# ZURB Foundation or Bootstrap?

These are the two most popular front-end frameworks at the moment. Choosing between Foundation or Bootstrap is like choosing between red or white wine. One isn’t necessarily better than the other, they just pair wel with different things.

## Grid System

The core feature that enables designers and developers to rapidly prototype layouts and make quick changes. Foundation has always been slightly ahead of the curve in this area. It was the first big framework to go responsive and also the only big mobile-first framework for a period of time. However, Bootstrap also has these features in place now. The syntax of creating grid can be slightly different.

Block grids in Foundation can convert an unordered list into a grid. Currently there are a few grid features in Foundation that might make it a better option in specific instances. Example: Block grid makes it simple to split the contents of an unordered list into an evenly spaced grid. Just specify the number of elements in each row and Foundation takes care of the rest. It also has the ability to easily collapse columns and remove gutters with the collapse class or center columns with the centered culumns syntax.

**Conclusion**: Foundation was first big framework to go responsive and also the only big mobile-first framework. Bootstrap also has these features in place now.

## Sizing Units

Calculating widths, typography and nearly everything else, Bootstrap uses pixels and Foundation uses rems. There are functional differences between these two units but both are capable of producing the same result. Pixels might be more familiar to graphic artists and new web designers. Pixels are an absolute unit but in the age of responsive design, a relative unit like rems helps me think in terms of porportions. It’s a matter of perspective and personal workflow. Example: 1em is 10px, instead of the default 16px. To set the font-size to 14px is 1.4em. For browsers that don’t support rem units we can specify the fall-back using px. Example: body { font-size: 14px; font-size: 1.4rem; }

**Conclusion**: Bootstrap uses pixels and are an absolute unit. Graphic artists and new web designers are more familiar with this. Foundation uses rems and are a relative unit and helps to think in terms of porportions.

## Features and Components

Foundation has built-in form validation through Abide. That’s not to say that Bootstrap couldn’t also have form validation, but for some, the pre-made Foundation solution might be a nice head start. Foundation also includes Interchange, which is a robust solution for responsive images, altough it might be more than you need. In addition to these two, there’s other handy features like right-to-left support, pricing tables, tours and off-cancas navigation.

Bootstrap isn’t quite as feature-full, but in my own opinion, I also feel like many of Bootstrap’s features are in a more complete state. The default look of Bootstrap components seems more suited to quickly building a one-off website and adding a theme. Bootstrap also now includes responsive embeds, which makes it easy to add responsiveness to elements like <iframe>, <embed> and <object>.

**Conclusion:** Foundation has built-in form validation (Abide). Foundation includes interchange (robust solution for responsive images). Bootstrap isn’t feature-full but the features they have are in a more complete state. Default look of Bootstrap components suites quickly building a one-off website and adding a theme. Bootstrap includes responsive embeds which makes it easy to add responsiveness to elements.

## Customization

Bootstrap tries to give you everything you need to get a site up and running quickly, while Foundation tends to provide a better environment for customization. Bootswatch provide free themes of Bootstrap. Bootstrap tends to make sites that look like they were made with Bootstrap. It’s only after digging deep into custom styling that the default look starts to fade. Bootstrap is underscored by the fact that Bootstrap gained more early popular a few years ago. Foundation’s default look feels closer to browser defaults in many cases, which makes it easier to mold into a unique aesthetic. Bootstrap has a wider variety of themes readily available.

**Conclusion:** Bootstrap tries to get a site up running quickly with a wide variety of themes that you can find on Bootswatch. Bootstrap makes sites look like they were made with Bootstrap only after digging deep into custom styling the default look starts to fade. Foundation default look feels closer to browser defaults makes it easier to mold into a unique aesthetic.

## Browser Support and Performace

For both frameworks is so good that the diffrences are almost negligible and are highly dependent on the context. Some permutation of different framework components and browser environments might have a trivial performace gap. The important diffrences revolve around features that support designers and developers.

**Conclusion**: Both frameworks perform good that the diffrences are almost negligible and are dependent on the context. The important diffrences revolve around features that support designers and developers.