

Automatic Visualization of Traceability Information

by

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text(size: 25pt, weight: "bold")[Abstract]

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text(size: 12pt)[Classical Traceability Management Systems (TMS) help track links between software parts like requirements, designs, Code, and test cases. They help keep projects organized and meet quality goals. But they have issues. Pulling out data takes too long. Searching is hard. The results are greasy and not easy to understand. These problems slow teams down and make fast decisions, especially for agile teams.

This study proposes an improved Traceability Management System (TMS) for software engineering processes. The system retrieves data in real-time and presents it through dynamically updating charts. It is designed to operate with greater speed and simplicity, thereby enhancing team coordination and progress monitoring.

Utilizing regular expressions, the system efficiently extracts critical information from intricate software datasets. This extracted data is subsequently transformed into comprehensible visual representations.]

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if keywords != none [text(size: 12pt, weight: "bold")[Keywords:] + text(size: 12pt)[Traceability; Automatic; Regular Expression; Visualization; TMS.]]

pagebreak() text(size: 25pt, weight: "bold")[Acknowledgments]

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text(size: 12pt)[I would like to express my sincere gratitude to my supervisor, Dr. Nasser Mustafa, for his invaluable guidance, patience, and support throughout this research. His expertise and insights have been instrumental in shaping this work.

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Table of Contents

Chapter 1 Introduction	1
1.1 Second heading	1
1.1.1 Third heading	1
Chapter 2 Background	1
References	1

List of Figures

List of Tables

Chapter 1 Introduction

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Chapter 2 Background

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Temporibus autem quibusdam et aut officiis debitis aut rerum necessitatibus saepe eveniet, ut et voluptates repudiandae sint et molestiae non recusandae. Itaque earum rerum defuturum, quas natura non depravata desiderat. Et quem ad me accedis, saluto: 'chaere,' inquam, 'Tite!' lictores, turma omnis chorusque: 'chaere, Tite!' hinc hostis mi Albucius, hinc inimicus. Sed iure Mucius. Ego autem mirari satis non queo unde hoc sit tam insolens domesticarum rerum fastidium. Non est omnino hic docendi locus; sed ita prorsus existimo, neque eum Torquatum, qui hoc primus cognomen invenerit, aut torquem illum hosti detraxisse, ut aliquam ex eo est consecutus? – Laudem et caritatem, quae sunt vitae.

References