

AY 2021/2022



POLITECNICO DI MILANO

RASD: Requirement Analysis and Specification Document

Ottavia Belotti Alessio Braccini Riccardo Izzo

Professor
Elisabetta DI NITTO

Version 1.0
October 16, 2021

Contents

1	Introduction	1
1.1	Purpose	1
1.2	Scope	1
1.3	Definitions, acronyms, abbreviations	1
1.4	Revision history	1
1.5	Reference documents	1
1.6	Document structure	1
2	Overall Description	1
2.1	Product perspective	1
2.2	Product functions	1
2.3	User characteristics	1
2.4	Assumptions, dependencies and constraints	1
3	Specific Requirements	1
3.1	External Interface Requirements	1
3.1.1	User Interfaces	1
3.1.2	Hardware Interfaces	1
3.1.3	Software Interfaces	1
3.1.4	Communication Interfaces	1
3.2	Functional Requirements	1
3.3	Performance Requirements	1
3.4	Design Constraints	2
3.4.1	Standards compliance	2
3.4.2	Hardware limitations	2
3.4.3	Any other constraint	2
3.5	Software System Attributes	2
3.5.1	Reliability	2
3.5.2	Availability	2
3.5.3	Security	2
3.5.4	Maintainability	2
3.5.5	Portability	2
4	Formal Analysis using Alloy	2

5	Effort Spent	2
6	References	2

1 Introduction

1.1 Purpose

1.2 Scope

1.3 Definitions, acronyms, abbreviations

1.4 Revision history

1.5 Reference documents

1.6 Document structure

2 Overall Description

2.1 Product perspective

2.2 Product functions

2.3 User characteristics

2.4 Assumptions, dependencies and constraints

3 Specific Requirements

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

Test.

3.4 Design Constraints

Test.

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

Test.

3.5.2 Availability

Test.

3.5.3 Security

3.5.4 Maintainability

3.5.5 Portability

4 Formal Analysis using Alloy

5 Effort Spent

Student	Time for S.1	S.2	S.3	S.4
Ottavia Belotti	?	?	?	?
Alessio Braccini	?	?	?	?
Riccardo Izzo	?	?	?	?

6 References