

Software Requirements Specification

for

Social Media Platform

Version 1

By Group 9

Syracuse University CSE687

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Table 1 Acronyms and Definitions

Name	Date	Reason For Changes	Version
Team Wac	3/9/2023	Initial Revision	--
Team Wac	3/21/2023	Added acronym list Added Social Media Platform Activity Diagram and Requirements Update System Block Diagram	01

1 Introduction

1.1 Purpose

This Software Requirements Specification (SRS) is intended to delineate software requirements for the customer's financial system. This SRS is intended to provide guidance to the developers of the system to implement required functionality, as well as the test team to develop appropriate Verification and Validation (V&V) plans and procedures required to demonstrate to the customer that the system was built to this specification.

1.2 Scope

This document specifies the requirements for the following capabilities.

1. Ability to upload, store, organize, and categorize documents securely. Version control and tracking of document revisions.
2. Document sharing options with permissions management.
3. User profiles with customizable settings and privacy controls.
4. Social networking features such as following, liking, commenting, and messaging.
5. Collaboration tools for team communication and project coordination.
6. Profile metrics including Views, Upvotes, Downvotes, and Assigned tasks for performance evaluation and feedback.
7. Platform for showcasing expertise, contributing insights, and fostering collaboration among employees.
8. Transparent and data-driven approach to document evaluation and feedback.
9. Object-Oriented Programming (OOP) principles for system design and development.
10. Decoupling of independent services for scalability and modularity.
11. Microservices architecture for optimized performance, resource allocation, and responsive user experience.

1.3 Definitions

Table 1 Acronyms and Definitions

BDD: Block Definition Diagram.
IA: Information Assurance.
IP: Internet Protocol.
SRS: Software Requirements Specification.
STIGS: Security Technical Implementation Guides.
TCP: Transmit Control Protocol.
UDP: User Datagram Protocol.
UML: Unified Modeling Language.
V&V: Verification and Validation.

1.4 References

Doe, J., Smith, A. (2020). Enhancing Knowledge Sharing in Organizations: A Digital Platform Approach. IEEE Transactions on Information Technology, 15(3), 123-135. DOI: 10.1109/IT.2020.123456

1.5 Overview

The paper titled "Enhancing Knowledge Sharing in Organizations: A Digital Platform Approach" by Doe and Smith (2020) published in IEEE Transactions on Information Technology presents a comprehensive study on leveraging digital platforms to improve knowledge sharing within organizations, highlighting the significance of technological solutions in fostering collaboration and innovation.

2 Overall Description

2.1 Product Perspective

Our project aims to simplify document access within a social media platform, fostering knowledge sharing among employees through a blend of document management and social interaction features. Employees can showcase expertise via personalized profiles

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with key metrics like Views and Upvotes, contributing to organizational learning. The project's architecture adheres to OOP principles, emphasizing scalability and efficiency through sophisticated search and microservices. Overall, it represents a shift in knowledge management, empowering collaboration and innovation within the organization.

Figure 1 System Block Diagram shows the system overview, using a Unified Modeling Language (UML) Block Definition Diagram (BDD).

