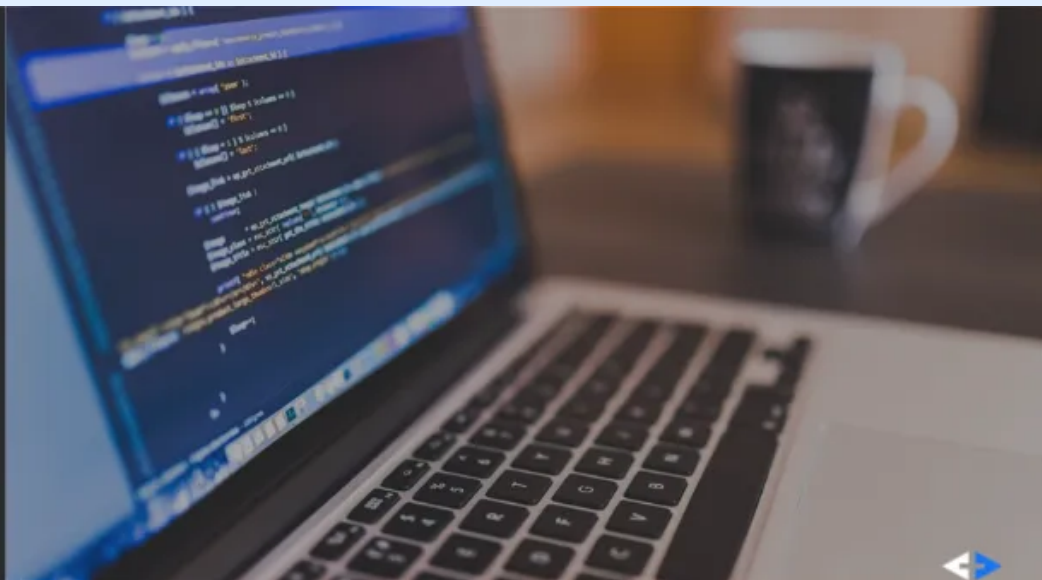




## Web development frameworks



Web development is a process throughout which you should consider multiple factors, such as the visual appearance of your website, security, web APIs and other services.

- If you're looking to speed up the creation of an advanced web solution, there are several web development frameworks that can significantly simplify the overall web development process.

*In web design a framework is defined as a structured package of standardised code files and folders (CSS, HTML, JS, etc.) which is used as both a basis and support for website development.*

We've prepared a small review of the most popular frameworks that will hold their positions in 2019. Stay up to date with web development technologies and follow modern tech trends with Magora.

## Ruby on Rails

This framework is built on the famous programming language Ruby. It's main feature is simplification and acceleration of web app development via the reuse of code. In addition, this approach allows you to add some additional features. Basecamp, GitHub, 500px etc. are among the most popular websites written in Ruby on Rails.



I can't say that RoR is the best technology ever. However, the framework offers plenty of benefits – above all, I mean fast development with less written code and fewer errors. Among other advantages, I would highlight:

- **Flexibility** – The framework is suitable for all branches of business, be it project management or construction.
- **Speed** – I've already written about this elsewhere and will do so again here: Ruby on Rails reduces web application development time by around 30-40%.
- **Ability to make changes to the code completely painlessly** – This is why RoR is ideal for long-running projects. Whether you face drastic changes in requirements or a reshuffle of the development team, none of this will constitute a serious problem.

Ruby on Rails has a huge developer community where you can easily find support for your project and answers to your particular [issue](#).

## Laravel

Laravel is one of the most popular PHP web development frameworks. With it, you can easily develop both web and mobile applications for small sites and large projects. Laravel has many valuable features, such as authorisation techniques, MVC support, object-oriented libraries, database migrations, cross-site queries etc.



