

University of Pretoria

COS 730

SOFTWARE ENGINEERING 1

UPRM

University of Pretoria Research Manager Software Requirements Specification

Author:
Jason Richard Evans
Vivian Venter

u13032608u13238435

Contents

| 1 | Intr | $\operatorname{roduction}$ 2 | | | | | | | | | | | | | |
|----------|------|---|--|--|--|--|--|--|--|--|--|--|--|--|--|
| | 1.1 | Purpose | | | | | | | | | | | | | |
| | 1.2 | Scope | | | | | | | | | | | | | |
| | 1.3 | Definitions, Acronyms and Abbreviations | | | | | | | | | | | | | |
| | 1.4 | References | | | | | | | | | | | | | |
| | 1.5 | Overview | | | | | | | | | | | | | |
| 2 | Ger | neral Description 3 | | | | | | | | | | | | | |
| | 2.1 | Product Perspective | | | | | | | | | | | | | |
| | 2.2 | Product Functions | | | | | | | | | | | | | |
| | 2.3 | | | | | | | | | | | | | | |
| | 2.4 | General Constraints | | | | | | | | | | | | | |
| | 2.5 | Assumptions and Dependencies | | | | | | | | | | | | | |
| 3 | Spe | ecific Requirements 4 | | | | | | | | | | | | | |
| | 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 | | | | | | | | | | | | | |
| | | 3.2.1 Functional Requirement/Feature Name | | | | | | | | | | | | | |
| | 3.3 | - <i>,</i> | | | | | | | | | | | | | |
| | | 3.3.1 Use Case Name or Number | | | | | | | | | | | | | |
| | 3.4 | Classes/Objects | | | | | | | | | | | | | |
| | | 3.4.1 Class/Objects Name or Number | | | | | | | | | | | | | |
| | 3.5 | Non-Functional Requirements | | | | | | | | | | | | | |
| | | 3.5.1 Performance | | | | | | | | | | | | | |
| | | 3.5.2 Reliability | | | | | | | | | | | | | |
| | | 3.5.3 Availability | | | | | | | | | | | | | |
| | | 3.5.4 Security | | | | | | | | | | | | | |
| | | 3.5.5 Maintainability | | | | | | | | | | | | | |
| | | 3.5.6 Portability | | | | | | | | | | | | | |
| | 3.6 | Inverse Requirements | | | | | | | | | | | | | |
| | 3.7 | Design Constraints | | | | | | | | | | | | | |
| | 3.8 | Logical Database Requirements | | | | | | | | | | | | | |
| | 3.0 | Other Requirements | | | | | | | | | | | | | |

| 4 | Analysis Models | | | | | | | | | | | | | | | | | | | |
|---|---------------------------|---------------|--------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| | 4.1 | Sequence Dia | agrams | | | | | | | | | | | | | | | | | |
| | 4.2 | Activity Diag | grams | | | | | | | | | | | | | | | | | |
| 5 | Change Management Process | | | | | | | | | | | | | | | | | | | |
| 6 | App | Appendices | | | | | | | | | | | | | | | | | | |
| | 6.1 | Appendix 1 | | | | | | | | | | | | | | | | | | |
| | 6.2 | Appendix 2 | | | | | | | | | | | | | | | | | | |
| | 6.3 | Appendix 3 | | | | | | | | | | | | | | | | | | |

1 Introduction

1.1 Purpose

This document serves as the software requirements specification for UPRM (University of Pretoria Research Manager). The requirements will include both the functional and non-functional requirements. This document is written as a requirements guideline for the software enigineers and any other party involved in the creation of UPRM.

1.2 Scope

1.3 Definitions, Acronyms and Abbreviations

 \bullet \mathbf{UPRM} - The system at hand, University of Pretoria Research Manager

1.4 References

1.5 Overview

2 General Description

- 2.1 Product Perspective
- 2.2 Product Functions
- 2.3 User Characteristics
- 2.4 General Constraints
- 2.5 Assumptions and Dependencies

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
- 3.2.1 Functional Requirement/Feature Name
- 3.3 Use Cases
- 3.3.1 Use Case Name or Number
- 3.4 Classes/Objects
- 3.4.1 Class/Objects Name or Number
- 3.5 Non-Functional Requirements
- 3.5.1 Performance
- 3.5.2 Reliability
- 3.5.3 Availability
- 3.5.4 Security
- 3.5.5 Maintainability
- 3.5.6 Portability
- 3.6 Inverse Requirements
- 3.7 Design Constraints
- 3.8 Logical Database Requirements
- 3.9 Other Requirements

- 4 Analysis Models
- 4.1 Sequence Diagrams
- 4.2 Activity Diagrams
- 5 Change Management Process

TO ADD TEXT

- 6 Appendices
- 6.1 Appendix 1
- 6.2 Appendix 2
- 6.3 Appendix 3