

# WEB FRAMEWORKS

# WHAT IS A FRAMEWORK?

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- Starting point to build rich, complex websites and applications
- Free, open-sourced code
- Two main terms: **CSS framework** and **JavaScript framework**
- **CSS frameworks**: set of well structured **CSS styles, grid classes**, and **JavaScript components** (optional)
- **JavaScript frameworks**: controls, functions and methods to develop Single Page Application (SPA)

# CSS FRAMEWORKS

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- Bootstrap  
Twitter ([getbootstrap.com](https://getbootstrap.com))
- Foundation  
Zurb ([foundation.zurb.com](https://foundation.zurb.com))
- Skeleton  
Dave Gamache ([getskeleton.com](https://getskeleton.com))
- UIKit  
YOOtheme (<https://getuikit.com>)

# JAVASCRIPT FRAMEWORKS

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- Angular.js  
Google
- React.js  
Facebook
- Vue.js  
Evan You (Formerly of Google)
- Backbone
- Ember

## REASONS TO USE A FRAMEWORK

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- Less code to write, save time and money
- No reinventing the wheel
- Cross-browser tested, bugs fixed, upgrades offered
- Easier for new people to take over a project  
Familiarity with the framework, well documented

# REASONS TO AVOID FRAMEWORKS

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- **Websites tend look the same**
- Websites can load slowly  
Although content delivery networks (CDNs) help
- Bloat is common  
Thousands of lines of code:
  - Bootstrap v4.1 ~9,600
  - UIKit v3.0 ~11,800
  - Foundation v6.4 ~5,800

# HOW TO PICK A FRAMEWORK

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- Can be challenging
- Requirements of the project
- Design  
How much code will you need to write on top of the framework?
- Experience with the framework
- Support and maintenance of the framework
- Community around the framework

**QUESTIONS?**