

The 5 Most Popular Front-end Frameworks Compared

There's a deluge of CSS front-end frameworks available nowadays. But the number of really good ones can be narrowed down to just a few. In this article, I'll compare what I think are the five best front-end frameworks available today.

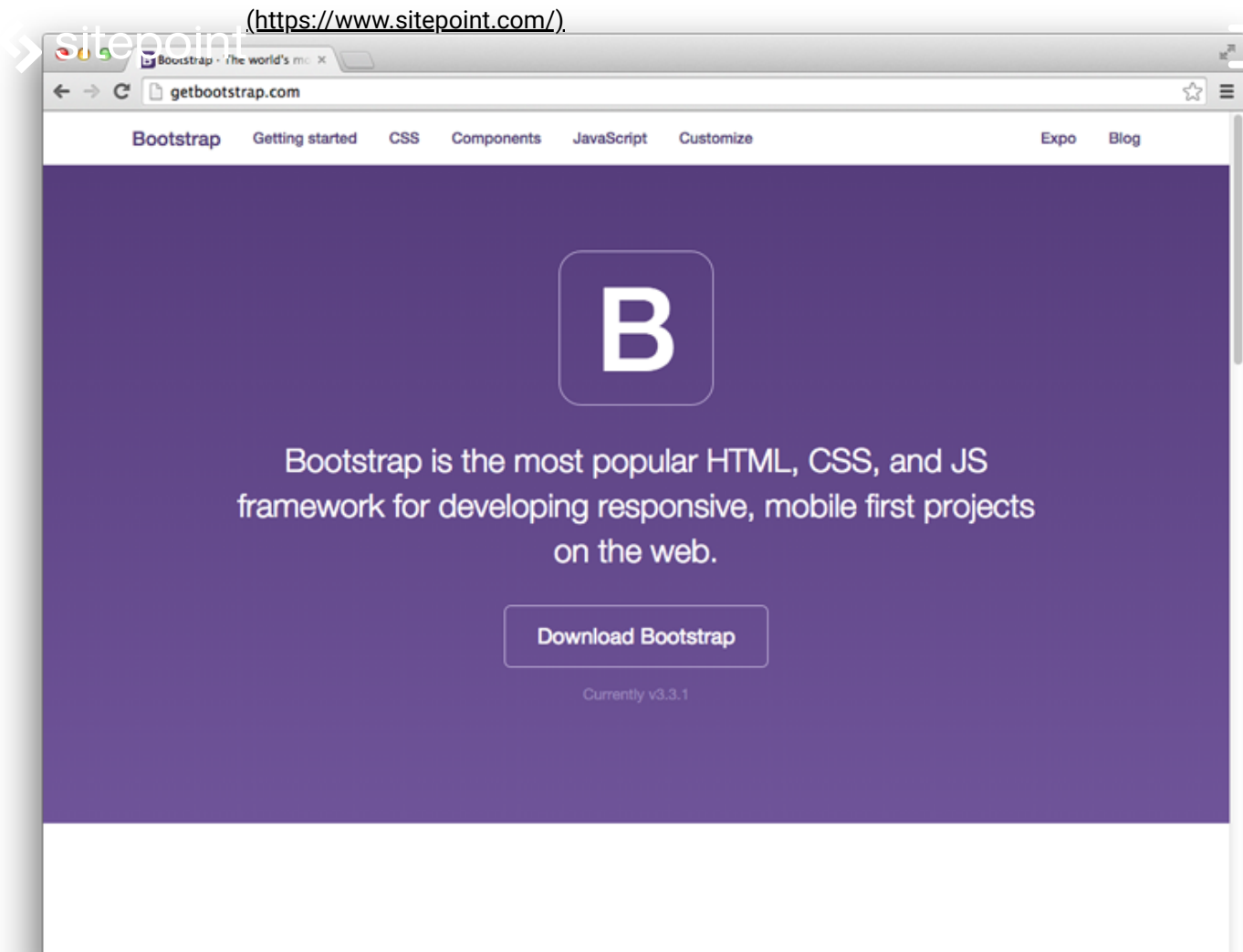
Each framework has its own strengths and weaknesses, and specific areas of application, allowing you to choose based on the needs of a specific project. For example, if your project is simple, there's no need to use a complex framework. Also, many of the options are modular, allowing you to use only the components you need, or even mix components from different front-end frameworks.

