Software Requirements Specification (SRS)

for

Dynamic Academic Submission System (DASS)

Version 1.0 approved

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25th March, 2025

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1.Introduction

1.1 Purpose

The purpose of this document is to define the software requirements for the webbased publication platform. It details the functionalities, constraints, and system features to be implemented.

1.2 Document Conventions

This document follows the IEEE standard for Software Requirements Specification (SRS).

1.3 Intended Audience and Reading Suggestions

This document is intended for developers, testers, project managers, and stakeholders involved in the development and deployment of the system.

1.4 Project Scope

The platform will provide authors, administrators, and readers with a seamless experience for publication management. It includes user authentication, content search, profile management, and publication-related functionalities.

2.Overall Description

2.1 Product Perspective

This system will serve as an online portal for managing, reviewing, and accessing publications. It will integrate with external services for authentication and citation exports.

2.2 Product Functions

- User authentication and profile management
- Publication submission, review, and access
- Search functionality with basic and advanced filters
- Dashboard for submission tracking
- Administrator functionalities for managing users and content

2.3 User Characteristics

- Authors: Submit and track publications
- Administrators: Manage platform settings and content
- Readers: Search, read, and download publications

2.4 Constraints

- Secure authentication via Google, LinkedIn, ORCID, and Facebook
- Password strength enforcement
- GDPR compliance for data handling
- Maximum file upload size: 10MB for publications
- Must support Chrome, Firefox, Edge, and Safari
- Response time for search queries should not exceed 2 seconds
- System must handle at least 10,000 concurrent users

3. Specific Requirements

3.1 Functional Requirements

3.1.1 Home Page

- About Us, Contact Us, Affiliated Organizations, Services
- Sign-in as Author/Administrator/Reader
- Social Login Options: Google, LinkedIn, ORCID, Facebook
- Password Strength Indicator with visual cues

3.1.2 Search Functionality

- Basic Search: Keyword or Title
- Advanced Search: Filters by author, date, journal name, subject area
- Auto-Suggestions: Predictive text for popular searches
- Saved Searches: Save frequent queries for quick access

3.1.3 Publications Page

- Categories: Organized by subject (Medicine, Engineering, etc.)
- Download Options: PDF, EPUB, HTML
- Open Access Badge for visibility
- Peer Review Dashboard for editors and reviewers
- Citation Export Tool (APA, MLA, Chicago)
- Collaborative Workspaces for authors and editors
- Interactive Metrics: Readership trends, citation impact

3.1.4 Dashboard

- Secure dashboard for submission tracking
- Display upcoming events, workshops, and deadlines

3.1.5 User Profile

- Name, Contact Details, Registered Emails, Location, Organizations
- Account deletion, email and password change
- Statistics tracking for authors

3.1.6 Contact Us Page

- Office Locations: Interactive map with pins
- Social Media Links with live feeds
- Live Chat & Support Ticket System
- Searchable FAQs
- Multilingual Support

3.1.7 Additional Features

- Mentorship Program for early-career researchers
- Funding Opportunities announcement
- Integration with conferences for paper submissions

3.2 Non-Functional Requirements

- Performance: The system should support at least 10,000 concurrent users.
- Security: Must comply with GDPR for user data protection.
- Usability: The UI should be intuitive and accessible.
- Scalability: The platform should support future enhancements and integrations.
- Availability: The system should have an uptime of 99.9%.
- Backup & Recovery: Daily backups must be maintained, and the system should support recovery within 2 hours of a failure.

3.3 External System Dependencies

- Google, LinkedIn, ORCID, and Facebook APIs for authentication
- Third-party citation management tools (Zotero, Mendeley, EndNote)
- Email service for notifications and password recovery
- Cloud storage for secure document handling

3.4 Error Handling

- Display user-friendly error messages for failed authentication and invalid inputs.
- Log errors for debugging and security monitoring.
- Implement CAPTCHA for login and signup to prevent bot attacks.

4.Use Cases & Diagrams

4.1 Use Case: User Login

- Actors: Author, Reader, Administrator
- Steps:
- 1. User enters credentials (or social login)
- 2. System validates input
- 3. If valid, user is redirected to dashboard
- 4. If invalid, an error message is displayed

5. If authentication fails three times, CAPTCHA is triggered

4.2 Use Case: Publication Submission

- Actors: Author
- Steps:
- 1. User uploads manuscript in supported format
- 2. System checks for plagiarism (if applicable)
- 3. User adds metadata (title, abstract, keywords)
- 4. Submission is assigned for review
- 5. Author tracks submission progress via dashboard

5.Appendices

- References to related documentation
- Glossary of terms

This document provides a structured approach to the development and implementation of the publication platform, ensuring clarity and completeness in defining system requirements.