## RESEARCH AND DEVELOPMENT OF MODERN FRAMEWORK

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Today, the use frameworks in the development of web-applications of varying complexity: business card website, corporate website, Internet portal or web-service. For creating web-based applications are very important criteria such as user friendliness, speed of development, reliability and efficient use of resources.

To improve the efficiency of programmers work, special systems for creating web-applications were created, the so-called web-frameworks, which allow the developer to focus on the basic logic of the application. Technologies such as PHP, Java, Microsoft.Net, MySQL, Oracle, Microsoft SQL Server and frameworks developed on their basis are used by developers around the world. Logically, the framework is divided into a kernel, a kernel loader, a library of common functions, and a configuration store.

The use of frameworks allows you to re-use the code in the development of the application, which makes it possible to implement large web-projects in a short time.

At the moment of development of frameworks there are about 100 different types and versions. In terms of ease of development, speed, stability, several popular frameworks were highlighted: Angular.JS, ASP.NET MVC, Aurelia, Bootstrap, CakePHP, Codeigniter, Django, Dojo, Ember.js, Express.js, F3, FuelPHP, Kohana, Laravel, Meteor JS, Phalcon, PHPixie, React, Ruby on Rails, Slim, Symphony, Vue.js, Yii, Zend.

According to research and comparative reviews of many authors over the past 4 years, several of the most commonly used in the development of web applications or complex sites of leading frameworks have been established. According to various authors and the popularity of use in the end should be noted such frameworks as Yii, Symphony, Laravel, Codeigniter, Zend, Phalcon, CakePHP, Angular.JS, React and Zend.

Tests performed on real-world applications have shown that PHP 7 is on average twice as fast as PHP 5.6 and uses 50% less memory during query processing, making PHP 7 a strong contender for other web development tools.

Choosing the right framework is one of the key points that affect the quality of the future site. Each of the described technologies can be called complete in all respects, as they are used for both front-end and back-end development. Usually the developer needs to choose the platform according to the preferences in programming languages and according to the requirements of the customer.