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Brief Study of Comparison of Zend and Laravel PHP

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Abstract: ***The explosive growth of information systems today offers many interesting technology solutions on the market. However, the technology may be adopted without considering the impact on existing information systems and user expectations. We encourage you to identify and implement the technology solution that best suits your information system strategy. As a result, new methods have emerged and design tools are still evolving. The PHP framework as part of it opens up new perspectives in enhancing information systems . In this regard, this article focuses on a comparative study between the most popular PHP frameworks, the Symphony framework, and Laravel. Therefore, it provides an efficient comparison of Zend and Larval that combines functionality , multilingual, system requirements, technical architecture, code structure, continuous integration (CI), and finally the seven dimensions of the document dimension and the learning curve. The results show that our model can help IT project developers choose the right PHP framework.***
Keywords: Comparison model LaravelPHP framework Symfony

I. INTRODUCTION

To implement an information system, you must study your existing programming environment to determine the best IT approach. Open source programming is very popular in today's computer world. There are various open source technologies that can be used in libraries, frameworks, APIs, etc. used today. The use of frameworks arises from the need to facilitate code reuse, testing and modification of applications to rapidly develop large-scale applications [1]. Most often used by developers, it is widely used and widely used for development written in multiple languages, including labels and symphonies, built in the same structure to help learn and understand the framework. frameworks used. .. Each of these two frameworks has its strengths and provides specific implementations to consider when choosing [2]. The author [2] says that the Symfony framework is best suited for quickly and efficiently enhancing complex enterprise-level applications and organizational information systems. This is why he chose Symfony to develop his project. This shows an application that aims to simplify stored procedures for research conference proceedings . So he argues that Symfony should impose structure on development. Suitable for environments with high conversion. Creator [3] in According to research on PHP frameworks, Laravel framework allows you to avoid "spaghetti code" and develop PHP code in an elegant and simple way. And Symfony framework is a comprehensive framework designed to optimize the development of web applications based on PHP code, Model View Controller (MVC) pattern. The author stated in a PHP analytical framework dedicated to the development of web information systems. , is one of the reasons to choose Symfony framework. It enables rapid development and management of web applications , facilitates the daily work of web programmers, and supports multiple databases (MySQL, PostgreSQL, SQLite, etc.). Equipped with Symfony. Doctrine, ORM and Symfony routers have many options for configuring routes and comments, YAML, XML and PHP [5]. The author argues that when it comes to evaluating the performance of PHP frameworks, Laravel is one that allows you to: On the contrary, Laravel is excellent. Ideal for large web projects that need to deliver faster with fewer resources. Analyzing these studies, we found that there was no accurate way to effectively facilitate the choice between the two PHP frameworks , Symfony and Laravel, and few authors reviewed this topic. For this reason, this article proposes an entirely new model that includes a set of criteria that facilitate the choice between these two frameworks.

II. LITERATURE REVIEW

When it comes to web frameworks, the term "framework" is a collection of libraries and tools that improve the design of web applications and provide additional functionality while adding rigor to development. The framework also includes certain processes that run by default, so you can also automate tasks. Therefore, the framework ensures a consistent architecture where development rigor is essential. Also, the lightweight, optimized and consistent code reflects the future as it is much easier to maintain and improve than the famous "Code Soup" [7]-[9]. Not all frameworks meet the same needs, and many frameworks can be used together in certain situations [7]. This framework also helps beginners to build more reliable applications by ensuring proper database coding and interaction at the presentation layer level.

