

# Bootstrap

CSCI P-14300

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# Overview

- What is Bootstrap?
- Why should I use Bootstrap?
- How do I use Bootstrap?
- Closing remarks

**What is Bootstrap?**

# What is Bootstrap?



Bootstrap is the most popular HTML, CSS, and JS framework for developing responsive, mobile first projects on the web.



# What is Bootstrap?

- Bootstrap makes styling relatively complex websites significantly easier.
- Bootstrap emphasizes responsive web design.
- Bootstrap is open source.
  - <https://github.com/twbs/bootstrap/tree/v3-dev>

**Why Use Bootstrap?**

# Why Use Bootstrap?

- **Simplifies web design and styling process**
  - CSS and JS for styles, design functionality
    - Typography, Dropdown menus, Tabs, etc.
  - Don't reinvent the wheel
  - Themes (paid)
  - Templates (free)
- **Extensive online resources**
  - Official documentation, getting started guide
  - Third-party tutorials
  - StackOverflow

# Why Use Bootstrap?

The image shows a screenshot of a social media application built with Bootstrap. The interface is clean and modern, with a blue header bar containing navigation links (Home, Profile, Messages, Docs) and a search bar. The main content area is divided into three columns. The left column features a user profile for Dave Gamache, including a profile picture, bio, and statistics (12M friends, 1 enemy). Below the profile is an 'About' section with location and activity information, and a 'Photos' gallery. The middle column displays a message thread with a 'Message' input field and a camera icon. The message content includes a profile picture of Dave Gamache, a timestamp of '4 min', and a paragraph of Lorem Ipsum text. Below the text are two images: a landscape with a lake and mountains, and a cave interior. Further down are two more images: a building at night and a road through a forest. The right column contains a yellow notification box, a 'Sponsored' advertisement for Iceland featuring a yellow lighthouse and a 'Buy a ticket' button, and a 'Likes' section for a post by Jacob Thornton, showing likes from Mark Otto and Jacob Thornton. At the bottom right, there is a footer with copyright information and various links.

oooo Home Profile Messages Docs Search

Message

**Dave Gamache** 4 min  
Aenean lacinia bibendum nulla sed consectetur. Vestibulum id ligula porta felis euismod semper. Morbi leo risus, porta ac consectetur ac, vestibulum at eros. Cras justo odio, dapibus ac facilisis in, egestas eget quam. Vestibulum id ligula porta felis euismod semper. Cum sociis natoque penatibus et magnis dis parturient montes, nascetur ridiculus mus.

**Jacon Thornton:** Donec id elit non mi porta gravida at eget metus. Vivamus sagittis lacus vel augue laoreet rutrum faucibus dolor auctor. Donec ullamcorper nulla non metus auctor fringilla. Praesent commodo cursus magna, vel scelerisque nisl consectetur et. Sed posuere consectetur est at lobortis.

**Mark Otto:** Lorem ipsum dolor sit amet, consectetur adipiscing elit. Fusce dapibus, tellus ac cursus commodo, tortor mauris condimentum nibh, ut fermentum massa justo sit amet risus.

**Jacob Thornton** 12 min  
Donec id elit non mi porta gravida at eget metus. Integer posuere erat a ante venenatis dapibus posuere velit aliquet. Cum sociis natoque penatibus et magnis dis parturient montes, nascetur ridiculus mus. Morbi leo risus, porta ac consectetur ac, vestibulum at eros. Lorem ipsum dolor sit amet, consectetur adipiscing elit.

**Visit your profile!** Check your self, you aren't looking well.

**Sponsored**

**It might be time to visit Iceland.**  
Iceland is so chill, and everything looks cool here. Also, we heard the people are pretty nice. What are you waiting for?  
[Buy a ticket](#)

**Likes - View All**

**Jacob Thornton** @fat  
[Follow](#)

**Mark Otto** @mdo  
[Follow](#)

Dave really likes these nerds, no one knows why though.

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# Why Use Bootstrap?

