

Travlendar+ project YOUR NAMES



POLITECNICO
MILANO 1863

Requirement Analysis and Specification Document

Deliverable:	RASD
Title:	Requirement Analysis and Verification Document
Authors:	Luca Alessandrelli, Andrea Caraffa, Andrea Bionda
Version:	1.0
Date:	19-October-2018
Download page:	https://github.com/lucaalexandrelli/AlessandrelliCaraffaBionda.git
Copyright:	Copyright © 2017, Luca Alessandrelli, Andrea Caraffa, Andrea Bionda – All rights reserved

Contents

Table of Contents	3
List of Figures	4
List of Tables	4
1 Introduction	5
1.1 Purpose	5
1.2 Scope	5
1.2.1 Goals	5
1.2.2 World Phenomena	5
1.3 Definitions, Acronyms, Abbreviations	5
1.4 Revision History	5
1.5 Reference Documents	5
1.6 DocumentStructure	5
2 Overall Description	6
2.1 Product perspective	6
2.2 Product functions	6
2.3 User characteristics	6
2.4 Assumptions, dependencies and constraints	6
3 Specific Requirements	9
3.1 External Interface Requirements	9
3.1.1 User Interfaces	9
3.1.2 Hardware Interfaces	9
3.1.3 Software Interfaces	9
3.1.4 Communication Interfaces	9
3.2 Functional Requirements	9
3.3 Performance Requirements	9
3.4 Design Constraints	9
3.4.1 Standards compliance	9
3.4.2 Hardware limitations	9
3.4.3 Any other constraint	9
3.5 Software System Attributes	9
3.5.1 Reliability	9
3.5.2 Availability	9
3.5.3 Security	9
3.5.4 Maintainability	9
3.5.5 Portability	9
4 Formal Analysis Using Alloy	10
5 Effort Spent	11
6 References	12

List of Figures

1	DICE DPIM metamodel.	7
2	DICE DPIM metamodel in portrait form.	8

List of Tables

1 Introduction

This document has been prepared to help you approaching Latex as a formatting tool for your Travlendar+ deliverables. This document suggests you a possible style and format for your deliverables and contains information about basic formatting commands in Latex. A good guide to Latex is available here <https://tobi.oetiker.ch/lshort/lshort.pdf>, but you can find many other good references on the web.

Writing in Latex means writing textual files having a `.tex` extension and exploiting the Latex markup commands for formatting purposes. Your files then need to be compiled using the Latex compiler. Similarly to programming languages, you can find many editors that help you writing and compiling your latex code. Here <https://beebom.com/best-latex-editors/> you have a short overview of some of them. Feel free to choose the one you like.

Include a subsection for each of the following items¹:

- Purpose: here we include the goals of the project
- Scope: here we include an analysis of the world and of the shared phenomena
- Definitions, Acronyms, Abbreviations
- Revision history
- Reference Documents
- Document Structure

Below you see how to define the header for a subsection.

1.1 Purpose

... Here you see a subsubsection

1.2 Scope

... Here you see a subsubsection

1.2.1 Goals

1.2.2 World Phenomena

1.3 Definitions, Acronyms, Abbreviations

... Here you see a subsubsection

1.4 Revision History

... Here you see a subsubsection

1.5 Reference Documents

... Here you see a subsubsection

1.6 DocumentStructure

... Here you see a subsubsection

¹By the way, what follows is the structure of an itemized list in Latex.

2 Overall Description

Here you can see how to include an image in your document.

Here is the command to refer to another element (section, figure, table, ...) in the document: *As discussed in Section 1.6 and as shown in Figure 1,* Here is how to introduce a bibliographic citation [?]. Bibliographic references should be included in a .bib file.

Table generation is a bit complicated in Latex. You will soon become proficient, but to start you can rely on tools or external services. See for instance this <https://www.tablesgenerator.com>.

