

Bootstrap Get Started

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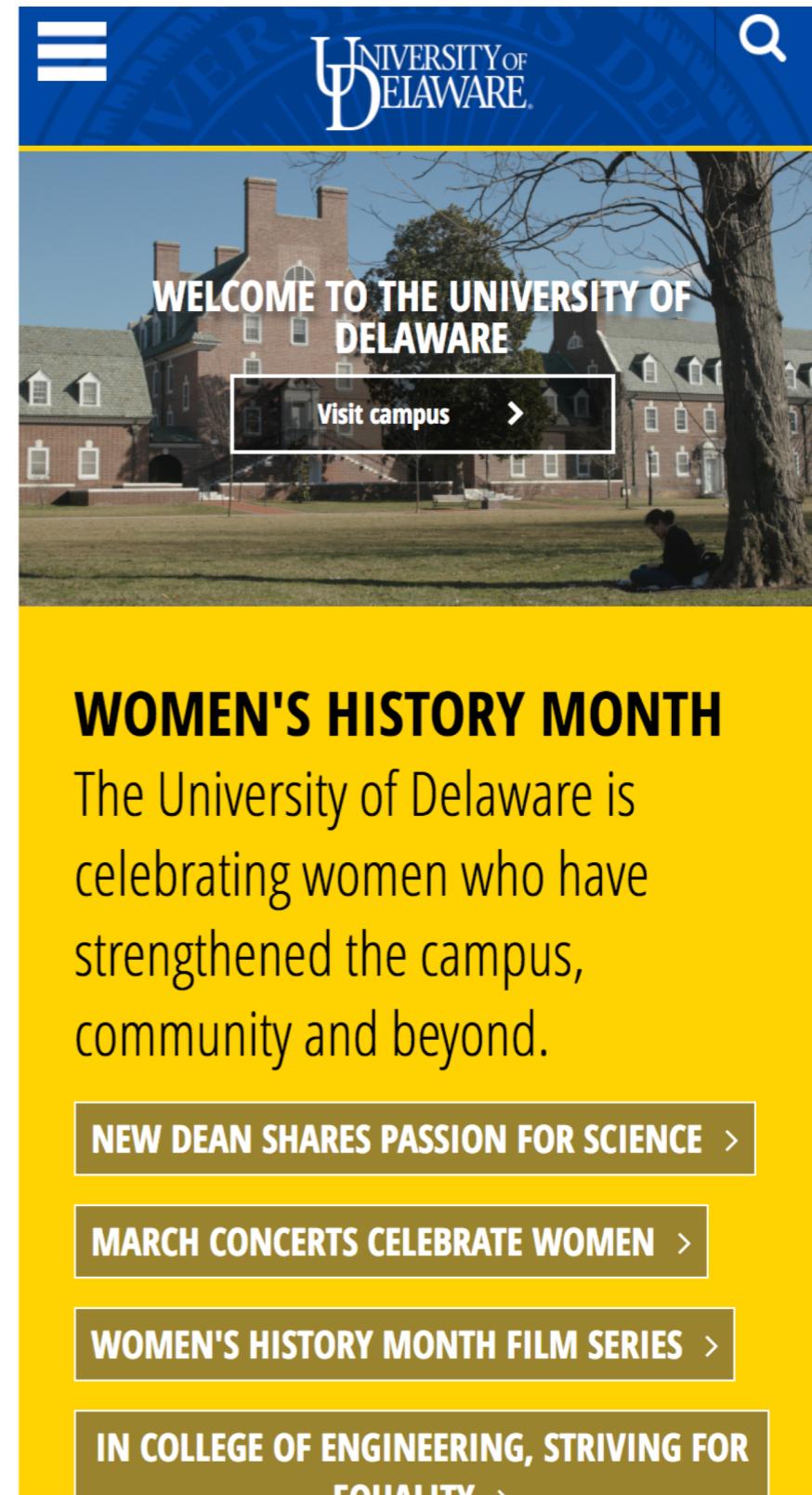
What is Bootstrap?



- Bootstrap is a free front-end **framework** for faster and easier web development.
- Bootstrap includes HTML and CSS based design templates for typography, forms, buttons, tables, navigation, modals, image carousels and many other, as well as optional JavaScript plugins.
- Bootstrap also gives you the ability to easily create **responsive designs**.

What is Responsive Web Design?

Responsive web design is about creating websites which automatically adjust themselves to look good on all devices, from small phones to large desktops.



Bootstrap History

- Bootstrap was developed by Mark Otto and Jacob Thornton at Twitter, and released as an open source product in August 2011 on GitHub.
- In June 2014 Bootstrap was the No.1 project on GitHub!

Why Use Bootstrap?

