Republic of the Philippines
Cavite State University
Don Severino delas Alas Campus
Indang, Cavite

COLLEGE OF ENGINEERING AND INFORMATION TECHNOLOGY

DEPARTMENT OF INFORMATION TECHNOLOGY

In Partial Fulfillment of
COSC 75A: Software Engineering II

A Proposal of

"Enhancing Learning Efficiency: DnD Libraries – An Open-Source Document Management System"

Submitted to:

Mr. Stephen Andrei O. Rocillo
Instructor

Submitted by:

Dinothelo P. Quiroga
Daniel Lawrence B. Cunanan

Date submitted:

February, 2024

Table of Contents

INTRODUCTION

1.1 Background

Public library material resources include books on all subjects, journals, magazines, newspapers, computers, DVDs, Videos/CDs, pictures, government documents, pamphlets, selected documentary films on relevant subjects, drawings, charts, models, lectures in the vernacular, posters, audiovisuals, cassette tape of government programs, achievements and problems and others (Nwofor,et al, 2015). According to Onwuazo (2003), public library resources include a variety of all published and unpublished information materials in various forms, readable with naked eyes or an aid for the clientele. He notes that these information resources include journals, online databases and software programs to ensure a good learning environment for users to achieve educational goals.

Many public libraries struggle with limited funding, which can affect their ability to purchase new materials, maintain facilities, and offer innovative programs and services. With the rise of digital resources, public libraries must navigate complex copyright laws and licensing agreements to provide access to e-books, databases, and other digital materials while respecting the rights of content creators and publishers. Many public libraries struggle with limited space, which can make it difficult to accommodate growing collections, provide comfortable seating areas, and offer programming and events. (Library Journal, 2023) Searching for information on the internet can be a daunting task due to various challenges. These include grappling with information overload, discerning the credibility of sources amidst a plethora of content, navigating biased or

misleading information, formulating effective search queries, overcoming language barriers, encountering technical issues like slow connections, facing paywalls and access restrictions, managing privacy concerns, contending with filter bubbles and algorithmic biases, and addressing limitations in digital literacy skills. (Smith, 2020) To navigate these struggles effectively, individuals can employ strategies such as critically evaluating sources, utilizing advanced search techniques, consulting multiple viewpoints, and enhancing digital literacy competencies.

Managing documents effectively is crucial for both individuals and organizations in the current digital landscape. A document repository centrally stores all content produced and housed by an organization, eliminating the need for paper and organizing documents effectively. This simplifies document management and promotes productivity and collaboration within the organization. (Laserfiche, 2024)

1.2 Statement of the Problem

Developers have identified a challenge in effectively gathering lectures and facilitating easy sharing of notes and documents among students.

1.2.1 Main Problem

One of the main challenges for developers nowadays is how they find information. Typically, this means either going to the library or doing a lot of searching online. Both of these methods take a lot of time and effort.

Libraries have useful books and materials, but they might not have the latest information. Online searches can be overwhelming because there's so much information out there, and it's not always easy to tell what's reliable. So, developers are looking for better ways to get the information they need.

1.2.2 Specific Problem

Here are some specific problems developers aims to solve in the proposed document repository through fishbone diagram.

Limited Availability of Latest Information in Libraries:

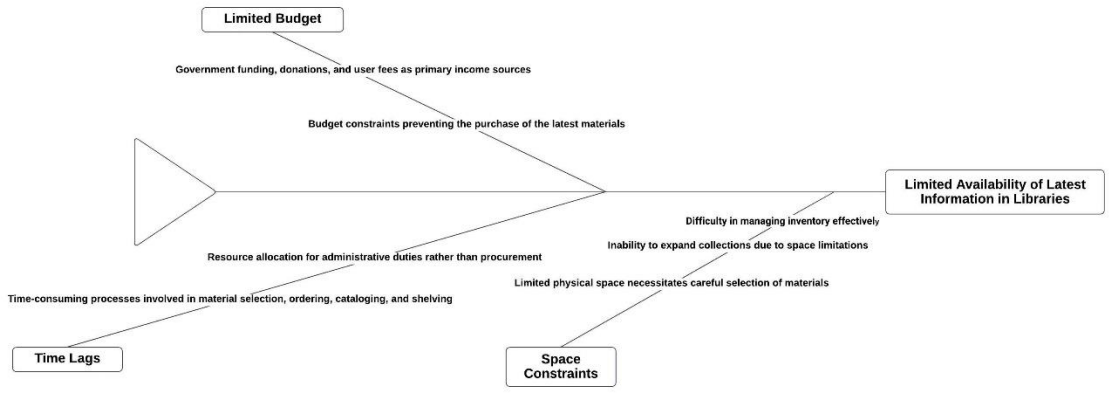


Figure 1: Fishbone Diagram of Specific problem

Obtaining the most recent information poses challenges for both traditional library systems and online search platforms. In public libraries, limited funding hampers their ability to quickly get new materials, as discussed by Nwofor et al. (2015). Administrative tasks and space constraints worsen this problem, leading to