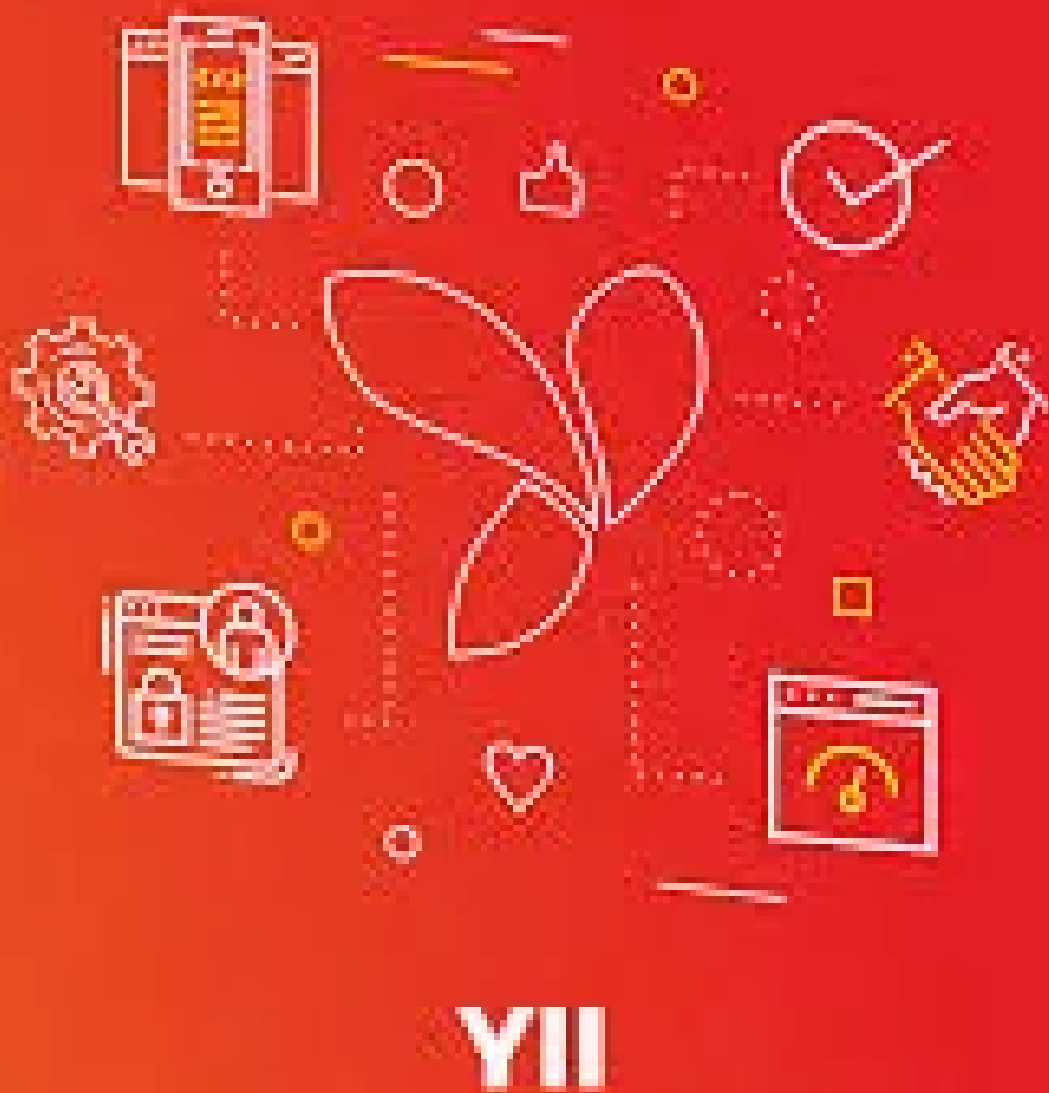
The main advantages of this framework include:

- The possibility of increasing traffic to the site. This technology is applicable to any browser and device.
- Flexibility. The framework has a modular structure that helps simplify the website itself and the process of its development.
- PHP does not need special maintenance methods. This is due to the automatic loading of the object, which is contained within the software.
- The Laravel framework can create unique URLs because it implements different routes with the same name.

Official guidelines for Laravel are available [here](#).

## Yii

[Yii](#) is an open source platform built into PHP5. Due to its user-friendly interface and clear design, this framework offers extremely straightforward and rapid web development. Yii is optimised for performance, so it can be used for any project from small to large. Additionally, the platform contains a lot of great tools to help you debug and test your application. Another plus is its well-developed documentation.



## Key Features of Yii

- The framework does not include classes and objects until they are needed. This speeds up the app-loading time.
- It uses [OOP standards](#), which means reliability and safety.
- All professional resources are completely free.

All these features help create a high-performance framework that will allow you to develop cool websites. Those already built this way include Craftcms, HumHub, Tass and various others.

## Angular.JS

[Angular](#) is a JavaScript framework from Google designed specifically for creating dynamic web applications. It has been very popular for almost ten years and is not going to lose ground in 2019. Working with Angular, you can create interface apps without having to use other plugins or frameworks.



Its structure includes a number of useful features. Here are some of them:

- Using templates, you can display information from the model and controller.
- Angular supports MVC architecture. As a result, a developer can simply divide the app into MVC components. Everything else will be managed by the framework.



- All expressions are similar to code fragments enclosed in brackets. They don't use loops or conditional expressions. On the contrary, they are used to format and display data.

