
```

Add Element

```
document.createElement(element)  
document.appendChild(element)  
document.write(text)
```

Replace and Delete Element

```
document.replaceChild(element)  
document.removeChild(element)
```

DOM Event

Mouse Event

`onclick`

`onmouseover`
`onmouseout`

`onmousedown`
`onmouseup`

DOM Event

Keyboard Event

onkeypress

onkeyup

onkeydown

DOM Event

Form Event

`onchange`

`oninput`

`onselect`

`onsubmit`

Add Event Handler

```
element.onclick = function() {alert('hello')}
```

Add Event Listener

```
element.addEventListener("click", function() {alert('hello')});
```


Countdown with javaScript

29일 21시간 54분 53초

add countdown feature

```
<p id="demo"></p>

<script>
var countdownDate = new Date("Sep 14, 2018 17:50:25")
.getTime();

var x = setInterval(function() {
}, 1000);
</script>
```

add countdown feature

```
var now = new Date().getTime();

var distance = countDownDate - now;

var days = Math.floor(distance / (1000 * 60 * 60 * 24));
var hours = Math.floor((distance % (1000 * 60 * 60 * 24)) / (1000 * 60 * 60));
var minutes = Math.floor((distance % (1000 * 60 * 60)) / (1000 * 60));
var seconds = Math.floor((distance % (1000 * 60)) / 1000);

document.getElementById("demo").innerHTML =
days + "일 "
+ hours + "시간 "
+ minutes + "분 "
+ + seconds + "초 ";

if (distance < 0) {
    clearInterval(x);
    document.getElementById("demo").innerHTML = "EXPIRED";
}
```

사용자 입력정보 표출

```
<script>
  document.getElementById('submit').onclick = function(){
    var inputName = document.getElementById('name').value
    var inputEmail = document.getElementById('email').value
    alert('신청해주셔서 감사합니다 ' + inputName + ' 님. \n 제출해주신 '
  }
</script>
```

실무에서의 활용방안?!

앞서 만든 프로젝트에 javaScript 한 스푼 첨가하기

Thank you!