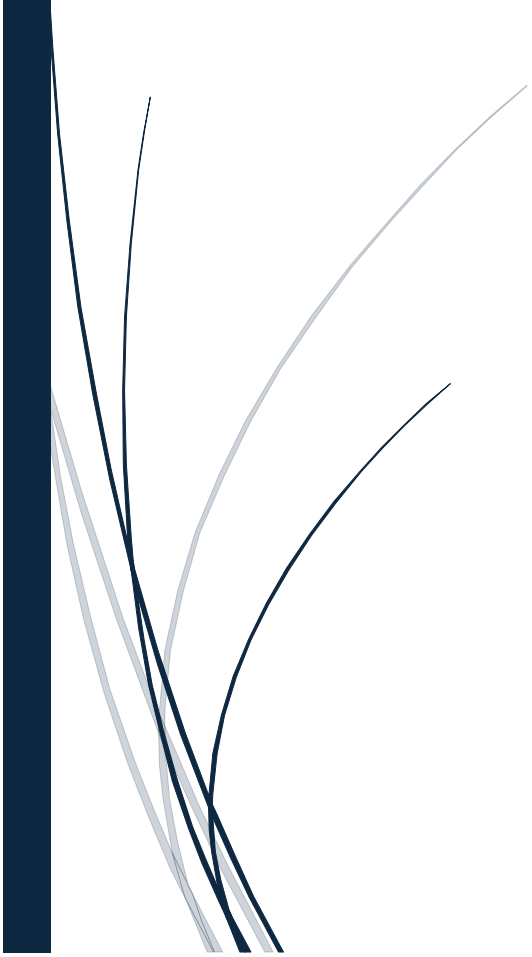
4/4/2024

Software Requirements Specification

Magazine Management System



PROCESS IMPACT

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Software requirement system

((SRS))

Table of Contents

1. Introduction

1.1 Purpose

The purpose of this document is to outline the requirements and specifications for the development of a Magazine Management System. This system aims to streamline the management of magazines within an organization, facilitating tasks such as inventory management, subscription handling, and content tracking.

1.2 Document Conventions

Throughout this document, the following conventions will be used:

- Functional requirements will be denoted with the prefix "FR."
- Non-functional requirements will be denoted with the prefix "NFR."

1.3 Intended Audience and Reading Suggestions

This document is intended for software developers, project managers, and stakeholders involved in the development and implementation of the Magazine Management System.

1.4 Project Scope

The Magazine Management System will encompass functionalities related to magazine inventory management, subscription handling, content tracking, and reporting. It will integrate with existing systems as necessary to ensure seamless operations within the organization.

2. User Requirements

2.1 **Admin**

- The admin login process should implement strong encryption protocols to secure user credentials and prevent unauthorized access.
- The admin should be able to sign out of the system securely.
- The admin should have access to a dashboard displaying total registered users, total new magazines, total published magazines, and total unpublished magazines And must load quickly and efficiently, displaying statistics and data without significant latency, to enhance user productivity.
- The admin should be able to approve or disapprove comments made on magazines in reliable way.
- The admin should be able to add, update, or delete magazines from the system should be performed efficiently, with minimal processing time and reliable database transactions to prevent data inconsistencies.
- The admin should be able to manage large publication processes of magazines, with scalable processes for selecting magazines for online publication.
- The admin should receive email notifications regarding the approval status of magazine publications should be delivered reliably, with mechanisms in place to handle delivery failures and ensure message integrity.

2.2 **Guest**

- The guest should have the option to log in to the system if they have an account and should be able to sign up for a new account if they are not already registered, and should be secure, with measures in place to protect user information and prevent unauthorized access.
- The guest should be able to sign out of the system securely.
- The guest should be able to view the total number of published magazines and magazines available for reading in a quick and responsive, with compatibility across various devices and browsers to ensure a consistent user experience.
- The guest should be able to search about any specific magazine he want
- The guest should be able to download magazines for offline reading.
- The guest should be able to comment on magazines reliably with proper error handling to prevent data loss or corruption.
- Guest should be able to rate and provide feedback on magazines

2.3 **Publisher**

- The publisher should be able to log in to the system using valid credentials and sign up for a new account if they are not already registered and should be secure, with measures in place to protect user information and prevent unauthorized access.
- The publisher should be able to sign out of the system securely.
- The publisher should be able to publish new magazines to the system efficiently and reliably, with minimal processing time and proper error handling to ensure data integrity.

- The publisher should receive email notifications regarding the approval status of their magazine publications should be delivered reliably, with mechanisms in place to handle delivery failures and ensure message integrity.
- The publisher should be able to view the history and status of their magazine publications in a friendly user interface, with clear navigation and organized layouts to facilitate efficient access to relevant information.