The front-end frameworks I'm going to explore are presented based on their GitHub popularity, beginning with the most popular, which is, of course, Bootstrap.

Note that some of the information below will go out of date from the time of publication – such as GitHub stars and version numbers – so be aware of this if you're reading this article long after the publication date. Also note that the framework sizes are the minified sizes of the necessary CSS and JavaScript files.

1. Bootstrap

Bootstrap (<http://getbootstrap.com/>), is the undisputed leader among the available front-end frameworks today. Given its huge popularity, which is still growing every day, you can be sure that this wonderful toolkit won't fail you, or leave you alone on your way to building successful websites.



Creators: Mark Otto (<https://github.com/mdo>), and Jacob Thornton (<https://github.com/fat>).

Released: 2011

Current version: 4.*.*

Popularity: 126,202 stars on GitHub

Description: "Sleek, intuitive, and powerful front-end framework for faster and easier web development."

Core concepts/principles: RWD (http://en.wikipedia.org/wiki/Responsive_web_design), and mobile first.

Framework size: 592 KB (precompiled zip folder)

Preprocessor: Sass (<http://sass-lang.com/>).

Responsive: Yes

Modular: Yes

Starting templates/layouts: Yes

Icon set: Not included

Extras/Add-ons: None bundled, but many third-party plugins are available.

Unique components: Jumbotron, Card

Documentation: Excellent

Customization: Option for separate files for Grid system and Reboot, ~~SCSS~~.. customization with Sass; no online customizer

Browser support: <https://www.sitepoint.com/compatibility-of-firefox-chrome-safari-ie810-11-microsoft-edge/>.

License: MIT (<https://tldrlegal.com/license/mit-license>).

Notes on Bootstrap

The main strength of Bootstrap is its huge popularity. Technically, it's not necessarily better than the others in the list, but it offers many more resources (articles and tutorials, third-party plugins and extensions, theme builders, and so on) than the other four front-end frameworks combined. In short, Bootstrap is *everywhere*. And this is the main reason people continue to choose it.

If you'd like to learn more about Bootstrap, check out [Your First Week With Bootstrap](https://www.sitepoint.com/premium/books/your-first-week-with-bootstrap/)

(<https://www.sitepoint.com/premium/books/your-first-week-with-bootstrap/>), [Bootstrap: Related Tools & Skills](https://www.sitepoint.com/premium/books/bootstrap-related-tools-skills/)

