Master Thesis

Conception of Collaborative Project Cockpits with Integrated Interpretation Aids

Konzeption von kolaborativen Projektleitstaenden mit integrierten Interpretationshilfen

by

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Aachen, den 01.03.2011

— Stefan Cholakov —

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1. Introduction

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The aim of this chapter is to provide an overview of the whole thesis at a glance. It identifies the problem domain and explains the topic statement. After presenting the topic, the thesis goals are addressed. The contents of each chapter of the thesis are summarized in a sentence in order to enable the reader to quickly find the points of interest. Section 1.4 then presents the approach to solving the thesis problem and highlights the tight interrelations between the chapters. It is an overview that explains why the thesis is structured in the chosen way.

The thesis was developed in cooperation with an industry partner. The external partner and its role in the development of this work is also presented in this chapter. First however, the problem domain is specified.

1.1. Problem Domain

Management is an important discipline during software development. Effective management requires transparency, achieved by developing and applying metrics. They provide the basis for monitoring and controlling the different aspects of software development projects. The different tasks in a project will inevitably lead to different metrics, which need to be visualized in a way that maximizes their expressiveness. The visualizations of the devised metrics and additional project information can be grouped together into a project cockpit. A cockpit needs to be specifically built for a project, because projects widely differ from each other.

On the one hand, these cockpits provide valuable guidance for the project manager. On the other hand, the information extracted from these cockpits needs to be communicated within the organization. For example, information needs to be reported to higher management or the information is used to steer activities