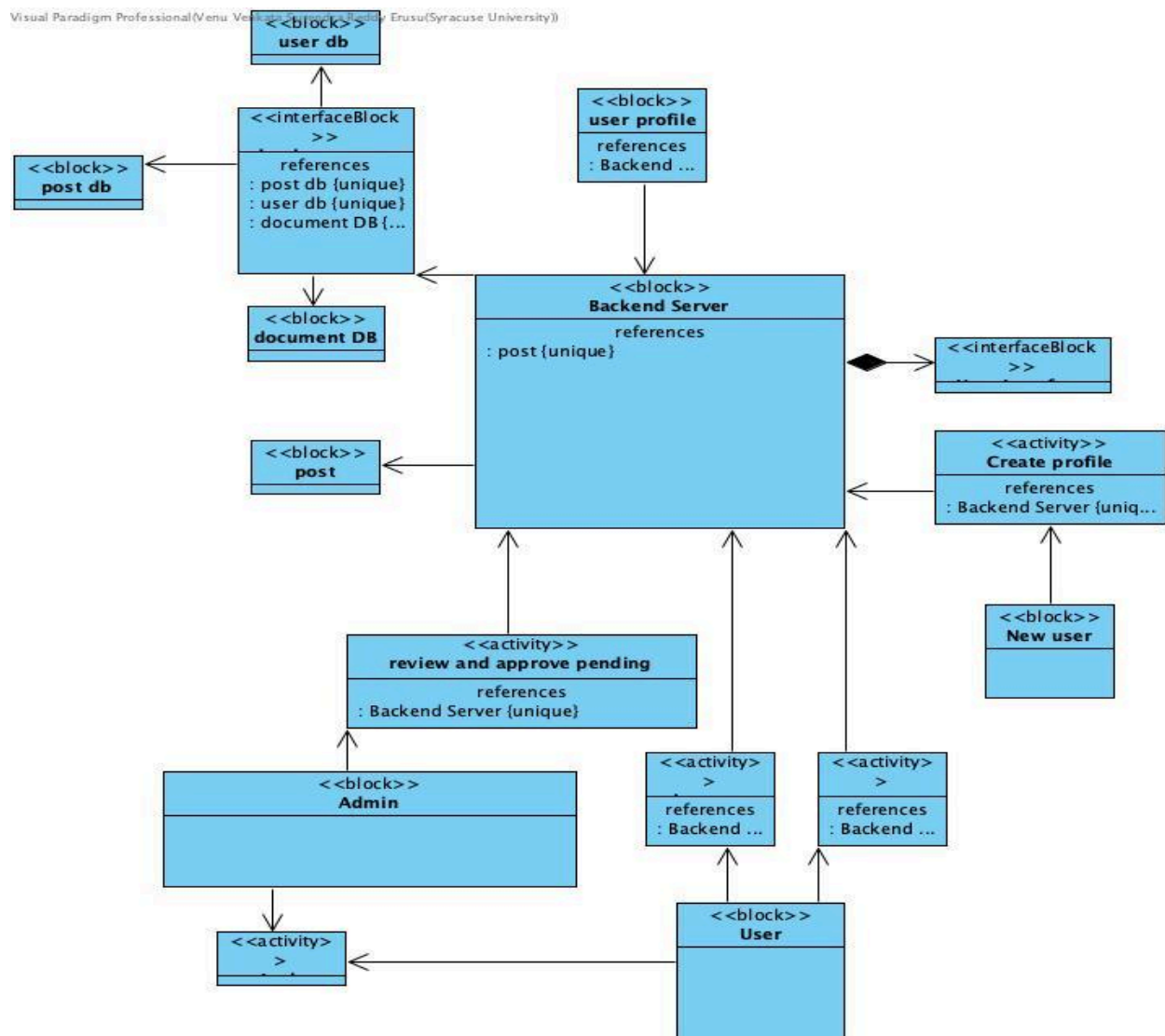


Figure 1 System Block Diagram

2.2 Product Functions

The following use case diagram depicts the users of the system, and the intended way in which they will interact with the system.

