

# Requirements Document

## 1 Introduction

This is a requirements document for the 'Library' project. This project's aim and goal is to simulate a real library, complete with an account system, different user roles, checking out and returning books and editing the library's contents.

## 2 User Requirements

### 2.1 Software Interfaces

The Library will interact with a variety of external sources and systems:

- Apache Tomcat – Library is, in itself, a servlet-based web application, which will use Apache Tomcat as a servlet container for deployment
- MySQL – the database of choice will be MySQL, where data on books, users and other business entities will be stored.

### 2.2 User Interfaces

The user will interact with the system using a web-browser of their choice. The system will use JSP-compiled html files to display data and request user input.

### 2.3 User Characteristics

Ease of use will be among the Library's top-priority design goals. The application itself is designed to be implemented both in education and in leisure.

### 2.4 Assumptions and Dependencies

Factors that affect the requirements:

- JSP design
- Database connectivity and stability
- Effective and optimized business logic
- Responsive browser layout (compatible with mobile and tablet devices)

## 3 System Requirements

### 3.1 Functional Requirements

- users has to be able to create accounts, log into accounts and change their account's details (name, surname, username)
- each user account has to have a role corresponding to their duties and access level (reader, librarian, administrator)
- administrators have to be able to edit the Library's contents (delete books, edit books, add books)
- administrators have to be able to edit user statuses (block accounts, edit user account details, assign roles to users)
- librarians have to be able to approve/deny reader's book checkout requests, resolve readers returning books

- readers have to be able to checkout books, return books
- all data should be persisted in a MySQL database
- the user has to be given a choice between three UI languages: RU, BEL and EN

## 3.2 Non-Functional Requirements

### 3.2.1 SOFTWARE QUALITY ATTRIBUTES

- ease of use – important for even the least tech-savvy user to get the hang of using the application's features
- security – important to secure each user's account details
- flexibility – the application should be able to be used by most of the widespread personal computer devices (PCs, laptops, tablets, smartphones)