**ZOTERO**

**Reference management software**

**Software Requirements Specification**

**Version <1.0>**

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**Software Requirements Specification**

Introduction

This section of the Software Requirements Specifications will give an overview of everything included in this SRS by defining the purpose, scope, and references. It will also outline definitions, acronyms and abbreviations used throughout the document.

1.1 Purpose

The purpose of the Software Requirements Specification (SRS) is to gather and analyze designs and proposals that have arisen to specify the system, give a detailed description of the requirements, and define the system of the software Zotero with respect to consumers. This document shall also help users and developers gain a better comprehension of the project and outline concepts that may be discarded or developed in the future.

The SRS will also explain constraints, interface and interactions with other applications and software requirements.

The intended audience of this document are developers from all horizons since this software is open source.

1.2. Scope

The software system in question is called Zotero, the scope pertains to the features that makes it a solid reference manager. Zotero is a free open-source reference manager software which helps manage, store, and cite bibliographic references like articles and books. Each reference represents an item in Zotero. Zotero is a tool for sorting and gathering sources and research information.

In Zotero, items can be added manually, by using browser extension or by using specific information provided in the resources (such as PMID). Every item contains different metadata depending on its type (for example books, articles, films, letters, sound recordings, manuscripts etc.). Once added, the items and their metadata will be displayed in the software interface.

1.3 Definitions, Acronyms and Abbreviations

|  |  |
| --- | --- |
| User | Someone who interacts with the software |
| Open source | Open-source software is software with source code that anyone can inspect, modify, and enhance |
| Metadata | Metadata is defined as the data providing information about one or more aspects of the data; it is used to summarize basic information about data that can make tracking and working with specific data easier. |
| Items | Items can be everything from books, articles, and reports to web pages, artwork, films, letters, manuscripts, sound recordings, bills, cases, or statutes, among many others. |
| Collections | Collections are folders into which items relating to a specific project or topic can be placed. |
| Library | The library contains all the items and collections from a User |
| RSS feeds | RDF Site Summary or Really Simple Syndication |
| PMID | A PMID, also known as the PubMed reference number, is a number assigned by the NIH National Library of Medicine to papers indexed in [PubMed](http://www.ncbi.nlm.nih.gov/pubmed/?term=25159316) |
| ISBN | International Standard Book Number |
| DOI | Digital Object Identifier System |
| CSL | Citation Style Language |
| HTTPS | Hypertext Transfer Protocol Secure (https) is a combination of the Hypertext Transfer Protocol (HTTP) with the Secure Socket Layer (SSL)/Transport Layer Security (TLS) protocol. |
| AES-256 | Advanced Encryption Standard (AES) |

1.4. References

The references are:

E-Store Project

1.5 Overview

The remainder of this document includes a general description as well as the functional and data requirements of the software. The section 2 of this document gives a general description of the product. The third section gives the requirements, constraints and assumptions and also provides a User viewpoint of product.

2. Overall Description

This document describes concisely the major features of the system. The SRS contains the various stakeholders’ detailed product perspectives. It details the requirements, including functional requirements, usability requirements, reliability & availability requirements, performance requirements, security, supportability, and design constraints.

3. Specific Requirements

The specific requirements are -

3.1 Functionality

3.1.1. Installing and uninstalling options

ID: FR1

The User shall be able to download the software from the official website. The software shall be free.

ID: FR2

The user shall be able to download the mobile versions of Zotero through official mobile stores or through the official website.

ID: FR3

The system shall allow the user to delete the software if they want.

3.1.2 Manage Items

ID: FR4

The system shall allow the user to manually add new items.

ID: FR5

The system shall allow user to enter information manually for an item.

ID: FR6

The system shall allow user to delete items.

ID: FR7

The system shall display detailed information of the selected items.

3.1.3. Manage Collections

ID: FR8

The system shall allow the user to create new collections, folders into which items relating to a specific project or topic can be placed.

ID: FR9

The system shall allow the user to delete collections.

3.1.4 Provide Tags

ID: FR10

The system shall allow the user to create tags which can be assigned to items.

3.1.5. Search System

ID: FR11

The system shall implement Quick searches to provide a fast way to find items in a library or collection

ID: FR12

The system shall enable the user to use a search box for terms in a search box.

ID: FR13

The system shall enable the user to use different modes for the quick search

ID: FR14

The system shall implement advanced searches.

ID: FR15

The system shall enable the user to use a magnifying glass for filtering items to run an advanced search.

ID: FR16

The system shall enable the user to save advanced searches.

ID: FR17

The system shall enable user to search documentation with a search bar on the official website.

3.1.6. File Management

ID: FR18

The system shall provide attachments for items.

ID: FR19

The system shall enable user to create rich-text notes to be attached to any item.

ID: FR20

The system shall enable user to attach files as standalone items or child items via browser.

ID: FR21

The system shall enable user to drag and drop files as standalone items or child items.

ID: FR22

The system shall enable user to create new files as standalone items or child items.