3. Functional Requirements

3.1 Authentication and User Management

3.1.1 Authentication

- **Description: Users should be able to authenticate themselves securely to access the system.**
- **Requirement: Users must provide a valid username and password to log in.**
- **Source: User input.**
- **Pre-condition: User account exists.**
- **Post-condition: User is logged in and granted appropriate access rights.**
- **Output: Success message or error notification.**

3.1.2 User Registration

- **Description: Users should be able to register for a new account in the system.**
- **Requirement: Users must provide necessary details such as name, email, and password for registration.**
- **Source: User action.**
- **Pre-condition: User is not registered.**
- **Post-condition: User account is created in the system.**
- **Output: Confirmation message or error notification.**

3.1.3 Sign Out

- **Description: Users should be able to securely log out of the system.**
- **Requirement:No additional information is required from the user.**
- **Source: User action.**
- **Pre-condition: User is logged in.**
- **Post-condition: User is logged out, and access rights are revoked.**

- **Output: Confirmation message of successful logout.**

3.2 Display Dashboard Statistics

- **Description**: The system should display statistics such as total registered users, total new magazines, total published magazines, and total unpublished magazines on the admin dashboard.
- **Requirement**: None.
- **Source**: System database.
- **Pre-condition**: Admin is logged in.
- **Post-condition:** Statistics are displayed on the dashboard.
- **Output**: Statistics summary.

3.3 Manage Magazines

- **Description/Action:** Admins should be able to add, update, or delete magazines from the system.
- **Requirements/Inputs:** Magazine details (title, content, etc.).
- **Source**: Admin action.
- **Pre-condition**: Admin account logged in.
- **Post-condition**: Magazine database is updated.
- **Output:** Confirmation message or error notification.

3.4 Search Functionality

- **Description**: Users should be able to search for specific magazines or content within the system.
- **Requirement**: Users must have a search bar where they can input keywords or phrases to find relevant magazines.
- **Source**: User action.
- **Pre-condition**: Magazines are available in the system.
- **Post-condition:** Search results are displayed based on user queries.

- **Output**: Search results with relevant magazine information.

3.5 **Rating System**

- **Description:** Users should be able to rate and provide feedback on magazines.
- **Requirement:** Users must have the ability to assign ratings and leave comments for magazines they have read.
- **Source:** User action.
- **Pre-condition:** Magazine is available for viewing.
- **Post-condition:** Ratings and feedback are recorded for the respective magazines.
- **Output:** User ratings and comments displayed for magazines.

3.6 **Publication Process Management**

3.6.1 Magazine Selection and Approval/Disapproval

- **Description**: Admins should be able to select magazines for online publication and approve or disapprove their publication status.
- **Requirements/Inputs:** Magazine selection , Publication status
- **Source**: Admin action.
- **Pre-condition**: Magazine awaiting publication decision.
- **Post-condition**: Magazine is either approved for publication and made available online or disapproved and not published. Additionally, the publication status is updated.
- **Output**: Updated publication status.

3.6.2 Email Notification for Publication Approval

- **Description**: Admins should be able to send email notifications to publishers informing them whether their magazine publication has been approved or not.

- **Requirements/Inputs:**Publisher email Approval status (approved/disapproved)
- **Source**: Admin action.
- **Pre-condition**: Magazine publication decision is made by the admin.
- **Post-condition**: Email is sent to the publisher indicating the approval status of their magazine publication.
- **Output**: Publisher receives an email notification with the publication approval status.

3.6.3 Email Notification to Publisher

- **Description**: Upon the admin's decision to approve or disapprove a magazine publication, the system should automatically send an email notification to the respective publisher informing them of the approval status.
- **Requirements/Inputs:** Publisher email**,** Approval status (approved/disapproved)**,** Magazine details.
- **Source**: System automation triggered by admin action.
- **Pre-condition**: Admin makes a decision on magazine publication.
- **Post-condition**: Email notification is sent to the publisher.
- **Output**: Publisher receives an email indicating whether their magazine publication has been approved or not, along with any additional information regarding the decision.

4. Non-Functional Requirements

The Magazine Management System is designed to meet various non-functional requirements to ensure its effectiveness, reliability, and user satisfaction. These requirements encompass security, performance, reliability, scalability, and usability aspects:

4.1 Security

- The system implements robust user authentication mechanisms, including encryption of user credentials and secure session management, to protect against unauthorized access and data breaches.
- Access to sensitive functionalities such as admin privileges and publisher actions is restricted based on role-based access control (RBAC) to prevent unauthorized operations.
- Magazine downloads and uploads are conducted over secure connections (HTTPS) to safeguard against data interception and tampering.

4.2 Reliability

- The system ensures high reliability and data integrity through transactional operations for critical functionalities such as magazine management, comment approval, and publication status updates.
- Error handling mechanisms are implemented to gracefully handle unexpected errors and exceptions, preventing system failures and data inconsistencies.
- Regular backups of system data are performed to mitigate the risk of data loss and ensure quick recovery in the event of system failures or disasters.