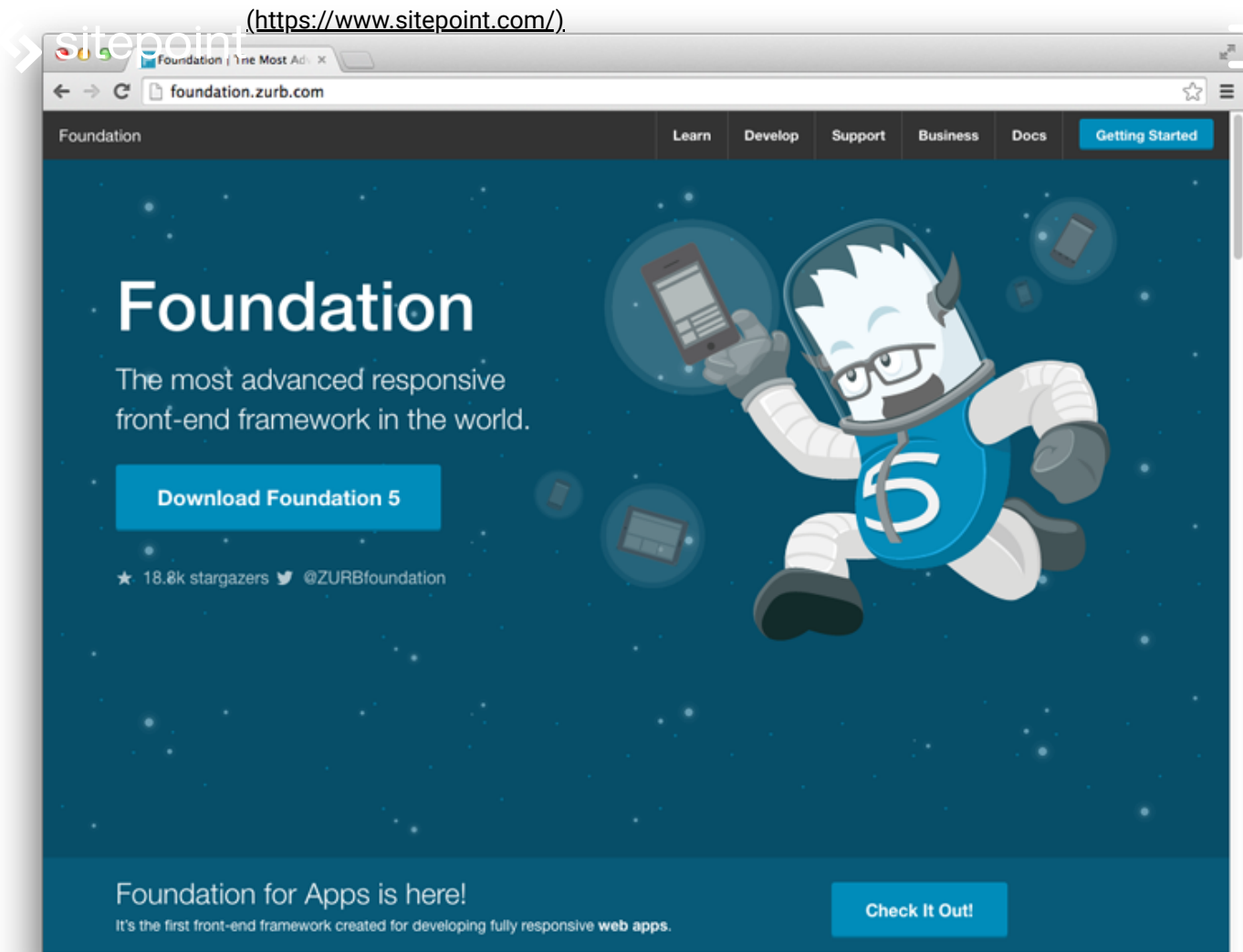
(<https://www.sitepoint.com/premium/books/bootstrap-related-tools-skills/>), and [8 Practical Bootstrap Projects](https://www.sitepoint.com/premium/books/8-practical-bootstrap-projects/)

(<https://www.sitepoint.com/premium/books/8-practical-bootstrap-projects/>).

Note: By saying "unique components", I mean that they're unique compared only to the front-end frameworks mentioned in this list.

2. Foundation by ZURB

[Foundation](http://foundation.zurb.com/) (<http://foundation.zurb.com/>) is the second big player in this front-end framework comparison. With a solid company like [ZURB](http://zurb.com) (<http://zurb.com>) backing it, this framework has a truly strong ... well ... foundation. After all, Foundation is used on many big websites including Facebook, Mozilla, Ebay, Yahoo! and National Geographic, to name a few.



Creators: ZURB

Released: 2011

Current version: 6

Popularity: 27, 497 stars on GitHub

Description: "The most advanced responsive front-end framework in the world"

Core concepts/principles: RWD, mobile first, semantic

Framework size: 233 KB

Preprocessors: Sass

Responsive: Yes

Modular: Yes

Starting templates/layouts: Yes

Icon set: Foundation Icon Fonts (<http://zurb.com/playground/foundation-icon-fonts-3>).

Extras/Add-ons: Yes

Unique components: Icon Bar, Clearing Lightbox, Flex Video, Keystrokes, Joyride, Pricing Tables

Documentation: Good, with many additional resources available.