ID: FR23

The system shall enable the user to attach web pages to any item as a link or snapshot.

3.1.7. Zotero Connector plugin

ID: FR24

The system shall enable the user to easily create new items from information available on the internet.

ID: FR25

The system shall provide a save icon to add an item to the current collection in Zotero. In addition, if the save icon is a folder, the webpage contains multiple items which the User shall be able to select from a dialog box.

ID: FR26

The system shall enable the user to save a page as a Web page item if Zotero is not able to recognize data on the page.

3.1.8. Add items automatically

ID: FR27

The system shall allow user to add items automatically with an identifier button if they provide ISBN number, DOI, or PMID.

3.1.9. Provide RSS feed subscription

ID: FR28

The system shall allow user to subscribe to RSS feeds from Zotero to be up to date with the latest research.

3.1.10. Manage bibliographies

ID: FR29

The system shall allow user to cite items using the CSL.

ID: FR30

The system shall enable user to insert citations directly from their word processing software.

ID: FR31

The system shall enable user to automatically generate a bibliography from the items cited.

ID: FR32

The system shall enable the user to switch citation style for the whole document in one click.

3.1.11. User authentication

ID: FR33

The system shall allow user to create profile and set credentials using email and password.

ID: FR34

The system shall be able to authenticate user credentials.

ID: FR35

The system shall allow user to update their credential information

ID: FR36

The system shall enable user to create an account from the official website.

ID: FR37

The system shall enable user to authenticate themselves on the official website

ID: FR38

The system shall save the authenticated user’s library information.

ID: FR39

The system shall enable user to change their password if they forgot it by using their email.

ID: FR40

The system shall enable authenticated user to use Zotero on multiple computers by syncing their library information.

3.1.12. Allow collaboration and sharing between users

ID: FR41

The system shall enable user to share their library

ID: FR42

The system shall enable user to create collaborative or interest groups.

ID: FR43

The system shall provide storage space to store Zotero files.

3.1.13. Online Purchase of products

ID: FR44

The system shall enable the user to upgrade their storage by purchasing storage plans.

ID: FR45

The system shall allow user to confirm the purchase.

ID: FR46

The system shall allow user to enter their payment information

3.1.14. Allow communication between users

ID: FR47

The system shall allow authenticated user to post questions on the official website forum

ID: FR48

The system shall enable authenticated users to comment on posts.

3.1.15. Provide Customer Support

ID: FR49

The system shall provide Customer online support

ID: FR50

The system shall provide FAQ customer support

ID: FR51

The system shall allow user to select the type of support they want.

3.2. Usability

3.2.1. Graphical User Interface (Web Client)

ID: UR1

The system shall provide responsive layout for different display sizes.

ID: UR2

The system shall verify that the user is not a robot on the registration.

3.2.2. Graphical User Interface (Desktop Client)

ID: UR3

The system shall provide the use of icons and toolbars.

ID: UR4

The system shall provide the ability to change the font size.

ID: UR5

The system shall provide the ability to change the alignment of the tabs.

ID: UR6

The system shall provide the error console for developers.

ID: UR7

The system shall provide the JavaScript prompt for developers.

ID: UR8

The system shall provide the style editor.

ID: UR9

The system shall provide the translator editor.

3.2.3. Graphical User Interface (Browser Extension)

ID: UR10

The interface shall provide the preferences settings.

ID: UR11

The interface shall display the error reports in the advanced preferences tab.

3.3. Reliability & Availability

ID: RA1

Users shall be able to access website without errors most of the time.

ID: RA2

Users shall be able to access functionality both using desktop and website version most of the time.

ID: RA3

Users shall be able to access desktop application without Internet access.

ID: RA4

Application should be available in different languages.

3.4. Performance

ID: P1

Application shall be fast as it is comfortable for the user.

ID: P2

Website load time shall not be more than a few seconds for the user.

ID: P3

Each process shall start as soon as user clicked.

ID: P4

Each process shall be seamless for the user.

3.5. Security

3.5.1. Data Transfer

ID: S1

The system shall use HTTPS protocol between client and server communication.

ID: S2

The system shall logout the user’s account after some period of inactivity.

3.5.2. Data Storage

ID: S3

The system shall encrypt the data of newly created accounts using AES-256 encryption.

3.6. Supportability

ID: SUP1

Application should be scalable to add other publication sources.

ID: SUP2

Application should be scalable to add different types of publication sources.

ID: SUP3

Application should be usable on different platforms (desktop, web and mobile).

3.7. Design Constraints

3.7.1. Web Based Client

ID: DC1

There are no memory requirements.

ID: DC2

The computers must be equipped with web browsers.

3.7.2. Desktop Based Client

ID: DC3

The user’s operating system shall be at least Windows 7 or macOS 10.11.

3.7.3. Web Browser Extension

ID: DC4

The user’s web browser shall be at least version of Chrome 55, Firefox 60, Safari on macOS Big Sur.

3.8. User Documentation

ID: UD1  
Zotero shall provide online guidelines and tutorials for the Users.