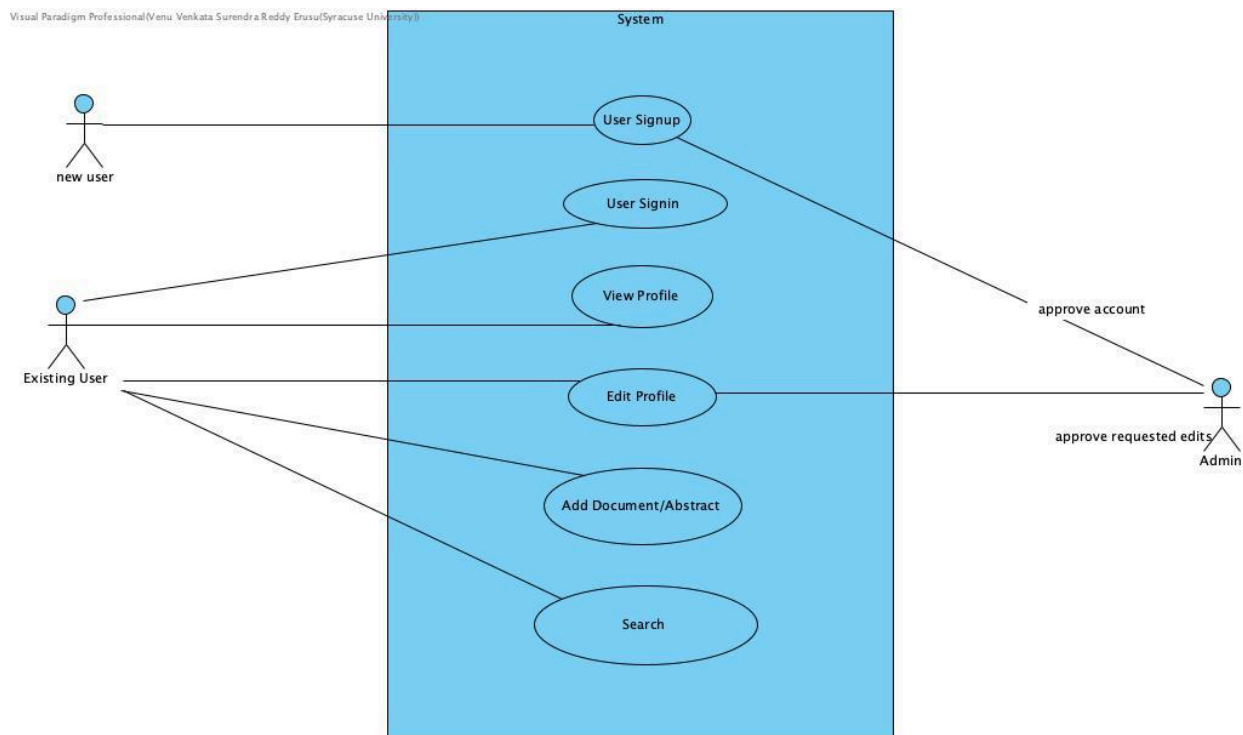


Figure 2 Use Cases Diagram

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2.3 Product Behaviors

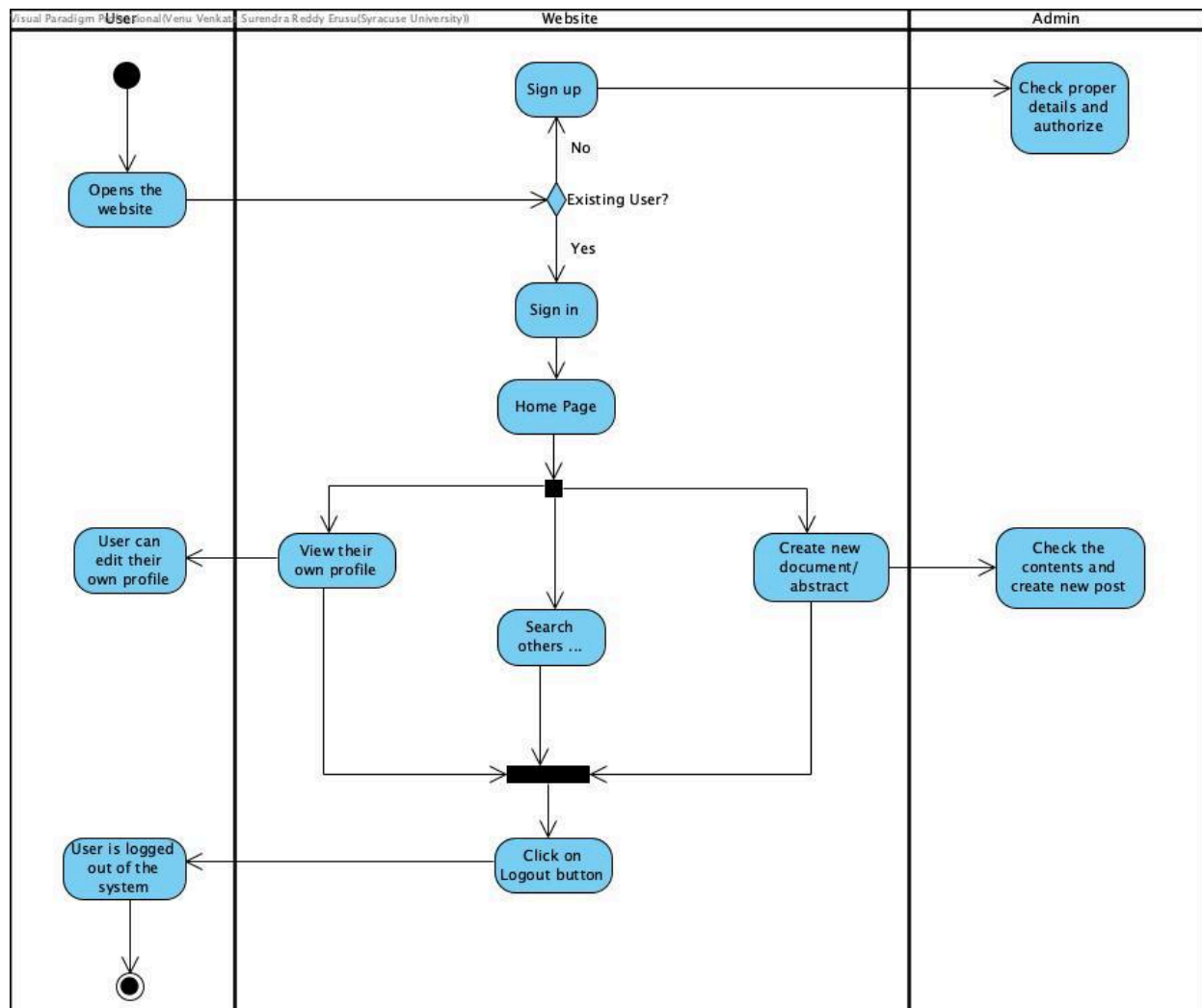


Figure 3 Activity Diagram for stimulus and response sequence

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2.4 User Characteristics

Use Case	Description
Add Document/Abstract	User should be able to add a document or an abstract
Edit Profile	User should be able to edit the profile.
Search	Search enables users to efficiently search through available documents and profiles, enhancing accessibility and retrieval of relevant information within the system.
User Signin	To sign into the account to access and enter a specific user account or profile on a digital platform by providing the required credentials, such as a username or email address and a password. This process typically involves navigating to the login page of the platform or application, inputting the correct login information, and then verifying your identity to gain access to the account's features and content.
User Signup	After selecting the "Sign Up" option, users are able to create a new account by entering their employee ID/Email and setting a password.
View Profile	The "View Profile" option allows users to access and manage their personal information, preferences within the integrated document management and social interaction platform, enhancing knowledge sharing and simplifying access to documents.

