



# CSS Frontend Frameworks: The Best 10 for Modern Web Design

by : [noeticsunil](#) Last Updated : Oct 13, 2015

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Are we building websites from scratch? Not really. Most of the web projects in modern times utilize some kind of standard framework. **CSS Frontend development frameworks** make web development process **faster, easier and more standards compliant**.

Depending on the problem that a framework attempts to solve, it can include CSS, HTML and/or JS components. Frameworks don't do anything more than what a web designer can do with plain CSS, HTML and JavaScript.

Frameworks are more like **collection of ready to use standard Components that solve some kind of common web design problem** which otherwise would require CSS, JS or HTML authoring from scratch.

There are many frontend frameworks and vary drastically when it comes to the features they provide. A

framework can be as small as a simple library that contains set of CSS3 classes for creating jazzy looking buttons or can be big enough to provide a **fully functional responsive website template**.

Here is the list of the **top 10 CSS frontend development frameworks** that attempt to solve most of the web design problems of modern times in one or the other way.

## 1. Bootstrap

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Bootstrap was developed by Twitter developers and released for public use in 2011 as open source framework. As of today, Bootstrap is the most used front end web development framework in the world.

Bootstrap is a powerful frontend development framework that includes HTML, CSS and JS components for building mobile first responsive websites of all sizes and complexity. With Bootstrap, you get ready to use responsive themes and templates as starting point for your web project.

The best thing about **Bootstrap framework** is that it is continuously upgraded by the bootstrap developers with latest technological advancements to solve complex web design problems of modern times. Recently, Bootstrap was upgraded to utilize Sass as the CSS preprocessor, Sass is the most used and feature rich CSS preprocessor.

That is not all, recently Google released material design guidelines and guess what? We now have **material design based bootstrap themes** available just under less than a month. This is the speed with which bootstrap follows and adapts any new web design trends.

Here are few of the resources to get you started -

Bootstrap Official Website: [getbootstrap](#).

Material Design for Bootstrap: [bootstrap-material-design](#).

Free Bootstrap Themes and Templates: [startbootstrap.com](#).

Bootstrap Tutorials: [Tutorials at Tutorialspoint.com](#).

**Pros:** It is well updated and is well supported since so many sites use it. Also, it is also well documented and help is always available since everyone uses it.

**Cons:** It is not the most light weight one, and also, for a clean look, it is somewhat inefficient in data, which is not what we are looking for.

## 2. Foundation

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Foundation is an Enterprise grade frontend development framework from the house of Zurb which is a web design company having over 15 years of experience in the web design industry. Zurb claims to have put in all the experience and learnings into building this framework and I must say it reflects in the

latest release of Foundation.

**Foundation** by far is the most features rich framework that provides an end to end solution for building responsive websites of any size without compromising with speed. Foundation is mobile first and runs on Sass CSS preprocessor.

This is one framework that gives a close competition to Bootstrap in terms of popularity, use and features. Foundation easily ranks among the most advanced frameworks in the world for building responsive, mobile friendly websites.

The focus to build optimized websites is never lost with use of Foundation. Some of the key features that Foundation comes up with for building lightning fast websites are –

**Interchange** - Foundation comes with "data-interchange" attribute which is the baby of Foundation framework itself and that is the reason this feature needs a special mention here. Using interchange you can load light weight html sections for mobile usage and heavier html for desktop or big screen devices.

This means that you choose which html code gets loaded depending on the device size much like how media queries are used to load selective CSS for different screen sizes. Isn't it great!

**Fastclick.js** - Foundation also comes integrated with fastclick.js for ultra-fast mobile experience.

**Off Canvas Navigation** - This is now almost default navigation style, you can create off canvas navigation out of the box using foundation.

**GPU Acceleration** - Foundation supports GPU Acceleration which helps smooth and faster animations.

You can read more about Foundation at [foundation.zurb.com](http://foundation.zurb.com).

**Pros:** It is very light weight on mobile.  
**Cons:** It is not light weight on desktop, which is what are end users are most likely going to use - we will pass on this one.

### 3. Semantic-UI

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Semantic-UI is the new kid on the block. This is another framework that gives tough competition to the likes of Bootstrap and Foundation. The adoption and support for this framework is increasing at a faster pace.

**Semantic UI** being released recently, **comes packed with all the latest features** to meet the needs of modern web design. It comes integrated with many third party libraries like Angular, Ember and Meteor and you hardly need to use any additional library even in the big and complex web projects.

Semantic has focused a lot on the structure of components, organization of files and naming

convention. The use of natural language is so awesome that code is self-explanatory and doesn't need a vocabulary.

You can read more about Semantic UI at [semantic-ui.com](http://semantic-ui.com).

Pros: Coding is easy!

Cons: There isn't enough documentation on it so it may be hard for us to work with.

