

## CSS FRAMEWORKS TOOLS

*DROZD DZIANIS, PYATKIN DMITRY*

Polotsk State University, Belarus

*A CSS framework is a pre-prepared software framework that is meant to allow for easier, more standards-compliant web design using the Cascading Style Sheets language.*

The CSS Front-End Frameworks are very popular with web developers. These are particular collection of HTML, CSS and JavaScript components that makes website development easier and faster. With framework you can easily design a fully responsive and modern layout of any website. Most of frameworks are using grid system for layout in spite of some differences. The main goals of all frameworks are to provide basic and common layout structure so that web developers do not have to design a website layout each time from scratch.

As there are too many Frontend frameworks available and each framework has its own strengths and weaknesses. So it is not necessary that the most popular framework work for your project, the less popular can be more suitable. So it does totally depend on your project to choose the right one. For example, if your project is simple, then there is no need to use a complex framework.

CSS frameworks are fast becoming extremely popular starting points for a lot of developers. If you have never used one, a CSS framework is a set of default CSS and HTML files that provide a great code base to build upon. Commonly included in CSS frameworks are CSS resets, buttons, and common layouts that are aimed towards saving developers time by not having to reinvent the wheel with every project.

When it comes to adding visual style and layout of a website, CSS frameworks can help add a little fineness to it. The most popular CSS Frameworks that will be helping development community:

Pure. A minimal CSS framework, Pure is known for its simplicity and style. Being smaller in size, it offers a better choice for all development needs where responsiveness is of utmost choice.

Materialize. Materialize is based on Google's Material Design featuring specific design pattern. This framework lets you do a lot of visual styling to impress users. It looks professional and saves a lot of developers' time. It is a perfect style if users want uniqueness and exclusiveness in their project.

Bootstrap. Certainly not a lightweight framework, but absolutely most popular framework with developers. It is one of the oldest frameworks which is going to enjoy its fame for longer. Due to an easy to use nature a number of developers are using it for their projects. Bootstrap has become an obvious choice for adding responsiveness to any website.

Kube. Modern day developers have developed a liking towards Kube for the fantastic characteristics that it exhibits – support for all modern browsers, light in weight, appealing templates and styles, etc. It is also based on Flexbox which offers many interesting features and added functionalities for layout.

Bulma. Free, open-source, Flexbox-based CSS framework – Bulma – provides many reasons to web designers and developers to choose it. It is fully responsive and modular, and offers a wonderful desktop and mobile-viewing experience.

The positive sides: A. They can help you learn CSS. You might just literally not know how to pull off a solid multi-column layout. A framework may be a good place to get your feet wet understanding how CSS works;

B. They provide code that you just don't need to write from scratch every time, like resets. All these frameworks start with brilliant resets that cover all the bases and will have you covered for years to come;

C. They relieve cross-browser concerns. We have all felt the burn of finding out our sites are burked in some browser. Frameworks are built to bring their functionality to all browsers;

D. They encourage grid based design. They just help you achieve better readability, scanability, balance visual weight, flexibility, expandability, and just overall page cohesiveness;

E. They come with documentation. If you need help getting started, framework generally comes with some support files. This can be particularly nice if you are designing a site you will be handing off to a client. You can just let them know what framework you used and refer them to that documentation for support requests.

The negative sides: A. Since a framework has a standard set of grids and selectors and other codes, it restricts your design. So for every new kind of design idea you would want to implement, you would have to learn a new framework

B. It changes the way you write your HTML. Developer wrapping websites in a div called "page-wrap". It's called "container" in logics. You write markup based around some frameworks predetermined class and id names

C. They can be bloated. There may be CSS styles set up in a framework to accommodate tons of different layouts that you'll never use. If you are concerned about every byte of a web page, you are going to end up doing a lot of stripping away of used code. The extra code comes up from the list of predefined codes that come with the framework.

These frameworks are required for the completion of website development. Additionally, these different preprocessors cater for the divergent requirements of individual projects. Depending on the requisites, it is advisable to select from the varied available frameworks.

It is also essential to bear in mind that some frameworks are ideal for new, fairly experienced, or proficient developers. Therefore, the expertise level is also another factor to consider during the selection process of the framework-kinds.

#### REFERENCES

1. CSS Frameworks You Should be Using [Electronic resource] // <http://cssmenu maker.com>. – Mode of access: <http://cssmenu maker.com/blog/5-css-frameworks-you-should-be-using/>. – Date of access: 15.02.2018.
2. Frontend frameworks – JavaScript, CSS and HTML in 2018 [Electronic resource] // <https://www.tecmaestro.com> //. – Mode of access: <https://www.tecmaestro.com/blog/top-5-front-end-frameworks-javascript-css-html/>. – Date of access: 15.02.2018.
3. What Are The Benefits of Using a CSS Framework? [Electronic resource] // <https://css-tricks.com>. – Mode of access: <https://css-tricks.com/what-are-the-benefits-of-using-a-css-framework/>. – Date of access: 15.02.2018.
4. Choose the Best CSS Framework of 2018 [Electronic resource] // <http://webdamn.com>. – Mode of access: <http://webdamn.com/the-best-front-end-framework/>. – Date of access: 15.02.2018.