Customization: Basic GUI customizer

Download: <https://foundation.zurb.com/sites/download.html/#customizeFoundation>

Browser support: Chrome, Firefox, Safari, IE9+; iOS, Android, Windows Phone 7+

License: MIT (<https://www.sitepoint.com/>).

Notes on Foundation

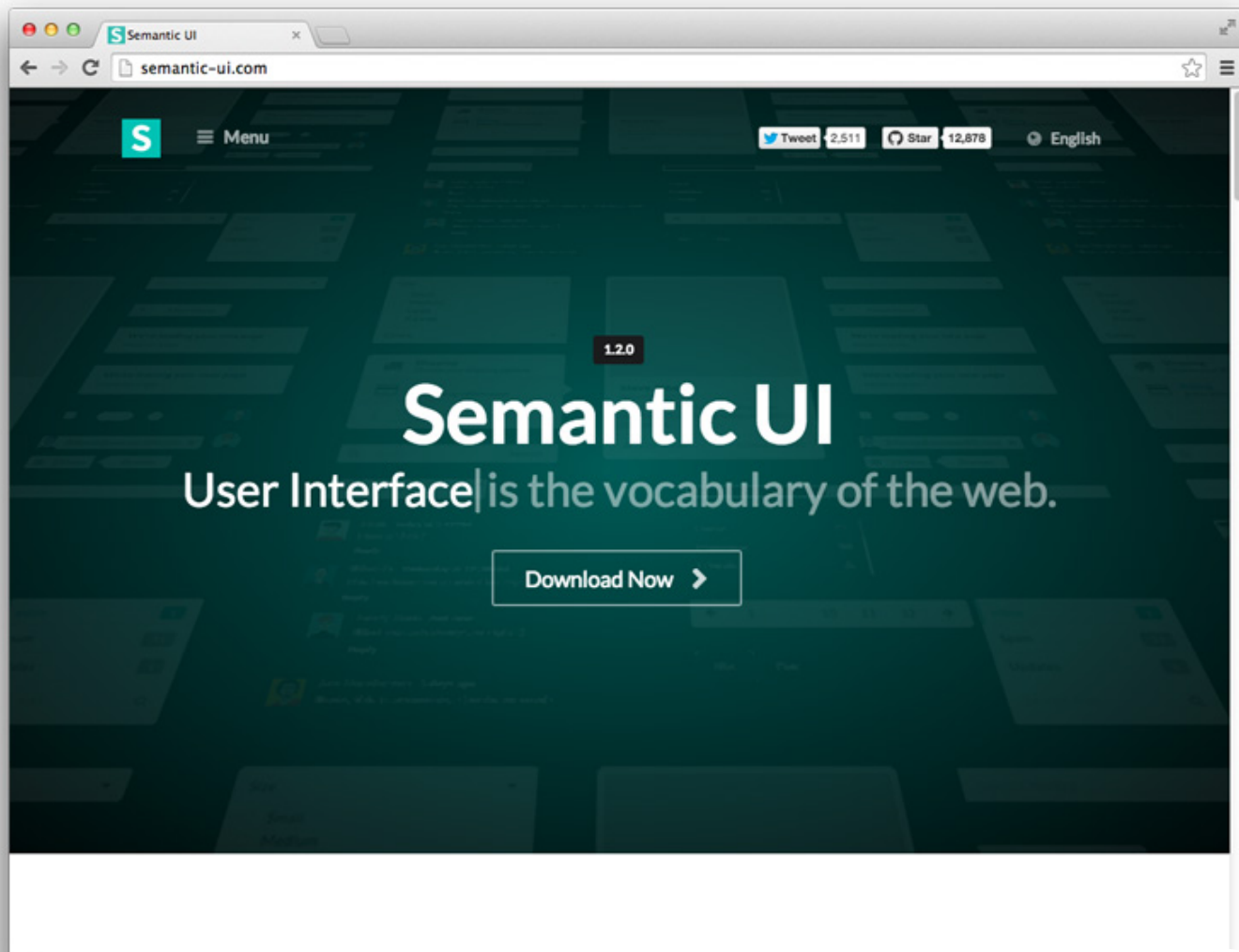
Foundation is a truly professional front-end framework with business support, training, and consulting offered. It also provides many resources to help you learn and use the framework faster and easier.

