



# UI/UX

03



# 자바스크립트의 객체

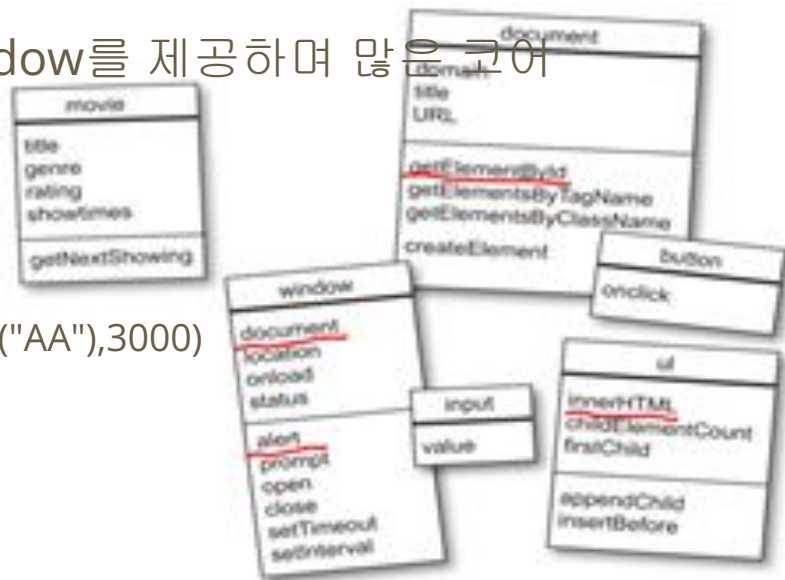
- 객체가 변수에 할당될 때 그 변수는 객체 자체가 아니라 객체에 대한 레퍼런스를 저장
- 레퍼런스를 객체에 대한 포인터로 간주

```
<script>
<html>
<head>
  <meta charset="UTF-8">
  <title>생성자 TEST</title>
  <script>
    function stud(name,score,grade)
    {
      this.name=name;
      this.score=score;
      this.grade=grade;
      this.comment=function(){
        alert(`${this.name} 학생의 점수는 ${this.score}이고 등급은 ${this.grade} 입니다.`);
      };
    }
    let stud1=new stud("김하나",98,"A");
    let stud2=new stud("이하나",35,"F");
    let stud3=new stud("박하나",87,"B");
    let stud4=new stud("최하나",77,"C");

    stud1.comment();
    stud2.comment();
    stud3.comment();
    stud4.comment();
  </script>
</head>
<body>
  생성자 TEST
</body>
</html>
```

# window 객체

- window 객체는 global object 이다.
- document.getElementById로 부터 돌려받은 엘리먼트들과 마찬가지로 document와 window도 객체들이다.
- global environment 객체이며 main window를 제공하며 많은 코어 프로퍼티와 메소드를 포함하고 있다.
  - location, status, onload, document
  - alert, prompt, open, close  
setTimeout, setInterval
    - ex) window.setTimeout(()=>console.log("AA"),3000)



# document 객체

- document 객체는 DOM을 접근(access)하는데 사용된다.
- 앞에서 보았듯이 사실 document 객체는 window 객체의 프로퍼티이다.
- 물론 window.document 처럼 사용하지는 않으며 보통 window는 생략한다.
- getElementById 에 의해 반환되는 엘리먼트 또한 객체이다.
- 프로퍼티와 메소드
  - domain, title, URL
  - getElementById, getElementsByTagName, getElementsByClassName  
createElement

# 태그 객체 ex) P태그

- 프로퍼티와 메소드
  - innerHTML, childElementCount, firstChild
  - appendChild, insertBefore, setAttribute, getAttribute



bootstrap



🔍 전체

🖼️ 이미지

📺 동영상

📄 도서

📍 지도

⋮ 더보기

도구

검색결과 약 249,000,000개 (0.27초)



getbootstrap.com

https://getbootstrap.com ▼

## Bootstrap · The most popular HTML, CSS, and JS library in the ...

**Bootstrap** utilizes Sass for a modular and customizable architecture. Import only the components you need, enable global options like gradients and shadows, and ...

### V4.6.x docs

Alerts - Layout docs - Download - Examples - Contents - JavaScript

### Get started with Bootstrap

Bootstrap is a powerful, feature-packed frontend toolkit.

### 5.1

Download - Navbar - Examples - Contents - JavaScript - ...