## 4. Susy

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Susy is the grids powerhouse, the master grid maker. If you are looking for a grid framework for complex layout needs and are willing to spend some time understanding the complexities of how grids are built then there is nothing better than Susy.

Susy doesn't come as a jumbo sized package like Bootstrap or Foundation to cover all aspects of web design, but it brings out the best in what it is meant to do, **building grids**.

Susy frontend development framework (actually just a grids framework) is a different ball game altogether!! It doesn't come with pre built ready to use grids.

You utilize Susy provided mixins to create grids as per the needs of your website layout. **This framework gives you flexibility to create any kind of grid layout**, you are not restricted to the pre supplied grids, for ex 12col, 18col etc.

This brings in a bit of complexity too, but of course, only till the time you are not familiar with the workings of Susy mixins. Once you master the basics of Susy, you are bang on to create any kind of grid layout.

You utilize Susy by incorporating easy to use mixins supplied with Susy while ***Susy does all the maths involved***.

Here is one very simple example -

```
.right-sidebar { @include span (6 last); }
```

*/\* the above would mean that sidebar is 6 columns wide and is last item in the row. \*/* You don't have ready to use grids, but grids are created using the statements as given above and Susy takes care of all the mathematical calculations behind.

Pros: Simple framework.

Cons: It doesn't have enough elements to make a robust page, so it would mean that the developer would do more work, I will pass on this one as well.

## 5. Material UI

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Material design is rocking at the moment and promises to continue for the coming years. Material design guidelines are published by Google and are being used now across the globe by web designers.

Looking at the popularity of material design, CSS frontend development frameworks around material design are inevitable and **Material UI is the pioneer** in that direction and is the most comprehensive **framework that implements Google material design**.

It is built on top of LESS CSS preprocessor and comes packed with React Components. To get started with this framework one should have basic understanding of React components.

This framework is not a starting point for your web project but provides CSS and material design compliant ready to use components that can be used in your web project.

What you get with Material UI—

**Google Material Design Color Palette** – Less variables for all colors.

**Typography** - includes headings and paragraphs with consistent vertical rhythm.

**Material Design Components** – This includes Date Picker, Dialog Box, Drop-down Menu, Icon Buttons, Icons Left Nav, Menus, Paper, Sliders, Switches, Snackbar, Tabs, Textfields and Toolbars.

**Customization Option** – Styles are separated into different files and you can easily override Less variables without interfering with the framework components.

You can get more details on Material UI at [github.io/material-ui](https://github.io/material-ui).

Pros: It looks like Material Design  
Cons: It requires knowledge of React over basic HTML/CSS, which means that it would pose a challenge to find developers that can use it.

## 6. MaterializeCSS

MaterializeCSS also implements Google's material design specifications and is a **responsive front end development framework** for modern web design.

**MaterializeCSS** comes with ready to use buttons, cards, forms, icons etc. that are designed as per material design guidelines. It becomes real easy to create material design compliant websites with these ready to use components.

It also comes with 12 column grid that can be used for the website layouts. You get ready to use CSS for Material design colors, shadows and typography to name a few.

To use materializecss you get two options -

The standard CSS version  
or the one running on SASS.

You can know more about Materialize CSS at [materializecss.com](http://materializecss.com).

Pros: CSS is simple, the design encompasses a lot of different elements and it is lightweight.  
Cons: It is not as readily updated as the others, although updates are often.

## 7. Gumby

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Couldn't keep Gumby out of my list of 10 best front end web development frameworks. Gumby has become popular in very short time and got recognition and support from the community of web designers.

The efforts put by folks from **Digital Surgeon** are fantastic and that is what makes it one of the top frameworks that cater to all web design needs of modern times.

Gumby is powered by Sass and is **here to compete with the likes of Bootstrap and Foundation** and is definitely holding the ground firmly. Few of the key features that Gumby brings on to the table are - An Extensive and beautiful UI Kit and templates that give designers a head start in the design life cycle and a **responsive grid system** that adapts to any device and viewport.

Gumby also supports nesting of grids and the **grid system is semantic**.

You get modern look and feel for buttons, forms, indicators, navigation, tabs, tables, tooltips, icons and almost any design component you would need in modern times. And of course, you can still customize the look and feel to be innovation. **Semi Flat or metro style, you name any modern trend and Gumby has it in it.**

It also comes with a large number of components including responsive images (for serving images based on device size) and parallax for creating parallax effect like a breeze.

Check out Gumby components for a detailed list on the official website at [gumbyframework.com](http://gumbyframework.com).

Cons: This doesn't follow Material Design principles, which leads to more clunkier pages than we want.

## 8. Pure

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This one is from the design house of Yahoo and you can use it by linking to Yahoo CDN. Pure doesn't come with additional JS or jQuery plugins, it is pure CSS. Pure is a **light weight package of CSS modules** that can be utilized in any web project.