- **Easy to use:** Anybody with just basic knowledge of HTML and CSS can start using Bootstrap
- **Responsive features:** Bootstrap's responsive CSS adjusts to phones, tablets, and desktops
- **Mobile-first approach:** In Bootstrap 3, mobile-first styles are part of the core framework
- **Browser compatibility:** Bootstrap is compatible with all modern browsers (Chrome, Firefox, Internet Explorer, Safari, and Opera)

Where to Get Bootstrap?

There are two ways to start using Bootstrap on your own web site.

You can:

- Download Bootstrap from getbootstrap.com
- Include Bootstrap from a CDN

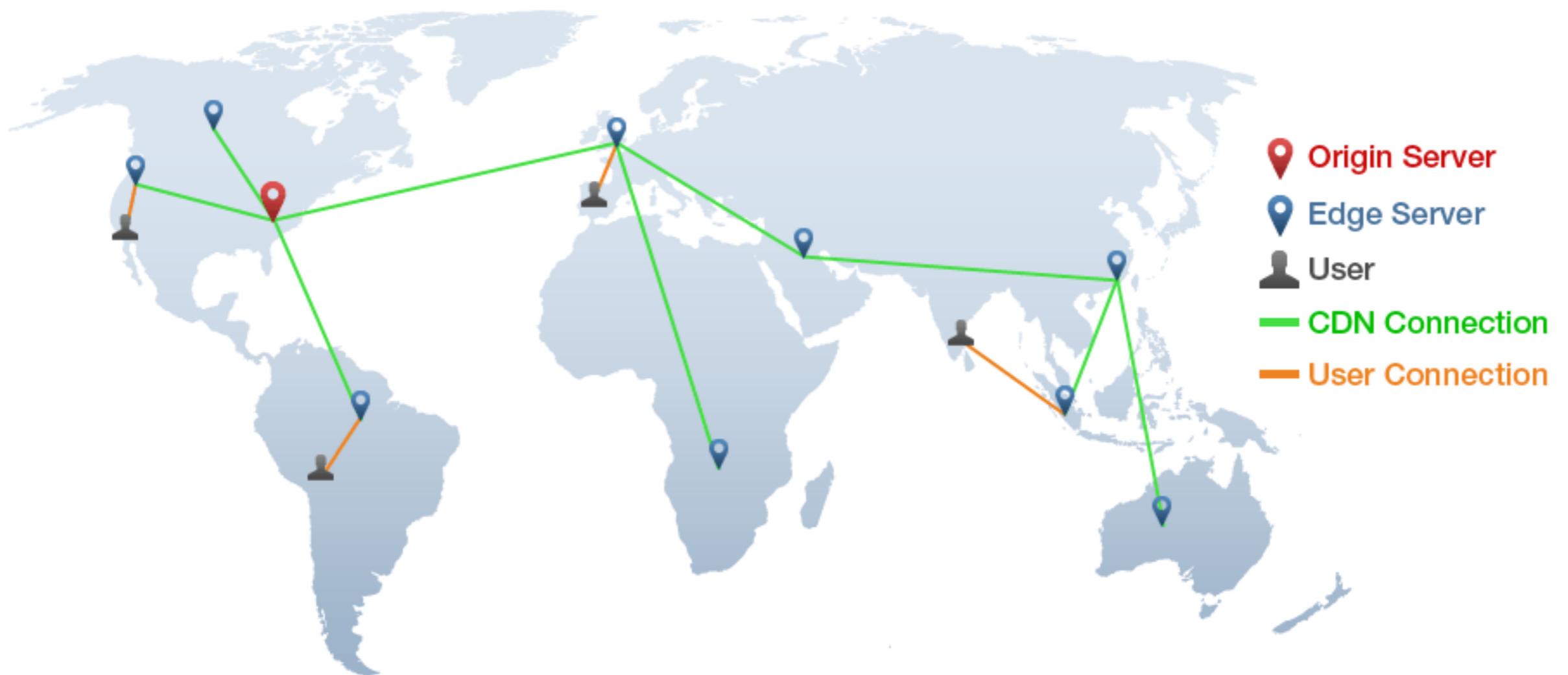
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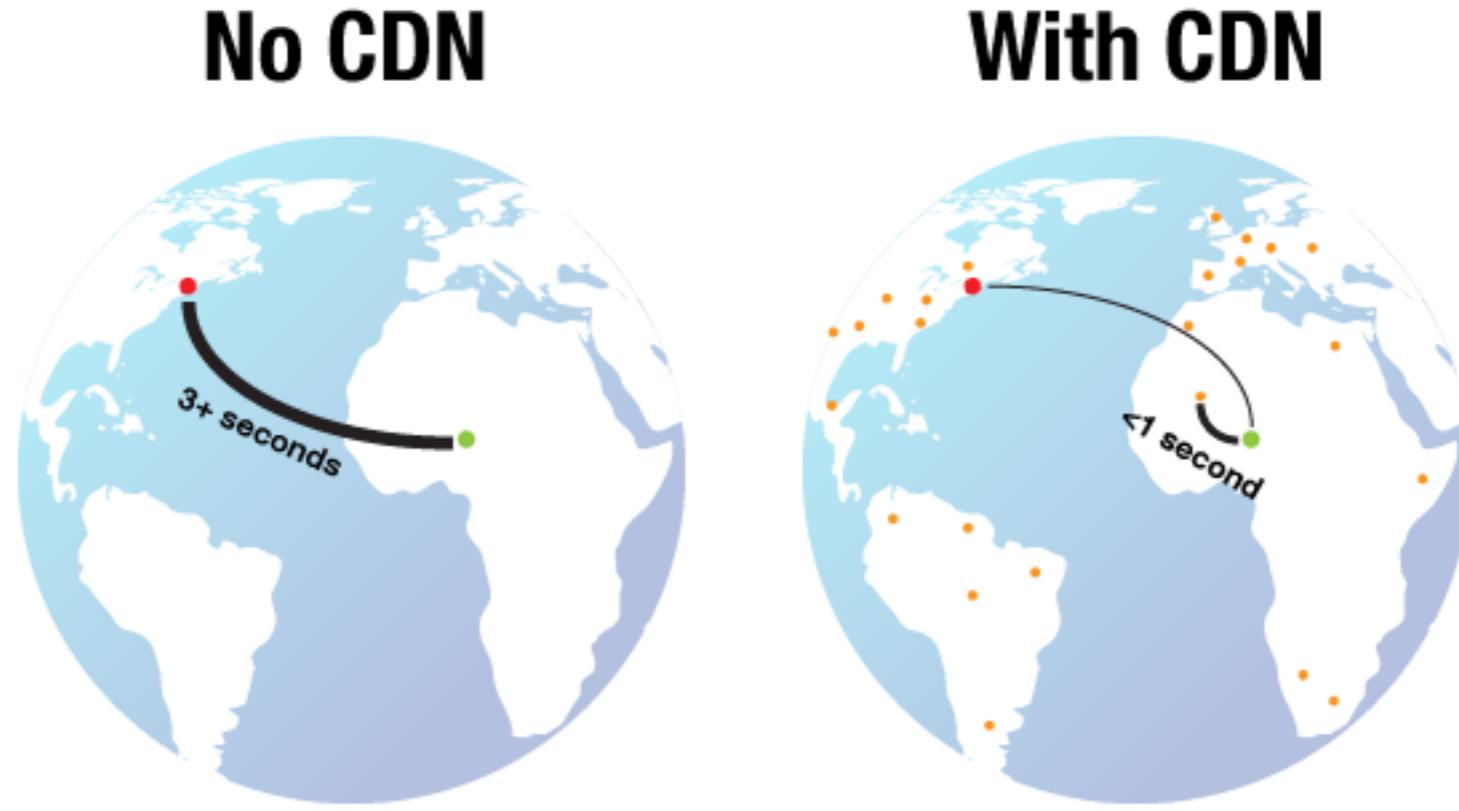
- Download Bootstrap from getbootstrap.com
- **Include Bootstrap from a CDN**