delays in updating collections and a shortage of new resources (Onwuazo, 2003; Library Journal, 2023). Limited funds, administrative tasks, and space constraints are significant obstacles for public libraries in getting new materials promptly and keeping their collections up to date (Nwofor et al., 2015; Onwuazo, 2003; Library Journal, 2023). Government funding, donations, and user fees are usually the main sources of income for libraries, but budget limits can stop them from buying the latest books, journals, and resources, affecting how well they can serve their visitors. Administrative tasks like picking what to buy, ordering it, putting it in the catalog, and putting it on shelves take time. And because of limited space, libraries have to choose carefully what they get and might not have enough copies for everyone who wants them.

Overwhelming Nature of Online Searches:

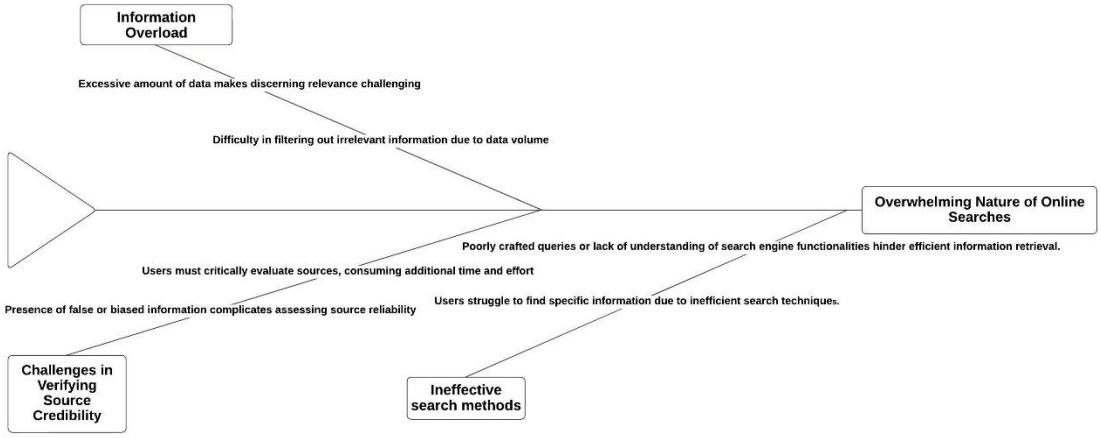


Figure 2: Fishbone Diagram of Specific problem 2

Online searches provide access to extensive information databases, yet navigating this digital realm comes with its own challenges. Smith (2020) emphasizes the daunting nature of online searches, pointing out obstacles like information overload, challenges in verifying the credibility of sources and ineffective search methods. In reference to Smith's observation (2020), the issues of too much information, verifying sources, and ineffective searching are significant concerns. When navigating online databases, users often face an overload of data, making it challenging to sift through what's relevant and what's not. Furthermore, the prevalence of false or biased information complicates the task of determining source credibility, prompting users to critically evaluate reliability. Additionally, difficulties in searching arise due to poorly crafted queries or a lack of understanding of search engine functions, hindering users' ability to find specific information efficiently.

1.3 Objectives

1.3.1 General Objective

The main objective of the web application document repository is to offer users a centralized platform for storing, organizing, and retrieving documents. The repository aims to simplify tasks related to documents, encourage collaboration, and ensure the security of data. It addresses the inconvenience associated with accessing lecture materials by providing concise reports on subjects.

1.3.2 Specific Objectives

The study is dedicated to accomplishing several pivotal objectives that play a crucial role in the development and execution of the web application document repository:

Enhance Information Accessibility Through Regular Updates:

Enable notifications or alerts for users when new documents are added or existing ones are updated, ensuring they have access to the latest information without relying solely on libraries or manual searches.

