

PHP Framework Performance for Web Development

Between PHP Frameworks Codeigniter and CakePHP

Nylén. Håkan
Blekinge Institute of Technology
Valhallavägen 1
Karlskrona, Sweden
hakan@dun.se

1. THE BACKGROUND OF THE *IDEA*

The frameworks is for the developers help, but is it good for a visitor? I started to think how the performance is between those two and if a visitor can see it as in speed and such. No already done work or article has been done as I could see, only some on codeigniter [1] and Cakephp [2].

1.1 Focus Areas

I will focus on performance and will also fake a high traffic to see how different platforms will handle it. This is a important test to see how a framework can be used in different business and in different websites sizes. Performance can be different things. But we will focus mostly on page loads.

This focus areas is important to see how a framework can be used in different business and in different websites sizes.

1.2 Goals

The goals is to know which framework is good in different ways. Like high traffic, speed while loading a page etc. This means that I will, according to my data choose which one is better in different situations, such as big Company, Medium Company and Small/individual.

2. RESEARCH

2.1 Research Questions

RQ1: Which framework can handle traffic fastest?

RQ2: What is the weakness in each framework in performance?

RQ3: which framework is best suited in the different sizes of a company (big, medium and small/individual)?

2.2 Research Methodology

Research Question	Methodology
RQ1	Technical Experiment
RQ2	Technical Experiment / Literature
RQ3	Technical Experiment

2.2.1 Collecting Data

To answer RQ1 and to RQ3: The high traffic load will be testing to a computer on the cloud (Amazon) with same specifications for both CakePHP and Codeigniter. I will be using Openload that will simulate high traffic through http. The server will be running default set Apache with PHP 5.*, probably 5.3.10, if the new 5.4 isn't reliable. I run high traffic in 3-5 phases 15 times, depending on the sizes of the company on each framework. making it total of 45 tests that will be run randomly for

each framework to then take the average of each sizes. this can of course be changed in the real thesis if i find better High traffic simulator or better solution to do the tests. Each framework will have a simple guestbook application with database that will get different sizes of high traffic depending on sizes of the website, no difference on server for the difference sizes of the website.

To answer RQ2: Collecting literature and doing some own data collecting for the differences between the framework on their sites. The literature will be about the good of one framework or talking about some differences in MVC frameworks, as example. See the literature review design.

2.2.2 *Literature review design*

Criteria:

- Should have topic similar to php framework
- Should have something about performance or difference of framework
- Should have good context of data to reference to
- Have something to tell why one or another framework is better or bad or differences between.

Search terms:

1. PHP performance
2. PHP framework
3. Codeigniter performance
4. CakePHP performance
5. CakePHP Codeigniter

This search terms is in google-thinking search terms, will maybe be different from each place if they are more strict to get the best results.

I will search on Web, Google Scholar, Elin, Engineering village and IEEE, but also on library. because of the difference of amount of literatures to get of the search terms above. It will not be specific criteria for each of them. I will take them with a good point according the unique framework is in the literature and how it can be in good support for my work, such as difference in php frameworks, how both frameworks of this thesis work and if any, have something about high traffic on each of the framework.

3. REFERENCES

- [1] G. G. . P. GU Da-gang (Department of Computer Science, Guiyang University. Analysis of model-based mvc framework for php development codeigniter. May 2009.
- [2] S. Widjaja. Web-based ide to create model and controller components for mvc-based web applications on cakephp. December 2010.