Content Delivery Network



A CDN is a geographically distributed network of proxy servers and their data centers.

Content Delivery Network



Another advantage of using the Bootstrap CDN:

Many users already have downloaded Bootstrap from MaxCDN when visiting another site. As a result, it will be loaded from cache when they visit your site, which leads to faster loading time. Also, most CDN's will make sure that once a user requests a file from it, it will be served from the server closest to them, which also leads to faster loading time.

Pure HTML

```
<head>
|   <title>Bootstrap and FontAwesome Exercise</title>
|</head>
```

```
<head>
|   <!-- Required meta tags -->
|   <meta charset="utf-8">
|   <meta name="viewport" content="width=device-width, initial-scale=1, shrink-to-fit=no">
|
|   <!-- Bootstrap CSS -->
|   <link rel="stylesheet" href="https://maxcdn.bootstrapcdn.com/bootstrap/4.0.0/css/bootstrap.min.css">
|   <title>Bootstrap Grid Exercise</title>
|</head>
```

HTML with Bootstrap

Pure HTML

1. Add responsive <meta> tag

```
<meta name="viewport" content="width=device-width, initial-scale=1">
```

Bootstrap is developed *mobile first*, a strategy in which we optimize code for mobile devices first and then scale up components as necessary using CSS media queries. To ensure proper rendering and touch zooming for all devices, **add the responsive viewport meta tag** to your <head>.

HTML with Bootstrap

Pure HTML

1. Add responsive <meta> tag

```
<meta name="viewport" content="width=device-width, initial-scale=1">
```

- The width=device-width part sets the width of the page to follow the screen-width of the device (which will vary depending on the device).
- The initial-scale=1 part sets the initial zoom level when the page is first loaded by the browser.