All of these features form part of a platform that allows you to build a great website. Here are just some examples of sites developed using this framework: Netflix, GoodFilms, Freelancer.com, etc.

## React.JS

Yes, it's not a framework, but in reality it is difficult to imagine JavaScript tools without React, a popular JavaScript library contributing to the creation of UI elements. It runs Facebook and Instagram, among others, and its support is provided by outsourcers, freelancers and developers from various corporations.

The world of web development is divided roughly equally between Angular and React, so it's up to you to decide which side you are on.

On React, you can write large projects and build web applications that allow you to change the information on the page without reloading.

## Mojito

Mojito is a JavaScript web framework that allows you to write programs for both the client and the server side. With Mojito, developers don't have to write different code for backend and frontend. If JavaScript is not enabled in the browser, the Mojito application will still be executed on the server side, using the same code.



This framework is based on the well-known JavaScript library [YUI 3](#) (Yahoo! User Interface Library).

## Advantages

Among the main features of Mojito (in addition to the availability of basic tools for developing JavaScript apps) I can note:

- localisation support;
- testing with unit tests;
- convenient documentation.

The peculiarity of this JavaScript framework is that it allows for the creation of code that is executed not only on the client side, but also on the server side with Node.js. Read more about [why we love Node.js](#).

## Meteor js

This framework is written on the Node.js platform and allows developers to create various real-time web apps. One of the coolest features of Meteor JS is an excellent basis for creating simple personal websites.

Meteor JS is an isomorphic, open source JavaScript web framework. This means that it allows you to load pages much faster. In addition, thanks to the integrated JavaScript stack, which extends from the database to the end-user screen, you can write 10 lines of code instead of 1000.



# METEOR

Another interesting feature is that you can use the same code when developing for iOS, web, Android or desktop. You can also use various popular frameworks and tools and focus on creating functions instead of writing disparate components.

## Express.js

And here is one more framework on the Node.js platform. You should definitely use it if you want to develop a web application and API as quickly as possible. Express.js covers a number of important functions with plugins. The framework can also be used to create mobile applications.

Essentially, Express.js consists of Angular and the MongoDB database. This means that to develop websites, you only need to have knowledge of HTML, CSS and JavaScript. And using the npm modules, you can expand the functionality of applications as much as you like.

Express.js is ideal for creating simple web services. If you need an MVP or you just want to get some web development practice, grab Express.js and enjoy the process.

## Zend

Zend is an open source framework written in PHP. It focuses on the development of modern, reliable and secure web services.

Zend uses various PHP professional packages that make the development of top-notch websites much easier and faster. In addition, the framework uses the MVC architecture, which separates the database and business logic from the presentation level. This way we get clearer and cleaner code.



Zend is based on the concepts of object-oriented programming, such as interfaces and inheritance, which helps you extend various components of the framework. I would also note the routing, which does its job flawlessly, and the cache function. You'll be surprised to learn they can be used indiscriminately.

## Django

The most popular framework for web development, written in Python and using the MVC architecture. Let me list the key features of this platform:

- **Speed** – The main goal of the framework is to help developers make apps as quickly as possible at all stages of production – from idea to release.
- **Efficiency and cost-effectiveness** – this is how the motto of Django can be formulated. The framework is ideal for developers facing deadlines.
- **Security** – You can even afford some security issues. As a rule, these are associated with SQL injections, fake cross-site requests and cross-site scripting. Django effectively manages all user names and passwords, and the user authentication system is known to play a crucial role.
- **Scalable** – Most business sites use Django to quickly meet traffic needs.
- **Full stuffing** – The framework includes various additional options to help with site maps, content administration, user authentication, RSS feeds and more. Each of them provides substantial assistance in the web development process.

## ASP.NET

ASP.NET is a great JavaScript framework, released in 2013 by Instagram and Facebook. Using it, you can easily create complex and large-scale dynamic apps. This particular framework is most often used to build user interfaces and has racked up more than 89 thousand stars on GitHub.

# ASP.NET VNEXT

#### Pros:

- React motto: "Learn once – write everywhere"
- Can make use of pre-written code
- Supports virtual DOM functionality

#### Cons:

- Virtual DOM algorithm inaccurate and slow
- Requires complex asynchronous programming with the server

### Concluding Note

Frameworks have become web developers' best friends and in 2019 will only prove more popular. Any professional web agency, utilising cutting edge technologies, can provide business owners with advanced, stable and secure web solutions with the help of the above-mentioned frameworks.

If you have any particular questions about web development or need a consultation about your project, or else just can't cope with your web development project by yourself, our team is always at your service.