If you'd like to learn Foundation, check out our book: [Jump Start Foundation](https://www.sitepoint.com/premium/books/jump-start-foundation) (<https://www.sitepoint.com/premium/books/jump-start-foundation>).

3. Semantic UI

[Semantic UI](http://semantic-ui.com/) (<http://semantic-ui.com/>), is an ongoing effort to make building websites much more semantic. It utilizes natural language principles, thus making the code much more readable and understandable.

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Creator: Jack Lukic (<https://github.com/jlukic>)

Released: 2013

Current version: 2.3

Popularity: 42,162 stars on GitHub

Description: "A UI component framework based around useful principles from natural language"

Core concepts/principles: Semantic, tag ambivalence, responsive

Framework size: 1.8 MB

Preprocessors: Less

Responsive: Yes

Modular: Yes

Starting templates/layouts: Yes, some basic starter templates are offered

Icon set: Font Awesome

Extras/Add-ons: No

Unique components: Divider, Flag, Rail, Reveal, Step, Advertisement, Card, Feed, Item, Statistic, Dimmer, Rating, Shape

Documentation: Very good, offering very well-organized documentation, plus [a separate website \(http://learnsemantic.com/\)](http://learnsemantic.com/), that offers guides for getting started, customizing and creating themes

Customization: No GUI customizer, only manual customization

Browser support: Firefox, Chrome, Safari, IE10+ (IE9 with browser prefix only), Android 4, Blackberry 10