This allows you to spend more time writing rea l web applications instead of writing repetitive code. A general idea of what PHP frameworks do is model view controllers (MVCs) MVC is an architectural programming model that decouples business logic from user interfaces and allows them to be modified individually (also known as problem isolation) [11]. Each type of PHP framework has its own strengths, and the elements required of the PHP framework are ease of use, rapid development / performance, popularity among other developers, powerful features, support / forums. And so on. All frameworks are slightly different and have different strengths and weaknesses [12] . For example, the Zend Framework [13], created by Zend Technologies in March 2006, is a free PHP framework created by Zend developers. A full range of functions and a support system unique to a long-established store. In contrast, CakePHP [14] is a newer PHP framework than the Zend Framework, the first version of which was released in April 2005 . Growth), much more user-friendly and easy to use. Symfony [15] is one of the finest frameworks created by Fabien Potencier in France in 2005, and is an internationally recognized PHP framework suitable for fairly complex but large projects. It is widely used in France as it is supported by the French team. Laravel [16] is a framework created by Taylor Otwell in 2011 and based on Symfony 2. It has become one of the most popular PHP frameworks for web developers. Flexible, extensible and easy to use. Code Igniter [17] is an ultra-lightweight framework created by EllisLab in 2006 (it only takes a few hours to learn how to use it). He has flaws in his qualities. So it may be too simple for certain projects. Yii [18], created in 2008 by Qiang Xue, is an agile and extensible framework that helps professionals accelerate their PHP application development. Phalcon [19] was created in 2012 by Andres Gutierrez. It is the fastest framework developed in C and distributed as an extension. This framework is not available for standard shared hosting. Many comparative studies have shown that Phalcon works very well thanks to its templating engine developed in C, and by far the fastest. Of course, there are many other popular motives. Let me quote Kohana [20], Solar [21], PHOCOA [22], etc. Symphony, Laravel's framework, is actively maintained and popular with the developer community, promoting modern web development methods and building websites and web applications of all sizes and complexity. .. However , choosing the right framework between different frameworks can be difficult. To make the selection process a little easier, we proposed a model that analyzes and compares different frameworks. In this case, choose laravel and the most popular symphony.

III. FINDINGS

While Laravel is a complete web application framework that encapsulates or supports many third-party tools and frameworks, Zend is a PHP-based MVC framework used for developing web applications that focuses primarily on the scalability and stability of applications. On comparing the two most popular and highly sought after PHP frame works, here we are presenting a fair comparison of structural features between both through coming on the following points Development:

1) Zend follows" configuration over convention" where laravel follows test driven development and also configuration over convention.
2) *Design:* Zend incorporates dependency injection MVC event driven and data mapper etc,where Laravel integrates observer ,Façade and MTv additionally.
3) *Memory:* Zend recommended to 512 MB of memory whereas Laravel 1GB
4) *Template Language :* Zend comes with no Blade in addition to PHP, Twig and smarty but Laravel support Blade in addition to PHP, Smarty and Twig
5) *Scripting Language:* Zend scripting language is PHP and Larvel PHP 7AMP Java script languages
6) *Programming:* Zend is object oriented and event driven platform is functional event driven and object
7) *Front end:* front end technologies used for Zend are PHP and jave script and for Larvel it is PHP only
8) *Cloud support:* Zend is integrated with window Azure,Amzzon Ec2,openshift, heroku where Laravel comes with google app engine digtal ocean and Linode,Amazon Ec2,openshift Padoga box.
9) *Data Base:* Data base in Zend MySql, open shift Bi, oracle and Mongodb and SQLite and IBM Db2 etc and in Laravel SQLite, Microsoft Bi Redis and Mysql etc.
10) *Email protocol :* In Zend SMTP, IMAP AND pop3 etc

A. *Zend vs Laravel ; functionality comparison*

Zend and laravel both php framework have great capability with ultimate user resources.they help you in achieving scalabilty,simplify maintenance and economies of the scale etc.

1) Zend gives you ready to use components so that you can improve your app securely, Larval has its own blade is the lightweight tinplating engine that helps users by latest features easily and improving speed of compiling task
2) Zend comes with build in authentication support that is integrated with rbac (role based access control) Laravel has already there RBAC

3) An escaper component is integrated with zend which helps escaping output and gives protection to defend from XSS protection and vulnerable to SQL injection attacks, Laravel also has XSS protection and also has ELQOUENT OROM that uses PDO parameter binding to evade SQL binding.

IV. CONCLUSION

Laravel is stable and requires more learning compared to Zend and is recommended in the case of smaller applications that does not need performance and requires security of the application, whereas Zend can be preferred in the case of the application performance, stability and scalability maintenance irrespective of Zend is the most utilized PHP framework by IT large enterprises and banking sectors but Laravel has the great poisiton thane Zend IT market.so the slant immunity suggest Laravel for people mostly.having a conclusion we speak that both framework have their own importance so it only depends on you which one you choose for their project.

