

# University of Pretoria

### COS 730

SOFTWARE ENGINEERING 1

# **UPRM**

University of Pretoria Research Manager Software Requirements Specification

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#### 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

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