



Web Development

Bootstrap & Responsive



Two Big Approaches to Mobile

- Build a separate mobile-compatible website (“m.”) or mobile app (or both)
- Responsive Design
- Comparing responsive design and “m.” websites

Which is Better?

“It depends”

[Comparing responsive design and “m.” websites](#)



Responsive Design

Defined by Three characteristics

- Flexible grid-based layout
- Images that resize
- Media queries (CSS3)

[Good article about Responsive design.](#)



What is Bootstrap?

- Bootstrap is a free and open source responsive design framework for building web sites and web applications.
- It is one of the most popular projects on GitHub.



What is Bootstrap 4?

- A fully functional grid system with 5 different sizes and 4 breakpoints.
- Base CSS includes standardized styling for forms, buttons, images, headings, navigation systems, etc.
- Sizing now managed in ems/rms, not pixels.
- CSS customization through Sass (LESS support dropped!)
- jQuery-driven components include dropdown menus, tooltips, popovers, alerts, image carousel, accordion panels, etc.
- Distributed under MIT license, 2015 Twitter.



Creation Story

- Started by Mark Otto and Jacob Thornton, while working at Twitter, as internal tool
- Released Bootstrap in 2011
- Otto & Thornton left Twitter in 2012
- Core team consists of Otto, Thornton, and 7 other members.



When is Bootstrap Awesome?

- You want to build a responsive front-end quickly.
- You need lots of styling out of the box.
- You love open source.
- You want to build with an industry leader.



Demo

Demo