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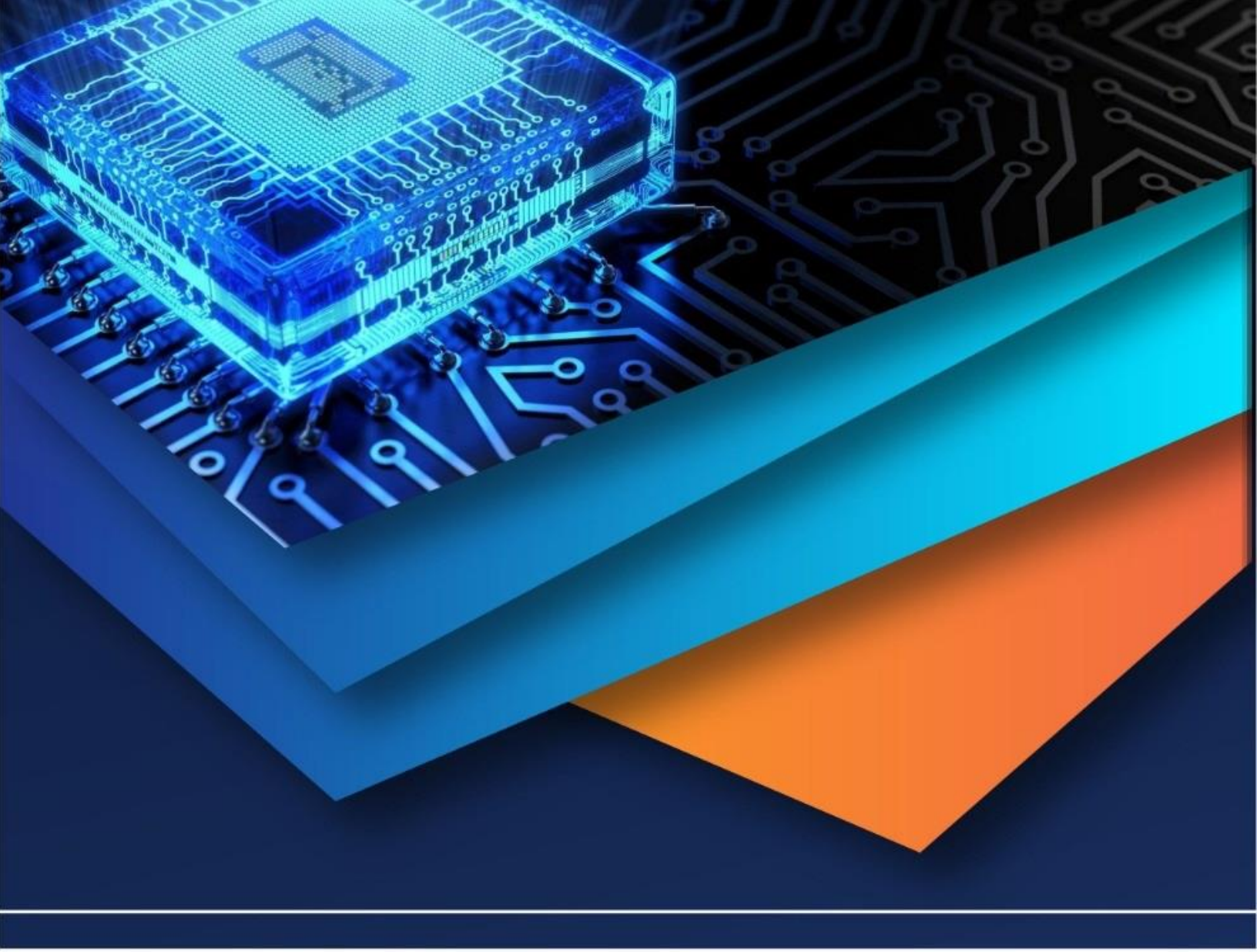

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