

A Review Paper on Bootstrap Framework

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Abstract- Bootstrap is the popular HTML, CSS and JavaScript framework for developing a responsive and mobile friendly website. Bootstrap is the most popular HTML, CSS and JavaScript framework for developing a responsive and mobile friendly website. Undoubtedly one of the biggest advantages of using Bootstrap is the speed of development. If you're looking to push out a new website or application quickly, you should definitely consider using Bootstrap. Bootstrap has a huge support community behind it so you can usually get help when you run into issues. Furthermore, Bootstrap itself is being continuously updated and the creators have been really good about putting out timely updates. Bootstrap framework allows for rapid, responsive development that is consistent and well supported by the development and design community

Indexed Terms: Bootstrap, Grid system, Typography, Glyph icons, Tools of Bootstrap, css, HTML

I. INTRODUCTION

Hypertext Markup Language is the standard markup language for creating web pages and web applications. With Cascading Style Sheets. HTML is a computer language it is used to allow create website. These websites can then be viewed by anyone else connected to the Internet. It is relatively easy to learn, with the basics being accessible to most people in one sitting; and quite powerful in what it allows you to create. It is constantly undergoing revision and evolution to meet the demands and requirements of the growing Internet audience under the direction of the organisation charged with designing and maintaining the language.

A. HTML

Hypertext Markup Language (HTML) is the standard markup language for creating web pages and web applications. With Cascading Style Sheets (CSS) and JavaScript it forms a triad of cornerstone technologies for the World Wide Web. Html is a descriptive structural language, HTML requires no compiler, simply a good programming text editor, many of which are open source free downloads.[4] HTML was originally designed as a simple way of presenting information, with the aesthetics of a web page being far less important than the content (and largely being left up to the web browser). Of course, now that the web has become as popular as it has, the presentation of your content has become almost critical to a site's

success. CSS is the key presentational technology that is used to design websites. [1][2]

B.CCS

CSS stands for Cascading Style Sheets. CSS describes how HTML elements are to be displayed on screen, paper, or in other media. CSS saves a lot of work. It can control the layout of multiple web pages all at once. Using CSS, you can control the color of the text, the style of fonts, the spacing between paragraphs, how columns are sized and laid out, what background images or colors are used, layout designs, variations in display for different devices and screen sizes as well as a variety of other effects. [6]

II. BOOTSTRAP

Bootstrap is the popular HTML, CSS and JavaScript framework for developing a responsive and mobile friendly website. Bootstrap is the most popular HTML, CSS and JavaScript framework for developing a responsive and mobile friendly website. It is absolutely free to download and use. It is a front-end framework used for easier and faster web development. It includes HTML and CSS based design templates for typography, forms, buttons, tables, navigation, modals, image carousels and many others. It can also use JavaScript plug-ins. It facilitates you to create responsive designs.

Why Use Bootstrap?

- Mobile first approach – Bootstrap 3, framework consists of Mobile first styles throughout the entire library instead them of in separate files.
- Browser Support – It is supported by all popular browsers.



- Easy to get started – with just the knowledge of HTML and CSS anyone can get started with Bootstrap. Also the Bootstrap official site has a good documentation.
- Responsive design – Bootstrap's responsive CSS adjusts to Desktops, Tablets and Mobiles. More about the responsive design is in the chapter Bootstrap Responsive Design.
- And best of all it is an open source.[8]

III. TOOL'S OF BOOTSTRAP

1. Pingendo:-

Pingendo is a Bootstrap 4 builder which is available in two flavors, an online playground and a desktop version available for Windows, macOS and Linux. Pingendo comes with quite a nice selection of templates to get you really bootstrapped with your web design. Amongst the available templates, you'll find an App intro site, a Conference site template and a Restaurant template, which comes in various themes.

2. Brix:-

Brix is a Bootstrap builder for designing, creating and editing responsive websites and UIs. The service is completely cloud-based, built as a rapid prototyping tool for the Bootstrap framework. The tool derives from experience gathered since the beginning of Bootstrap.

3. Jetstrap:-

Jetstrap is a Bootstrap Interface builder which is a cross between a mockup tool and an interface-building tool, bringing a bit of both to the table. Actually, the great thing is that rather than mocking up your screens, you're actually building them on the fly. The tool is fully web-based and includes drag-and-drop components and snippets of good clean markup ready for creating complicated components easily.

4. Pinegrow:-

Pinegrow is a desktop web editor that allows you to build responsive sites using live, multi-page editing, CSS and Sass styling, and components for Bootstrap, Foundation and Word Press. Available for mac OS, Windows and Linux, you can develop using Bootstrap 3, 4, or other frameworks as you prefer.