Streamline Document Discovery and Retrieval Processes:

Develop advanced search functionalities within the repository, including filters by topic, date, author, and document type, to narrow down search results effectively. Introduce a tagging system allowing users to categorize and label documents for easier organization and searchability.

1.4 Discussion of Existing and Proposed System

1.4.1 Existing System

With the developers' research, one of the existing web app document repository management systems is GitHub. GitHub is a platform that allows users to store files online and access them from anywhere through the cloud. Additionally, GitHub provides users with version control for software development projects, issue

tracking, and collaboration features. In contrast to the proposed simple document repository management system by the developers, GitHub has a complex data flow. When a user pushes code or uploads files to GitHub, the system, rather than the admin, automatically checks for potential vulnerabilities, code quality, and facilitates collaboration through pull requests and code reviews. This process aligns with the developers' proposed system, with the distinction being that validations are performed by the system, not the admin.

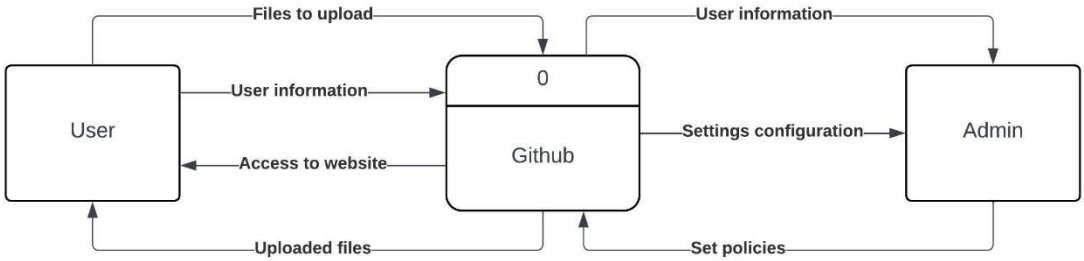


Figure 3: Level 0 Data Flow Diagram of Existing System

1.4.2 Proposed System

In this Level 0 Data Flow Diagram, the system comprises two main entities: users and administrators. The central component is the web app document repository management system. Users can access the dashboard by providing their user information. Additionally, they have the privilege to view and download public approved documents uploaded by other users. Users can also contribute to the system by uploading their own documents. Administrators play a pivotal role in overseeing both the system and user activities. They are responsible for authorizing the documents uploaded by users. If a document receives

authorization from an admin, it is then featured on the dashboard. Admins also require user information for access to the admin dashboard.

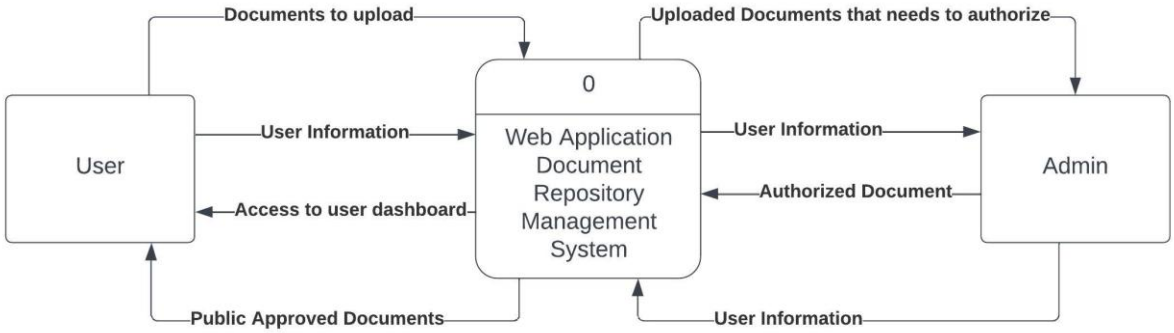


Figure 4: Level 0 Data Flow Diagram

In the Level 1 diagram for both user and admin interactions, the detailed system flow unfolds as follows: Users initiate the process by logging in with their credentials, and this information is then stored in the users table within the database. Upon successful login, users gain access to the dashboard, where they can navigate to their profile, document upload section, and notifications. The dashboard features approved public documents, stored in the documents table. Within the profile section, users can modify their name and email, updating the corresponding entries in the users table. The profile page also provides users with a view of their uploaded and favorited documents. The document upload page allows users to submit their documents. Upon upload, the document is initially stored in the authorization table. After receiving authorization, it is then moved to the documents table, and the system notifies the user of the approval or rejection status.

