TDDD05 - Assignment 1 Component-Based Software IDA - Linköping University Niklas Pettersson - Nils Petersson nikpe353 - nilpe995 2017-04-25

Summary - paper 1

A white paper written by Gregory Hohpe in 2007 with the intent to tackle the design difficulties with SoA. The paper is driving the thesis that the knowledge we get from the old, familiar, design patterns is maybe being reused in the new technologies. The paper also mentions how we should approach this new technologies with a historic thinking.

Patterns is a hot topic in the software industry right now and they fill an important role as a way to explain structures to other developers and share knowledge. This comes from the fact that the software industry, previously, lacked a good vocabulary for expressing software designs. Design patterns differ a lot from other standards in the industry and is not created by a few individuals but by the community from actual usage and implementation. Furthermore, as of now, the software industry stands in front of a big shift in software development, Service-oriented architectures. Will this shift result in a whole bunch of new design patterns or will the existing ones just adapt to work in this new environment? The truth probably lies somewhere in between since old knowledge could be recycled. The downside, in regards to the popularity of design patterns, is that they are being used in situations where they are not needed and making things overcomplicated in the process.

Summary - paper 2

A technology based paper written by Dandan Zhang, Zhiqiang Wei & Yongquan Yang in 2013 with the intent to research different tools to implement a Web application using a Model-View-Controller framework in contrast to using the traditional approach to web development. Mybatis and Hibernate were used as database frameworks in the study. The test was to query 600 records of User table and display them through JSP page. They did not only test the performance of the different frameworks but also the complexity of the implementation and the number of configuration files created when using them. They discovered that by using mybatis they could improve development speed and efficiency when accessing the databases. This would enable more time for focusing on other aspects of the code, like security and maintainability. When it comes to pure operational efficiency, all the tested frameworks were faster than SSH (Struts, Spring, Hibernate), and Mybatis was the best operating framework. Mybatis combined with Spring MVC could be considered a relatively lightweight framework.

References

Gregory Hohpe. 2007. SOA Patterns - New Insights or Recycled Knowledge?. [http://www.enterpriseintegrationpatterns.com/docs/SoaPatterns.pdf]. Accessed April 10 2017.

Dandan Zhang, Zhiqiang Wei & Yongquan Yang. 2013. Research on Lightweight MVC Framework Based on Spring MVC and Mybatis.

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