The screenshot displays the 'Start Bootstrap' website interface. At the top, there is a navigation bar with 'Start Bootstrap' on the left and 'Themes', 'Resources', 'Articles', and 'Contact' in the center. On the right side of the navigation bar, there is a 'Premium' option with a star icon and a search icon.

The main content area features a grid of nine theme cards, each with a preview image, a title, a brief description, and a 'PREVIEW & DOWNLOAD' button:

- New Age:** An app landing page theme. Preview image shows a smartphone displaying a 'HAPPY' app.
- Creative:** A one-page creative theme. Preview image shows a laptop with a 'Creative' theme overlay.
- Clean Blog:** A clean blog theme. Preview image shows a blog post with the text 'Man must explore, and this is exploration at its greatest'.
- Agency:** A one-page agency theme. Preview image shows a dark-themed agency landing page with the text 'Welcome To Our Studio! IT'S NICE TO MEET YOU'.
- Freelancer:** A one-page freelancer theme. Preview image shows a teal-themed freelancer landing page with the text 'START BOOTSTRAP'.
- Scrolling Nav:** A scrolling navigation template. Preview image shows a white page with a 'Scrolling Nav' section.
- Grayscale:** A one-page grayscale theme. Preview image shows a dark, grayscale-themed landing page with the text 'GRAYSCALE'.
- SB Admin 2:** A dashboard theme. Preview image shows a complex dashboard with various charts and data tables.
- Landing Page:** A landing page theme. Preview image shows a landing page with a hand holding a pen and a smartphone.

# Why Use Bootstrap?

The image displays a screenshot of the NBA website on a desktop browser, illustrating its responsive design. The website features a blue header with the NBA logo and navigation links. Below the header, there are sections for "ALL GAMES", "MY GAMES", and "NBA SUMMER LEAGUE 2017". The main content area includes a "Blogtable: How Will Paul Trade Affect Western Conference?" article, a "MY NBA" section with a "NEVER MISS A MOMENT" banner, and a "LATEST NBA NEWS" section with articles like "Clippers trade Paul to Rockets in multi-player deal" and "Philips Arena to feature NBA's first courtside bar".

Overlaid on the right side of the image is a browser developer tool showing the HTML and CSS of the page. The "Elements" panel highlights a Bootstrap class, and the "Styles" panel shows the default Bootstrap styling for a `body` element, including a sans-serif font family, normal weight, and a white background color. This demonstrates how Bootstrap provides a consistent and professional look for web applications.

**How Do I Use Bootstrap?**

# Getting Started

- **Several installation methods**
  - **Precompiled**
    - Direct download
    - Include from CDN
  - **Self-compile**
    - <http://getbootstrap.com/getting-started/#grunt>
- **For our purposes**
  - **Maximize simplicity!**



# Getting Started

- **CDN**
  - Content Delivery Network
  - Method for quickly distributing data to users
- **Bootstrap on CDN**
  - CSS
  - JavaScript
    - Make sure to include jQuery as well

# Getting Started

```
<link rel="stylesheet" href="https://maxcdn.bootstrapcdn.com/bootstrap/3.3.7/css/bootstrap.min.css">
```

# Getting Started

- What do I need to link?
  - Depends on your needs
    - CSS
    - JS
      - jQuery

# Getting Started

```
<!-- JQuery -->  
<script src="https://code.jquery.com/jquery-3.2.1.min.js"></script>  
  
<!-- Bootstrap JS -->  
<script src="https://maxcdn.bootstrapcdn.com/bootstrap/3.3.7/js/bootstrap.min.js"></script>  
  
<!-- Bootstrap CSS -->  
<link rel="stylesheet" href="https://maxcdn.bootstrapcdn.com/bootstrap/3.3.7/css/bootstrap.min.css">
```

**Demo**

**Exercise**

# Exercise

- Using Bootstrap CSS and JS, create a (beautiful!) website
- No need for back-end (Flask)
  - Build on Project 0
  - Make something new
- Experiment with Bootstrap CSS and JS
  - <http://getbootstrap.com/javascript/>
    - Tabs, Dropdowns, Tooltips, Alerts
  - <http://getbootstrap.com/css/>
    - Tables, Typography, Grid