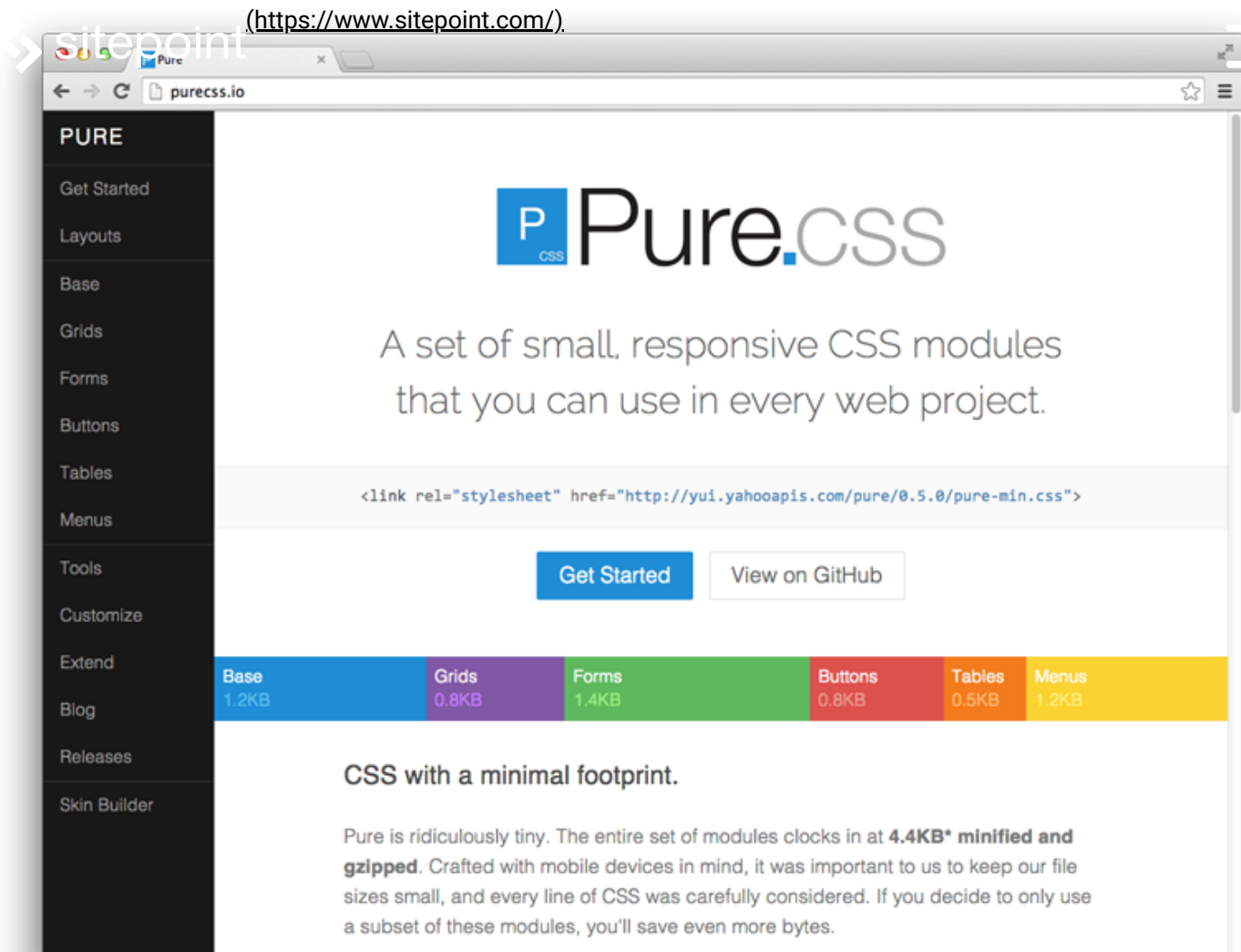
License: MIT

Notes on Semantic UI

Semantic is the most innovative and full-featured front-end framework among those discussed here. The overall structure of the framework and the naming conventions, in terms of clear logic and semantics of its classes, also surpasses the others.

4. Pure, by Yahoo!

Pure (<http://purecss.io/>), is a lightweight, modular framework — written in pure CSS — that includes components that can be used together or separately depending on your needs.



Creator: Yahoo

Released: 2013

Current version: 1.0.0

Popularity: 18,825 stars on GitHub

Description: "A set of small, responsive CSS modules that you can use in every web project"

Core concepts/principles: SMACSS (<http://smacss.com/>), minimalism

Framework size: 3.8 KB minified and gzipped

Preprocessors: None

Responsive: Yes

Modular: Yes

Starting templates/layouts: Yes

Icon set: None; you can use Font Awesome instead

Extras/Add-ons: None

Unique components: None

Documentation: Good

Customization: Basic GUI Skin Builder (<https://purecss.io/customize/>).