4.3 Performance

- The system is optimized for fast and responsive performance, ensuring quick loading times for user interfaces, dashboards, and magazine content to enhance user experience.
- Database queries and transactions are optimized for efficient processing, minimizing response times and latency to support high concurrency and user load.
- Magazine download and upload processes are optimized for fast transfer speeds, utilizing efficient data compression and transmission protocols to minimize download times and bandwidth consumption.

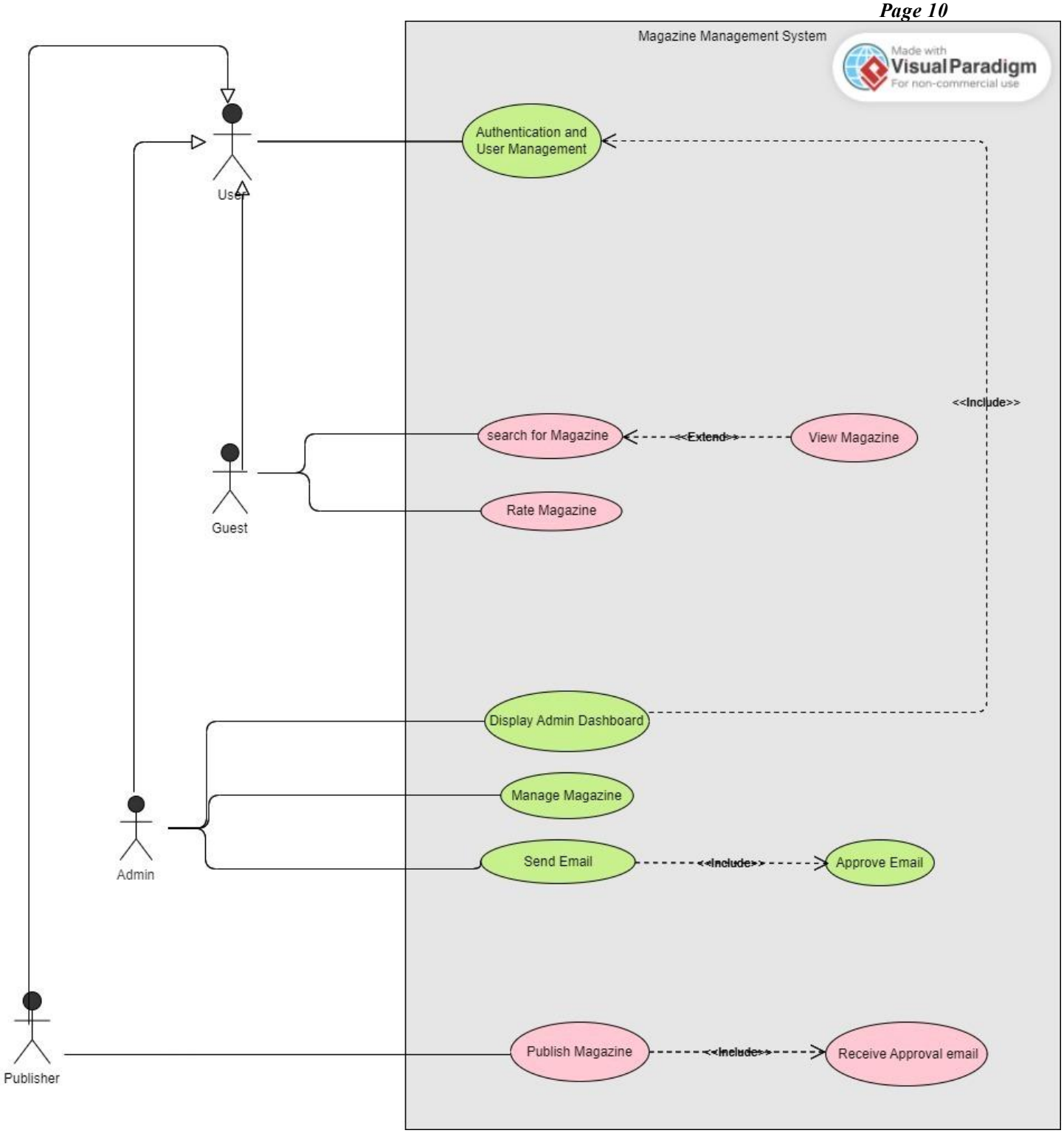
4.4 Scalability

- The system is designed to be scalable to accommodate increasing user demands and growing data volumes over time.
- Scalability is achieved through horizontal scaling techniques, such as load balancing and distributed architectures, to distribute workload across multiple servers and resources.
- Database scalability is ensured through techniques such as sharding and partitioning to handle large datasets and optimize query performance.

