

# Fastcampus

## 퍼포먼스 마케터를 위한 업무자동화 실전 CAMP

### Day3. js for Google Apps Script



# Homework Review

<https://docs.google.com/spreadsheets/d/10sHOqSxiA3lvnIfJNijUS2XuWVRz8zm9IZyA3RDyskc/edit?usp=sharing>

# JavaScript for Google Apps Script

# javaScript from scratch

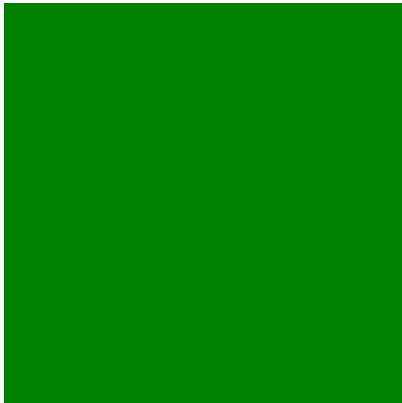
## JavaScript란?

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

## Static Web site - 1

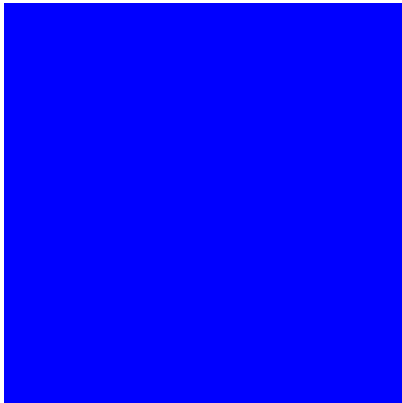


## Static Web site - 2

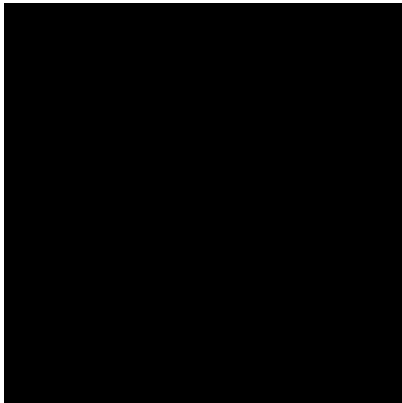




## Static Web site - 3



## Dynamic Web site



Red Green Blue

HTML is like ..



And CSS is like ..



**And javaScript is like ..**



## Java != javaScript

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

## Try "hello world!"

```
print("hello python!")
```

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

## variable, statements, operation

```
a=3  
b=5  
c=a+b
```

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



## functions

```
def name(parameter1, parameter2, ..):  
    # code to be executed
```

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

## functions

```
def print_hello(name):  
    print("hello, "+name)
```

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

## functions

```
def awesum(num1, num2):  
    return num1 + num2
```

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

# Conditional statements - if, else

```
a = 10
if a==10:
    print("a is 10")
else:
    print("a is not 10")
```

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

# Conditional statements - if in else

```
a = 10
if a==10:
    print("a is 10")
elif a==5:
    print("a is 5")
else:
    print("a is neither 10 nor 5")
```

```
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");
}
```

# 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 in range(1,10+1):  
    print("hello for " + i + " times")
```

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

## loop - while

```
while i<10+1:  
    print("hello")  
    i+=1
```

```
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");  
}
```

**=? ==? ===??**

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

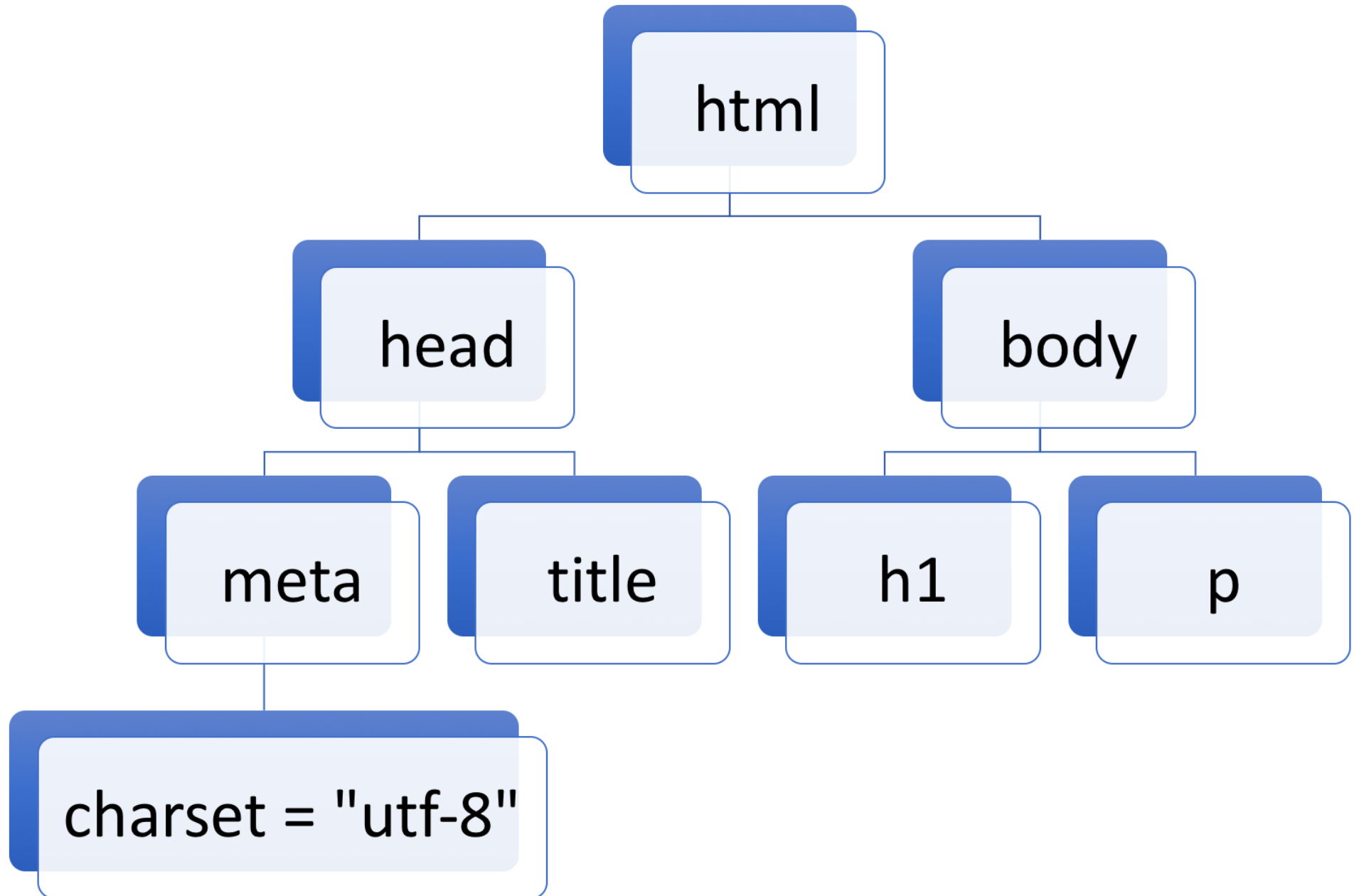
# JavaScript HTML DOM

# 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')});
```