### Introduction



**New in v5.3** Color mode support, expanded color palette, and more!



# Build fast, responsive sites with Bootstrap

Powerful, extensible, and feature-packed frontend toolkit. Build and customize with Sass, utilize prebuilt grid system and components, and bring projects to life with powerful JavaScript plugins.

```
$ npm i bootstrap@5.3.0-alpha1
```



[Read the docs](#)

Currently **v5.3.0-alpha1** · [Download](#) · [v4.6.x docs](#) · [All releases](#)

2. **Include Bootstrap's CSS and JS.** Place the `<link>` tag in the `<head>` for our CSS, and the `<script>` tag for our JavaScript bundle (including Popper for positioning dropdowns, poppers, and tooltips) before the closing `</body>`. Learn more about our [CDN links](#).

```
<!doctype html>
<html lang="en">
  <head>
    <meta charset="utf-8">
    <meta name="viewport" content="width=device-width, initial-scale=1">
    <title>Bootstrap demo</title>
    <link href="https://cdn.jsdelivr.net/npm/bootstrap@5.3.0-alpha1/dist/css/bootstrap.min."
  </head>
  <body>
    <h1>Hello, world!</h1>
    <script src="https://cdn.jsdelivr.net/npm/bootstrap@5.3.0-alpha1/dist/js/bootstrap.bund
  </body>
</html>
```



Include Bootstrap's CSS and JS. Place the `<link>` tag in the `<head>` for our CSS, and the `<script>` tag for our JavaScript bundle (including Popper for positioning dropdowns, poppers, and tooltips) before the closing `</body>`. Learn more about our [CDN links](#).

부트스트랩의 CSS와 JS를 포함한다. CSS에 대한 <링크> 태그와 자바스크립트 번들에 대한 <스크립트> 태그(드롭다운, 팝퍼, 툴팁을 배치하기 위한 포퍼 포함)를 닫는 </body> 전에 배치한다. CDN 링크에 대해 자세히 알아보십시오.



# CDN

- CDN은 Content Delivery Network 즉, 콘텐츠 전송 네트워크의 약자
- 콘텐츠를 캐싱할 수 있는 캐시기능을 갖추고 있으며 최종 사용자와 가까운 위치에서 사용자에게 콘텐츠를 제공할 수 있다.
- 같은 웹 서버에 접속하는 사용자 수가 늘어나 부하가 증가되는 현상 해소
- 먼 위치의 서버의 접속으로 인한 지연 발생 해소 가능
- 대역폭 비용 감소

**bootstrapEx1.html - button**

**bootstrapEx2.html - alert**

**bootstrapEx3.html - navbar demo2**

**bootstrapEx4.html - navs & tabs**

- data-bs-target 조작해 보기
- + 자신의 이름 탭 추가하기

# bootstrap icon

https://www.bootstrap

[Icons](#) / Arrow through heart fill

## Arrow through heart fill

Tags: cupid, love, valentine


Category: Arrows, Love



### Examples

 Heading

 Smaller heading

Inline text 

Example link text 

 Button  Button  Button



Adobe Creative Cloud for Teams. Put creativity to work.

[ads via Carbon](#)


### Download

Download the SVG to use or edit.

[Download SVG](#)

### Icon font

Using the web font? Copy, paste, and go.

```
<i class="bi bi-arrow-through-heart-fill">< 
```

### Code point

Unicode: **U+F700**


CSS: **\F700**

JS: **\uF700**

HTML: **&#xF700;**

### Copy HTML

Paste the SVG right into your project's code.

```
<svg xmlns="http://www.w3.org/2000/svg" wid   
<path fill-rule="evenodd" d="M2.854 15.854A.5  
</svg>
```

webpack  
Parcel  
Vite  
Accessibility  
RFS  
RTL  
Contribute

## Customize

Overview  
Sass  
Options  
Color  
Color modes  
Components  
CSS variables  
Optimize

## Layout

### Breakpoints

Containers  
Grid

# Available breakpoints

Bootstrap includes six default breakpoints, sometimes referred to as *grid tiers*, for building responsively. These breakpoints can be customized if you're using our source Sass files.

Breakpoint	Class infix	Dimensions
Extra small	<i>None</i>	<576px
Small	<i>sm</i>	≥576px
Medium	<i>md</i>	≥768px
Large	<i>lg</i>	≥992px
Extra large	<i>xl</i>	≥1200px
Extra extra large	<i>xxl</i>	≥1400px

Each breakpoint was chosen to comfortably hold containers whose widths are multiples of 12. Breakpoints are also representative of a subset of common device sizes and viewport dimensions—they don't specifically target every use case or device. Instead, the ranges provide a strong and consistent foundation to build on for nearly any device.

These breakpoints are customizable via Sass—you'll find them in a Sass map in our `_variables.scss` stylesheet.

Between 1

## Components

Accordion  
Alerts  
Badge  
Breadcrumb  
Buttons  
Button group  
**Card**  
Carousel  
Close button  
Collapse  
Dropdowns  
List group  
Modal  
Navbar  
Navs & tabs  
Offcanvas  
Pagination  
Placeholders  
Progress

Just like with card groups, card footers will automatically line up.

