Students & Companies

Requirements Analysis and Specification Document

Francesco Ostidich, Matteo Salari, Francesco Rivitti Version 0.1, October 13, 2024

Contents

1	Intr	oduction	2
	1.1	Purpose	2
	1.2	Scope	2
	1.3	Definitions, acronyms, abbreviations	2
	1.4	Revision history	2
	1.5	Reference documents	2
	1.6	Document structure	2
2	Ove	rall description	3
	2.1	Product perspective	3
	2.2	Product functions	3
	2.3	User characteristics	3
	2.4	Assumptions, dependencies and constraints	3
3	Spec	cific requirements	4
	3.1	External interface requirements	4
		3.1.1 User Interfaces	4
		3.1.2 Hardware Interfaces	4
		3.1.3 Software Interfaces	4
		3.1.4 Communication Interfaces	4
	3.2	Functional requirements	4
	3.3	Performance requirements	4
	3.4	Design constraints	4
		3.4.1 Standards compliance	4
		3.4.2 Hardware limitations	4
		3.4.3 Any other constraint	4
	3.5	Software system attributes	4
		3.5.1 Reliability	4
		3.5.2 Availability	4
		3.5.3 Security	4
		3.5.4 Maintainability	4
		3.5.5 Portability	4
4	Forr	nal analysis using Alloy	5
5	Effo	ort spent	6
6	Refe	erences	7
•	1616	51 611666	,

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
- 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

5 Effort spent

6 References