

REUSABLE AJAX BASED COMPONENTS FOR WEB APPLICATIONS

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MASTER THESIS

Abstract

There has been a major effort in the software community to create component based applications. In the meanwhile, the web has evolved into a perfect medium for hosting application. Thus, the need for component based web applications has risen and a new science field was born. In this master thesis, an exploration and research on this field is made. The research results are used in order to define a component model which comprises from a client side component framework, a server side component framework and set of component specifications. The component framework is being implemented and used in order to develop a functional, realistic example of an e-shop. The example web application is comprised of reusable, redistributable components that follow component model's specifications. Component framework is extended in order to allow adaptation of components in web applications that are hosted in third party servers. This gives the ability to redistribute functional parts of the application. Through this example, the lifecycle of a component based web applications is presented and all benefits are exposed (easy maintenance, easy extensibility, easy adaptability in new systems).

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