5. Bootstrap studio:-

Bootstrap Studio is a desktop app, but it does offer an online demo of its capabilities. It's built around drag-and-drop functionality and comes with quite a good set of built-in components, including headers, footers, galleries, and slideshows.

6. Bootply:-

Bootply touts itself as a Bootstrap playground, editor and builder. Of all the tools we've seen so far, this seems like the one which is most suited for those who like having the power of drag and drop but with the full ability of coding at hand. It allows you to switch between the Code Editor and the Preview so you can quickly check your build. Bootply also comes with a number of pre-build starter templates to get you up and running quickly. Besides your run-of-the-mill landing page, single page

app or article, you've also got more complex templates such as the Control Panel and the Dashboard templates and a modern layout for a tech news site

7. Bootmetro:-

This is a simple UI framework which allows you to create a Metro-like interface using Bootstrap. With a tag line of *build a web page in 5 minutes, no coding required*, you can get an idea of where this tool is strongest. Essentially, it's another UI builder that allows you to generate whole UIs using drag and drop and code tweaks as necessary.

8. JSfiddle with Bootstrap:-

You've probably already come across JSFiddle, a popular JS playground. But what if you want to also fiddle around with Bootstrap? The above is a JSFiddle workspace with Bootstrap resources and its dependencies added as external resources so you can JSFiddle in a Bootstrap environment. This is for the control freaks — all those of you who want to do it all yourselves — so there are no components, no drag and drop, no nothing.

9. Codepen:-

We've left the best for last. This is without a shadow of a doubt the most fully-fledged code playground out there and of course, it fully supports Bootstrap. Chris Coyier's pet project has quickly evolved into one of the most popular sites for web designers and developers out there. CodePen is not just a playground. It's also a repository of other people's experiments that can be shared. So just to get you started with Bootstrap-built Pens. [7]

IV. BOOTSTRAP GRID SYSTEM

It is widely used to design layout and content structure in print design. In web design, it is a very effective method to create a consistent layout rapidly and effectively using HTML and css. Bootstrap includes a responsive, mobile first fluid grid system that appropriately scales up to 12 columns as the device or viewport size increases. It includes predefined classes for easy layout options, as well as powerful mixins for generating more semantic layouts. [5]

EXAMPLE

.col-xs-1	.col-xs-1	.col-xs-1	.col-xs-1	.col-xs-1	.col-xs-1	.col-xs-1	.col-xs-1	.col-xs-1	.col-xs-1	.col-xs-1	.col-xs-1	.col-xs-1
.col-xs-2		.col-xs-3			.col-xs-7							
.col-xs-4				.col-xs-4				.col-xs-4				
.col-xs-5						.col-xs-7						
.col-xs-6							.col-xs-6					
.col-xs-12												

glyphicon glyphicon- asterisk	glyphicon glyphicon- plus	glyphicon glyphicon- euro	glyphicon glyphicon- eur	glyphicon glyphicon- minus	glyphicon glyphicon- cloud	glyphicon glyphicon- envelope	glyphicon glyphicon- pencil
glyphicon glyphicon- glass	glyphicon glyphicon- music	glyphicon glyphicon- search	glyphicon glyphicon- heart	glyphicon glyphicon- star	glyphicon glyphicon- star-empty	glyphicon glyphicon- user	glyphicon glyphicon- film

V. BOOTSTRAP TYPOGRAPHY

Bootstrap sets basic global display, typography, and link styles. When more control is needed, check out the textual utility classes.

- Use a native font stack that selects the best font-family for each OS and device.
- For a more inclusive and accessible type scale, we assume the browser default root font-size (typically 16px) so visitors can customize their browser defaults as needed.
- Use the \$font-family-base, \$font-size-base, and \$line-height-base attributes as our typographic base applied to the <body>.
- Set the global link color via \$link-color and apply link underlines only on: hover.
- Use \$body-bg to set a background-color on the <body> (#fff by default).

These styles can be found within _reboot.scss, and the global variables are defined in _variables.scss. Make sure to set \$font-size-base in rem. [6]

VI. GLYPHICONS

Bootstrap includes 260 glyphs from the Glyphicon Halflings set. Glyphicons Halflings are normally not available for free, but their creator has made them available for Bootstrap free of cost. As a thank you, you should include a link back to Glyphicons whenever possible.

Glyphicons are icon fonts which you can use in your web projects. Glyph icons Halflings are not free and require licensing, however their creator has made them available for Bootstrap projects free of cost. [8]

CONCLUSION

Bootstrap allows for rapid, responsive development that is consistent and well supported by the development and design community. As the framework continues to develop, the reasons to use Bootstrap keep mounting. If you've overlooked this framework, it's probably time to give it a try. As you can see, there are several benefits to using Bootstrap. The framework allows for rapid, responsive development that is consistent and well supported by the development and design community.

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