2.1 Product perspective

2.2 Product functions

2.3 User characteristics

2.4 Assumptions, dependencies and constraints

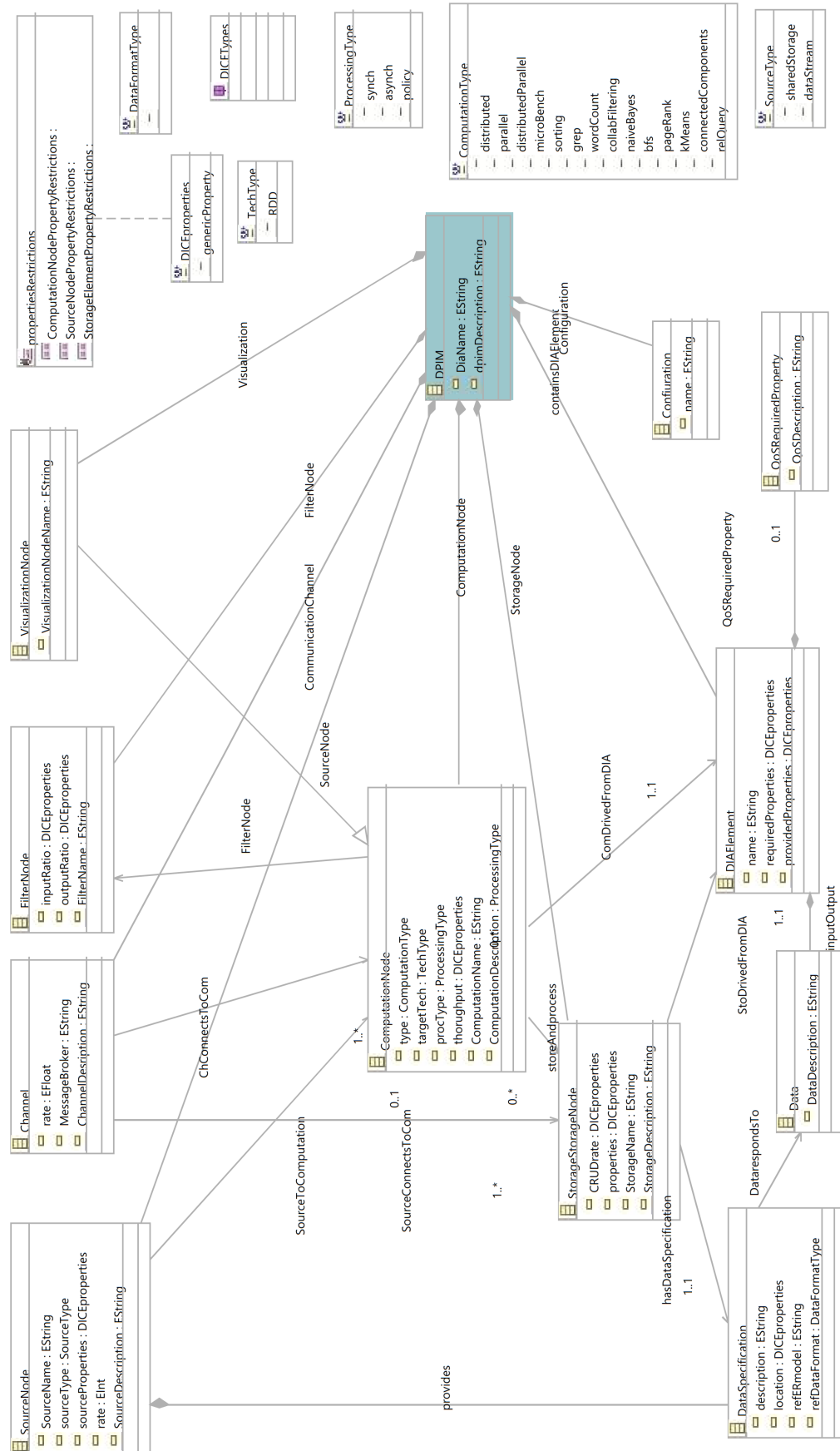


Figure 1: DICE DPIM metamodel.

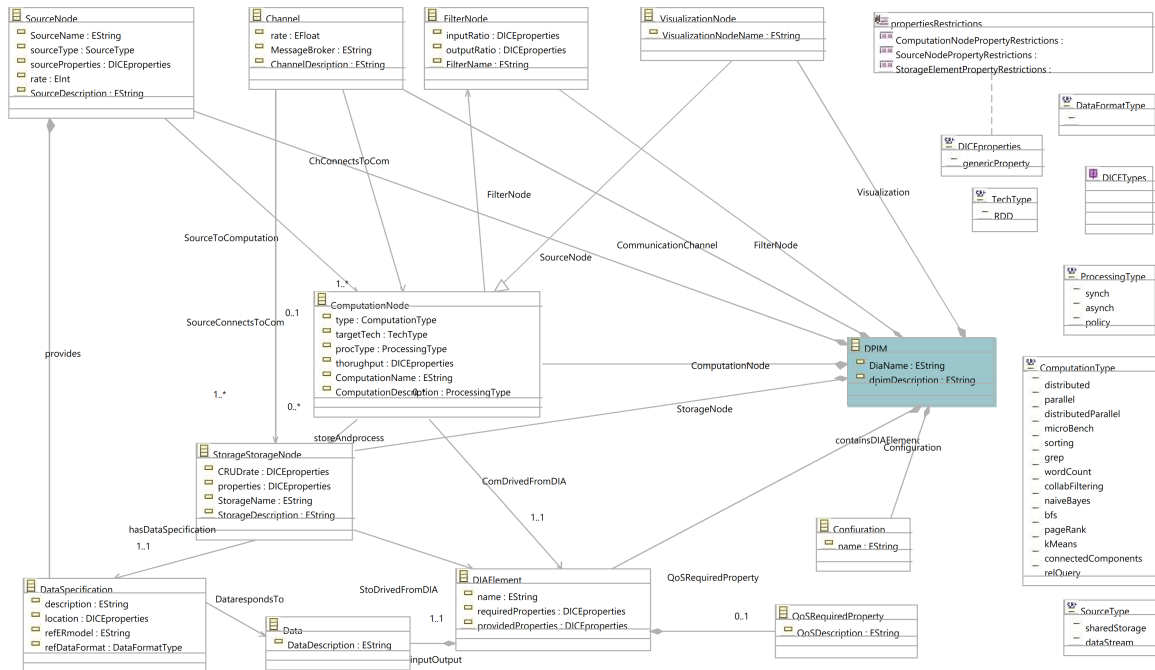


Figure 2: DICE DPIM metamodel in portrait form.

3 Specific Requirements

Organize this section according to the rules defined in the project description.

3.1 External Interface Requirements

3.1.1 User Interfaces

3.1.2 Hardware Interfaces

3.1.3 Software Interfaces

3.1.4 Communication Interfaces

3.2 Functional Requirements

3.3 Performance Requirements

3.4 Design Constraints

3.4.1 Standards compliance

3.4.2 Hardware limitations

3.4.3 Any other constraint

3.5 Software System Attributes

3.5.1 Reliability

3.5.2 Availability

3.5.3 Security

3.5.4 Maintainability

3.5.5 Portability

4 Formal Analysis Using Alloy

Organize this section according to the rules defined in the project description.

5 Effort Spent

Provide here information about how much effort each group member spent in working at this document. We would appreciate details here.

6 References

asdasd