

STATE OF PRACTICE FOR MEDICAL IMAGING SOFTWARE

ASSESSING THE CURRENT STATE OF THE PRACTICE FOR MEDICAL IMAGING
DOMAIN WITHIN SCIENTIFIC COMPUTING SOFTWARE

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Abstract

Abstract here

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Chapter 1

Introduction

introduction

Chapter 2

Background

2.1 Categories and Status

Briefly discuss open source, freeware and commercial software.

2.2 Software Quality Definitions

Refer to the Quality Definitions of Qualities created by us

2.3 Analytic Hierarchy Process

Chapter 3

Measurement Methods

Where to include Domain experts, in Software Product Selection?

3.1 Overall Process

Briefly introduce the following subsections.

3.2 Software Product Selection

My process of collecting and screening the packages step by step.

3.3 Grading Template

Manual measurements and empirical tools.

3.4 Measuring Qualities

e.g. virtual machines, time spent per software, where to look for docs, etc.

Chapter 4

Measurement Results

For some qualities, it might be a good idea to cross-compare with the empirical scores.

4.1 Selected Software List

4.2 Installability

4.3 Correctness & Verifiability

4.4 Reliability

4.5 Robustness

4.6 Usability

4.7 Maintainability

4.8 Reusability

4.9 Understandability

4.10 Visibility & Transparency

Chapter 5

Interviews with Developers

5.1 Interview Methods

The way to ask questions, the way to transcript answers and the technologies used.

5.2 Interviewee Selection

Generally speaking, ask all the teams which we can find contacts, and continue with the ones who are willing to participate.

5.3 Interview Question Selection

The aspects we focused on.

5.4 Summary of Answers

- Start with one by one, with commonalities and interesting special cases.
- Shorten and summarize later.

5.5 Discussions

Any conclusions?

Chapter 6

Recommendations

I think the recommendations can originate from both parts - measurements and interviews.

Chapter 7

Conclusions

No clues yet. Should be started at a later stage.

Bibliography

Appendix A

Full Grading Template

appendix here

Appendix B

Summary of Measurements

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Appendix C

Interview Answers

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