You can CSS modules for creating responsive Grids, Buttons, Tables and Menus to name a few. The best thing about Pure is its exceptional small size. Include all features of Pure from Yahoo CDN directly by using the below in your code.

Or if you just want to use responsive grids for pure then below line of code will do the job.

```
<link rel="stylesheet" href="http://yui.yahooapis.com/pure/0.5.0/pure-min.css">
```

You can know more about Pure CSS framework at [purecss.io](http://purecss.io).

Cons: We as a team want a framework that follows material design

## 9. Metro UI CSS 2.0

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I personally love Metro style user interface and that is the reason to give it a place in the list of top 10 front end development frameworks. This is a great for making websites that look similar to windows 8 Interface.

While working with this **Metro UI CSS 2.0**, you are definitely going to feel as if you are building for Windows 8 , and of course, it is not suited for designing all kinds of websites.

Metro UI CSS runs on LESS CSS preprocessor and includes grids, layout, typography, built in icons and many ready to use components.

Metro UI CSS is the baby of **Sergey Pimenov** and is now a BizSpark startup which is a Microsoft initiative. This definitely is on the top spot in its specialized niche - The Metro style UI design.

You can know more about Metro UI CSS 2.0 at [metroui.org.ua](http://metroui.org.ua).

Cons: Windows 8 was not the most intuitive for even the tech savvy. We should stay away from that if we want a good design for non tech savvy users.

## 10. Leaf Beta

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This one is again based on Google's Material design and runs **Stylus as CSS preprocessor**. Leaf is in its initial stages but the author **Kim Korte** is super ambitious to make it one of the best frameworks for next generation of web development.

This one is in the list of top ten CSS Frameworks for its bold idea and planned approach. You can check out the beta version at [getleaf.com](http://getleaf.com).

Cons: This is too new and unstable to use at the moment, but shows promise for potential in the future.



# Conclusion

There are many front end CSS frameworks to choose from and the selection greatly depends on the requirements of the web project. Many of these frameworks overlap in terms of features they provide but still **every framework has its own unique appeal and specific targets**.

The unique problems that these frameworks attempt to solve in modern web design era has brought these to the list of top 10 front end development frameworks. Let us know your experience of using front end web development frameworks via comments.

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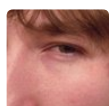
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**Donnie Reese** • 3 months ago

It looks as though Gumby is being retired.

2 ^ | v • Reply • Share ›



**Brock** ➔ Donnie Reese • 3 months ago

Indeed it has. Personally, I switched to Foundation after much Gumby sites. The mobile first ethos was the deciding factor. Bootstrap bolts mobile on afterwards.

1 ^ | v • Reply • Share ›



**noeticforce** Mod ➔ Donnie Reese • 3 months ago

yes it is, really loved it.

May be I will update this article and include Ratchet instead which is doing great at



the moment..

^ | v • Reply • Share ›



**Gary Braid** → Donnie Reese • 3 months ago

Gumby was dumped months ago, which is a pity

^ | v • Reply • Share ›



**Hisham Abdul Majeed** • 3 months ago

what about uikit ? [getuikit.com](http://getuikit.com) ?

2 ^ | v • Reply • Share ›



**noeticforce** Mod → Hisham Abdul Majeed • 3 months ago

UIKit has come out very well, lightweight with many features. Thanks

1 ^ | v • Reply • Share ›



**DathanNicholson** • 2 months ago

Microsoft uses Picchu: <http://picchu-docs.azurewebsitesit...>

^ | v • Reply • Share ›



**hanakin** • 3 months ago

not sure most of these are even relevant anymore. bootstrap & foundation are the only ones still in the mainstream. All the materiali ones are niche/new with materialize being the top among those. The rest are pretty much worthless. You left out alot of more relevant and ultimately more widely used frameworks if age was not your factor.

^ | v • Reply • Share ›



**Pawan Vora** • 3 months ago

Don't know if any of the frameworks, other than Bootstrap, comes with accessibility built-in. I don't see ARIA roles, etc. in other frameworks. Perhaps, I haven't looked at the others carefully, but any thoughts will help.

^ | v • Reply • Share ›



**Todor Velichkov** • 3 months ago

why Pure CSS don't have more fame?

^ | v • Reply • Share ›



**noeticforce** Mod → Todor Velichkov • 3 months ago

IMHO it meets very specific requirements and is not for everyone,

^ | v • Reply • Share ›



**Tarkeshwar Singh** • 3 months ago

What about Angular Material? That's pretty popular too.

^ | v • Reply • Share ›



**noeticforce** Mod → Tarkeshwar Singh • 3 months ago

Angular Material is popular indeed. It is part of this post here -

<http://noeticforce.com/best-ma...>

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