Browser support: Latest versions of Firefox, Chrome, Safari; IE7+; iOS 6.x

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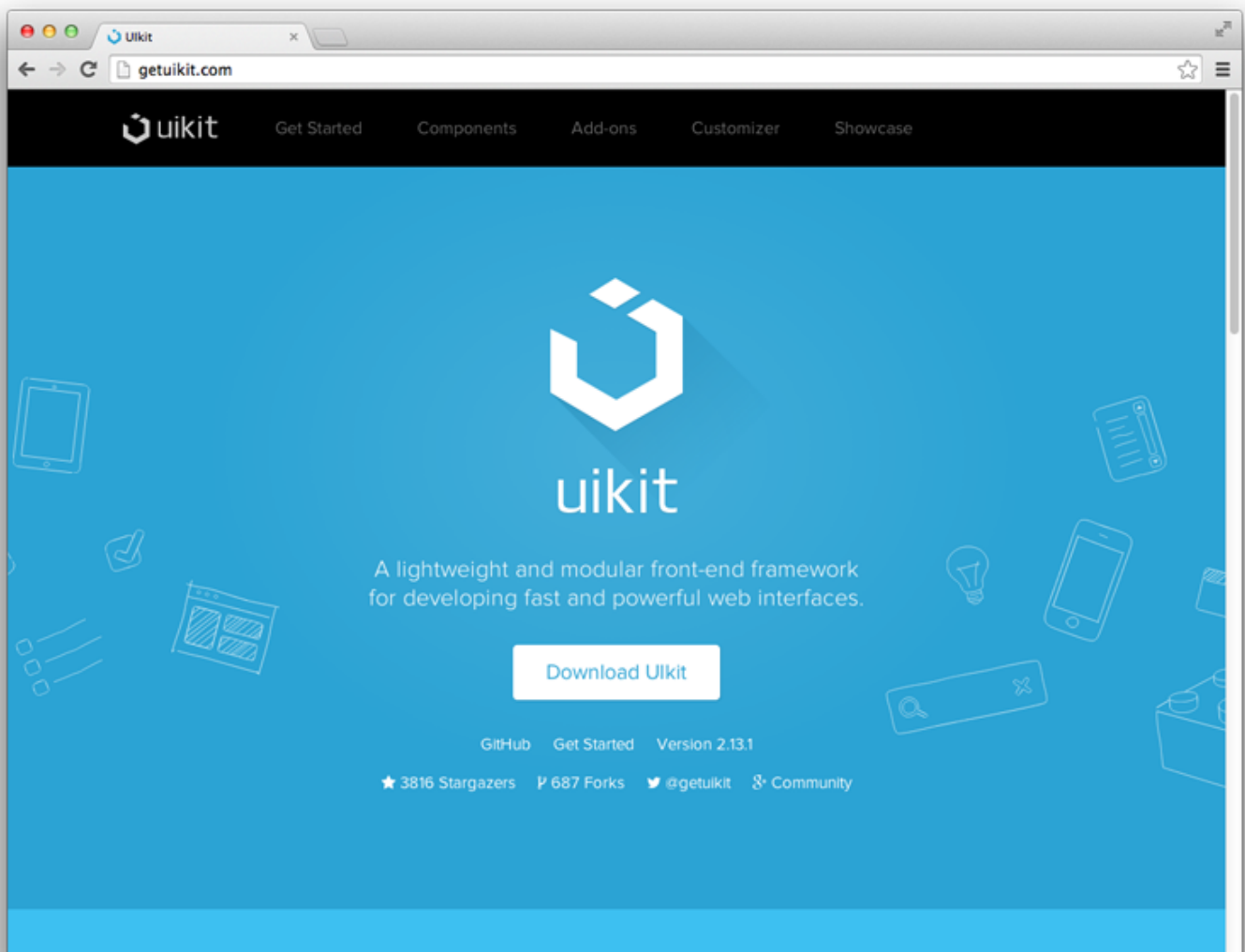
License: Yahoolin BSD (<https://github.com/yahoo/pure-site/blob/master/LICENSE.md>).

Notes on Pure

Pure offers only bare-bones styles for a clean start to your project. It's ideal for people who don't need a full-featured framework but only specific components to include in their work.

5. Ulkit by YOOtheme

Ulkit (<https://getuikit.com/v2/>), is a concise collection of easy-to-use and easy to customize components. Although it's not as popular as its competitors, it offers the same functionality and quality.



Creator: YOOtheme (<http://yootheme.com/>).

Released: 2013

Current version: 3.0.0

Popularity: 12,821 stars on GitHub

Description: "A lightweight and modular front-end framework for developing fast and powerful web interfaces"

Core concepts/principles: RWD, mobile first

Framework size: 374 KB (zipped folder)

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Preprocessors: <https://www.sitepoint.com/>

Responsive: Yes

Modular: Yes

Starting templates/layouts: Yes

Icon set: Ulkit comes with its own SVG icon system and library with a growing number of outline icons

Extras/Add-ons: Yes

Unique components: Article, Flex, Cover, HTML Editor

Documentation: Good

Customization: Advanced GUI Customizer only available in version 2 (previous version)

Browser support: Chrome, Firefox, Safari, IE9+

License: MIT

Notes on Ulkit

Ulkit is successfully used in many **WordPress themes** (<http://getuikit.com/showcase/index.html>). It offers a flexible and powerful manual customization mechanism. (Previous version of the framework also offered an advanced GUI customizer.)