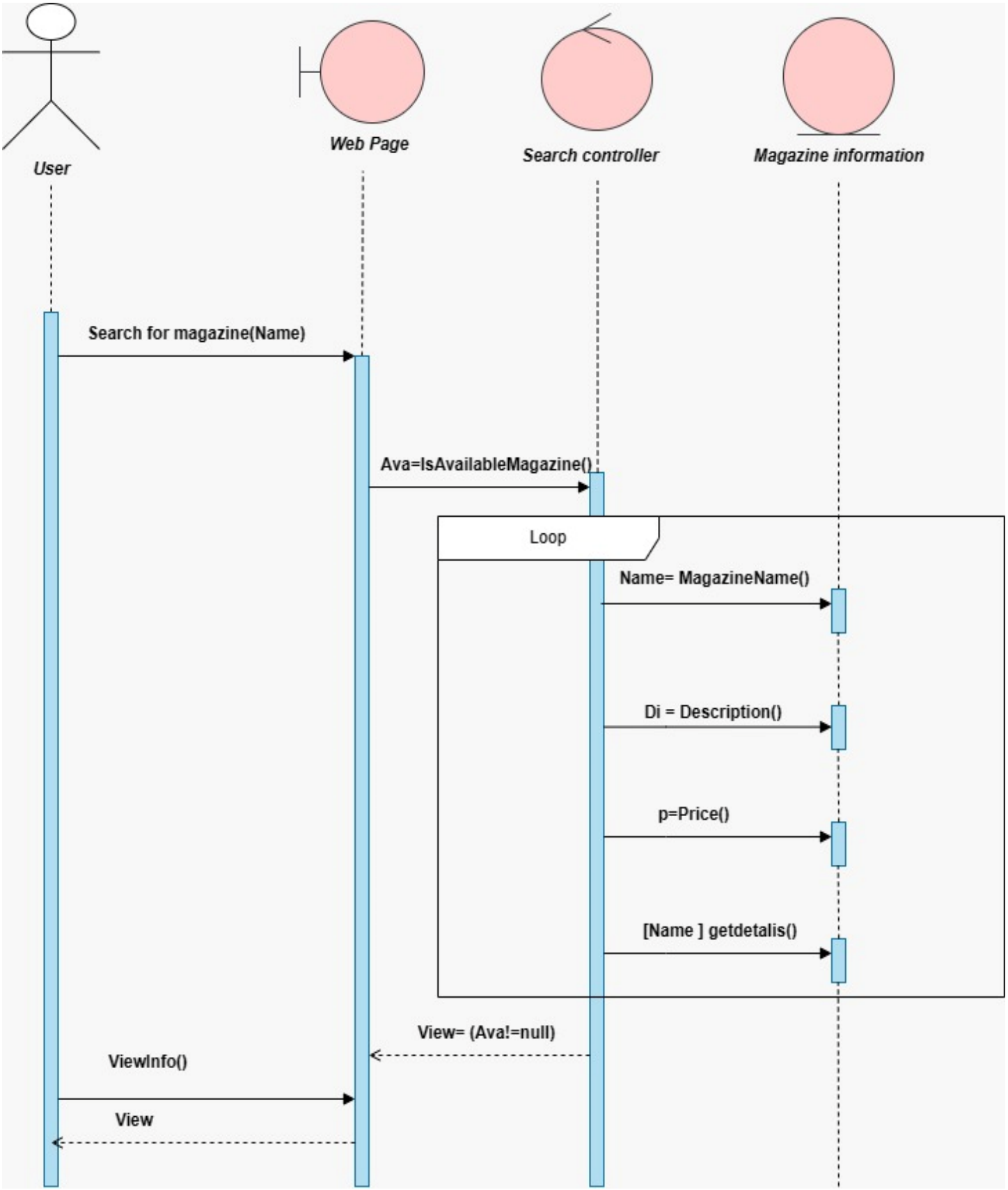
4.5 **Usability**

- The system provides a user-friendly interface with intuitive navigation and clear instructions to facilitate ease of use for all user roles, including admins, guests, and publishers.
- Accessibility features are incorporated to ensure the system is usable by individuals with disabilities, complying with relevant accessibility standards such as WCAG (Web Content Accessibility Guidelines).
- User interfaces are designed with responsive design principles to ensure consistent and optimal user experience across various devices and screen sizes.

((Use Case Diagram))


Magazine Management System
Made with VisualParadigm For non-commercial use
User
Guest
Admin
Publisher
Authentication and User Management
search for Magazine
<<Extend>>
View Magazine
Rate Magazine
<<Include>>
Display Admin Dashboard
Manage Magazine
Send Email
<<Include>>
Approve Email
Publish Magazine
<<Include>>
Receive Approval email

((Sequence Diagram))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Search for magazine(Name)
Ava=IsAvailableMagazine()
Loop
Name= MagazineName()
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