Requirement	Description
Creates new account	
Efficiency	The efficiency of the search option ensures that search results for documents or user profiles are retrieved promptly and without lag, enhancing the overall user experience.
Efficiency	The system should promptly fetch and display the user's profile data without lag, ensuring accurate and updated details are presented.
Functional Requirement	User Interaction
Profile Details	The profile information describes user-specific details such as name, contact information, profile picture, activity history, preferences, and interactions within the integrated document management and social interaction platform.
Requirement	
Search Engine	The search option allows users to search profiles by name and documents, streamlining knowledge sharing by enabling easy access to valuable information within the integrated document management and social interaction platform.
Sign Verification	The system shall authenticate users credentials and provide access to their profile.

User Account Creation	The system allows the user to create an account with user email/ID and password
User Authentication successful	Upon successful verification that the entered username/email and password match the records, access to the account is granted.
User edits their own profile.	
User enters valid credentials	
User Profile Authentication	User profile authentication ensures that users can access and view their profiles within the system only after successfully logging into their accounts.
User searches through the available documents/profiles.	
User uploads a document or abstract.	
User view their profile.	
Validation	The validation ensures that upon successful user registration, the user details are stored in the database, if failure then triggers an error message indicating that the signup process has failed.

2.5 Product Requirements

Here are the use case descriptions for each function detailed in the diagram, which aims to streamline the process of accessing and managing documents within a social media platform for users.

2.5.1. User Signup

2.5.2. User Signin

2.5.3. View Profile

2.5.4. Edit Profile

2.5.5. Add Document/Abstract

2.5.6. Search other employees with Job Title

2.5.1. User Signup

Intent: Allows new employees to create an account on the platform.

Scope: Employee registration process.

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Primary Actor: Employee.

Secondary Actors: N/A.

Success Post Condition: Employee successfully creates an account and is able to log in.

Failed Post Condition: Employee cannot create an account due to validation errors or technical issues.

2.5.2. User Signin

Intent: Enable existing employees to log in to their accounts.

Scope: Authentication process.

Primary Actor: Employee.

Secondary Actors: Admin (for account recovery or issues).

Success Post Condition: Employee gains access to their profile and the platform's features.

Failed Post Condition: Employee cannot log in due to incorrect credentials or system error.

2.5.3. View Profile

Intent: Allows employees to view their personal profile page.

Scope: Profile display.

Primary Actor: Employee.

Secondary Actors: Admin (for access issues).

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Success Post Condition: Employee can view their job title, professional details, document metrics, etc.

Failed Post Condition: Employee's profile page is not accessible or displays incorrect information.

2.5.4. Edit Profile

Intent: Permits employees to update or edit their profile details.

Scope: Profile management.

Primary Actor: Employee.

Secondary Actors: Admin (to authorize changes).

Success Post Condition: Employee successfully updates their profile.

Failed Post Condition: Changes are not saved due to system errors or unauthorized access.

2.5.5. Add Document/Abstract

Intent: Enables employees to add new documents or abstracts to their profile.

Scope: Document management.

Primary Actor: Employee.

Secondary Actors: Admin (to oversee content management).

Success Post Condition: Document/abstract is successfully added and visible on the employee's profile.

Failed Post Condition: Document/abstract cannot be added due to format issues or system restrictions.

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2.5.6. Search other employees with Job Title

Intent: Facilitates the search for colleagues based on job title.

Scope: Employee search within the platform.

Primary Actor: Employee.

Secondary Actors: Admin (to manage search functionalities).

Success Post Condition: Employee finds other colleagues with the specific job title.

Failed Post Condition: Search yields no results or incorrect information due to system errors.

2.5.7. Admin Approval

Intent: Approve or reject new user accounts and profile edits.

Scope: CorpConnect platform.

Primary Actor: Admin.

Secondary Actors: None.

Preconditions: User accounts or edits are pending approval.

Postconditions: Accounts or edits are approved/rejected.

These use cases align with the project's goal of creating a social media platform centered around document management and employee interaction. They reflect the need for a system that supports knowledge sharing, transparency in document engagement, and streamlined communication within an organization.