HTML with Bootstrap

Pure HTML

1. Add responsive <meta> tag

```
<meta name="viewport" content="width=device-width, initial-scale=1">
```

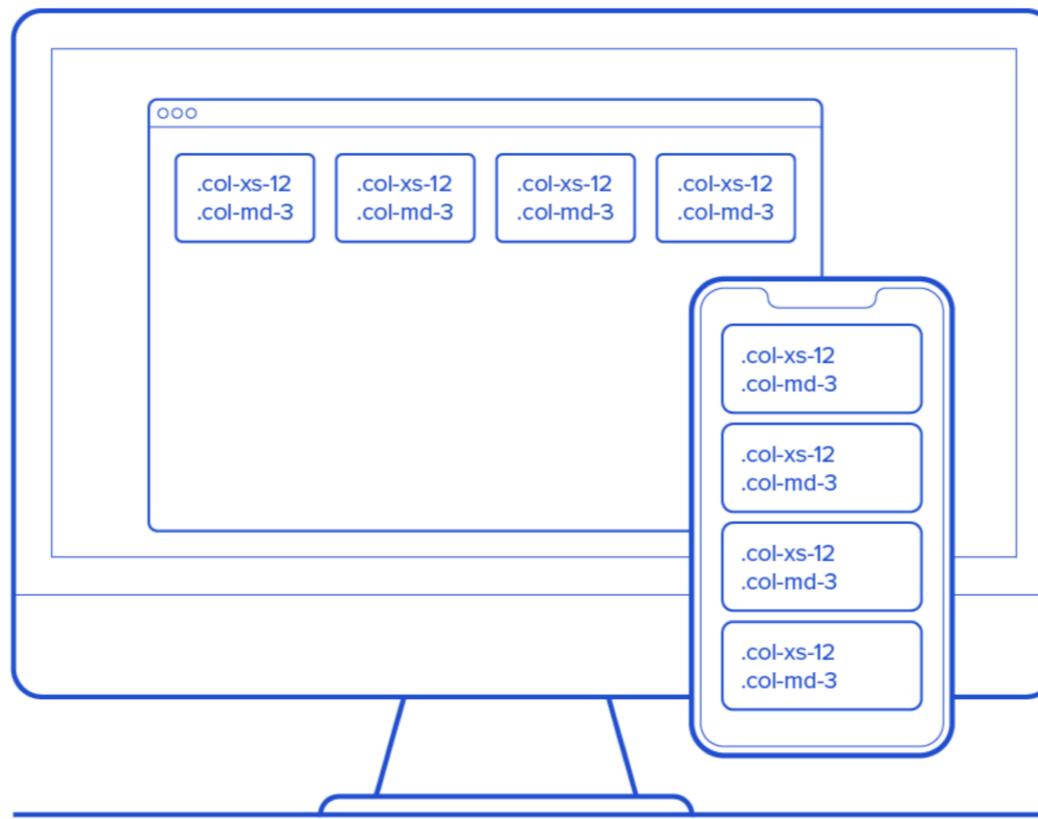
2. Include Bootstrap from CDN

```
<link rel="stylesheet" href="https://maxcdn.bootstrapcdn.com/bootstrap/4.0.0-beta.2/css/bootstrap.min.css" integrity="sha384-PsH8R72JQ3SOasVfCkV4c+Lm1ZqcdB0P3k26" crossorigin="anonymous">
```

Just google “bootstrap cdn” and open the first website.

HTML with Bootstrap

Container



Containers are the most basic layout element in Bootstrap and are required when using default grid system. Choose from a responsive, fixed-width container (meaning its max-width changes at each breakpoint) or fluid-width (meaning it's 100% wide all the time).

Bootstrap Grid System

- Bootstrap's grid system allows up to 12 columns across the page, which will re-arrange automatically depending on the screen size.

	Extra small devices Phones (<768px)	Small devices Tablets (≥768px)	Medium devices Desktops (≥992px)	Large devices Desktops (≥1200px)
Grid behavior	Horizontal at all times	Collapsed to start, horizontal above breakpoints		
Container width	None (auto)	750px	970px	1170px
Class prefix	.col-xs-	.col-sm-	.col-md-	.col-lg-

- Basic Structure: a container, a row, and columns

```
<div class="container">
  <div class="row">
    <div class="col-*-*"></div>
  </div>
  <div class="row">
    <div class="col-*-*"></div>
    <div class="col-*-*"></div>
    <div class="col-*-*"></div>
  </div>
  <div class="row">
    ...
  </div>
</div>
```

```
<div class="col-sm-3 col-md-6">....</div>
<div class="col-sm-9 col-md-6">....</div>
```

"at the small size, look at classes with -sm- in them and use those. At the medium size, look at classes with -md- in them and use those" See [an example](#)⁹