What's the Right Front-end Framework for You?

In the end, let me give you some guidelines for choosing the right framework. Here are some of the more important things to watch out for:

Does the framework have enough **popularity**? Bigger popularity means more people involved in the project, and thus, more tutorials and articles from the community, more real-world examples/websites, more third-party extensions, and better integration with relative web development products. Great popularity also means that the framework is more future-proof: a framework with a bigger community around it is much less likely to be abandoned.

Is the framework under **active development**? A good framework needs to level up constantly with the latest web technologies, especially with regards to mobile.

Has the framework reached *maturity*? If a particular framework is not yet used and tested in real-world projects, then you can freely play with it, but to rely on it for your professional projects would likely be unwise.

Does the framework offer **good documentation**? Good documentation is always desirable in order to facilitate the learning process.

What is the framework's *level of specificity*? The main point here is that a more generic framework is far easier to work with, in comparison to a framework with high-level specificity. In most cases it's better to choose a framework with minimal styles applied, because it's much easier to customize. Adding new CSS rules is a far more convenient and efficient process compared to overwrite

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you'll end up with ~~https://www.sitepoint.com/~~ which will increase unnecessarily the size of the CSS.

In case you're still unsure, you can adopt a mix-and-match approach. If a particular framework doesn't satisfy your needs, you can mix components from two or more projects. For example, you can get smaller CSS base styling from one framework, a preferred grid system from another, and more complex components from a third. Viva modularity! :)

Finally, it should be mentioned that nowadays, with Flexbox and Grid Layout having good support in the latest versions of major browsers, it's easier than ever to build complex layouts. This fact alone might encourage more developers to leave the crutch of front-end frameworks and code their layouts from scratch.

What are your thoughts? Do any of these front-end frameworks have any strengths and weaknesses that weren't mentioned here? Do you think there are others that should have been listed? Let us know in the discussion below.

To dive deeper into the top two front-end frameworks, try [Bootstrap: A SitePoint Anthology #1](https://www.sitepoint.com/premium/books/bootstrap-a-sitepoint-anthology-1) (<https://www.sitepoint.com/premium/books/bootstrap-a-sitepoint-anthology-1>), and [Jump Start Foundation](https://www.sitepoint.com/premium/books/jump-start-foundation) (<https://www.sitepoint.com/premium/books/jump-start-foundation>).

This article was updated in July 2018 to reflect the current status of the features present in the front-end frameworks listed below.

If you've heard about Bootstrap but have been putting off learning it because it seems too complicated, then play through our [Introduction to Bootstrap 4](https://www.sitepoint.com/premium/courses/introduction-to-bootstrap-4-2984) (<https://www.sitepoint.com/premium/courses/introduction-to-bootstrap-4-2984>) course for a quick and fun introduction to the power of Bootstrap.

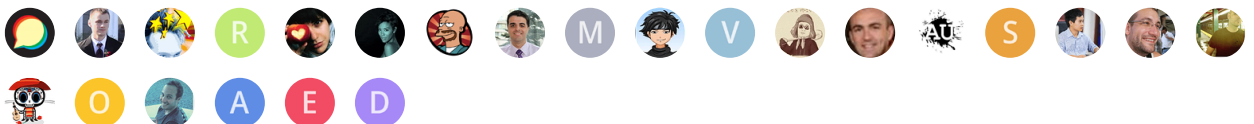


Meet the author

[Ivaylo Gerchev](https://www.sitepoint.com/author/igerchev/) (<https://www.sitepoint.com/author/igerchev/>)

Ivaylo Gerchev is a self-taught web developer/designer. He loves to play with HTML, CSS, jQuery, PHP, and WordPress, as well as Photoshop and Illustrator. Ivaylo's motto is "Minimum effort for maximum effect!"

Replies



[mawburn](http://community.sitepoint.com/t/the-5-most-popular-frontend-frameworks-of-2014-compared/106900) (<http://community.sitepoint.com/t/the-5-most-popular-frontend-frameworks-of-2014-compared/106900>)

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