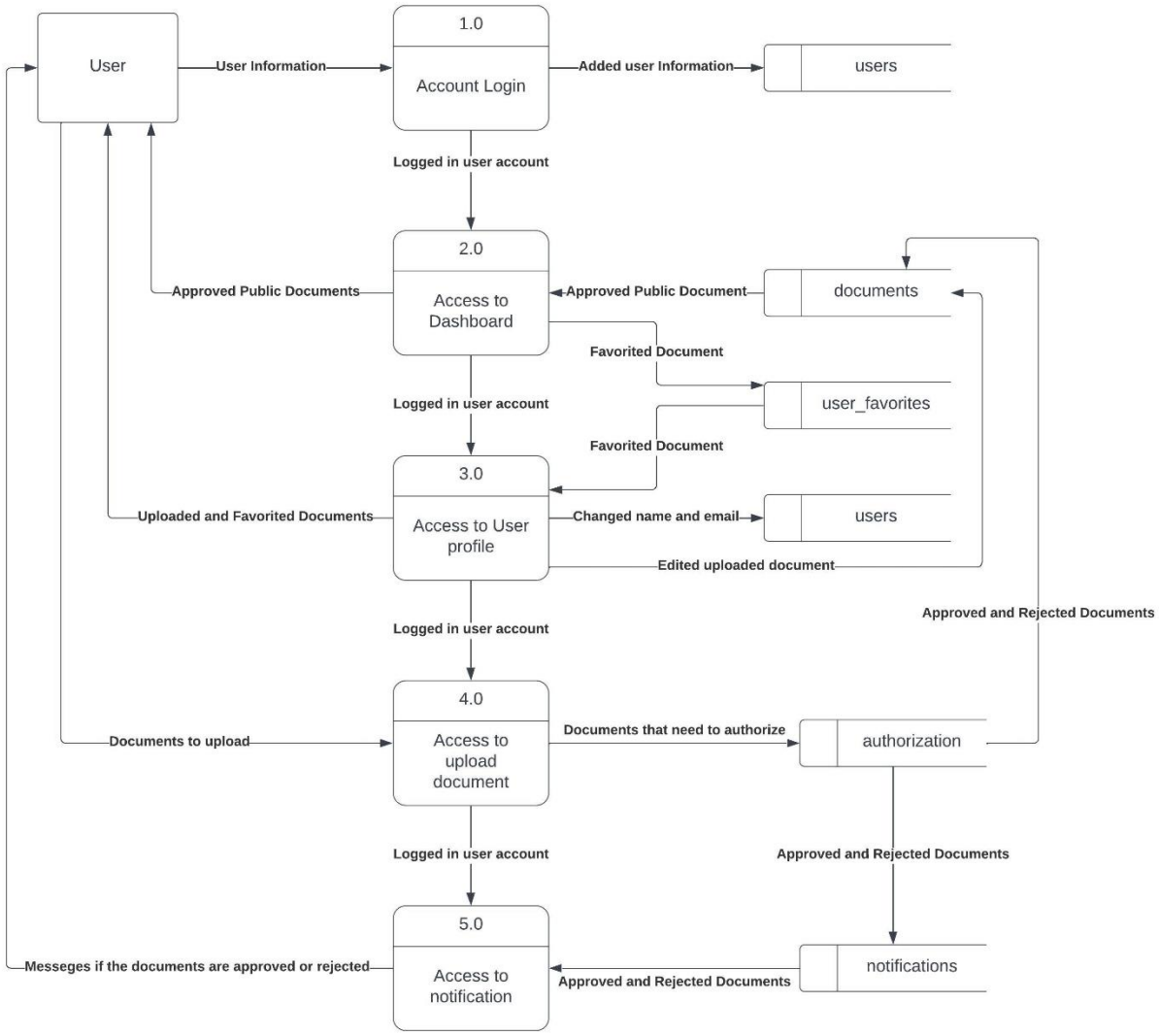


Figure 5: Level 1 Data Flow Diagram (Users)

Admins log in using their credentials, and this information is stored in the users table within the database. Subsequently, administrators gain entry to the admin dashboard, where they can retrieve user information and documents. Admins possess the authority to delete both user accounts and documents; however, they do not have the capability to edit user information or document content. Within the admin dashboard, there is a feature for file modification history, enabling admins to track any modifications made by users to their documents. Furthermore, administrators have access to the file authorization section, where they can either approve or reject files. An analytics section is also available to admins, providing insights and a history of notifications. This analytics feature allows administrators to review the total count and details of authorized documents.

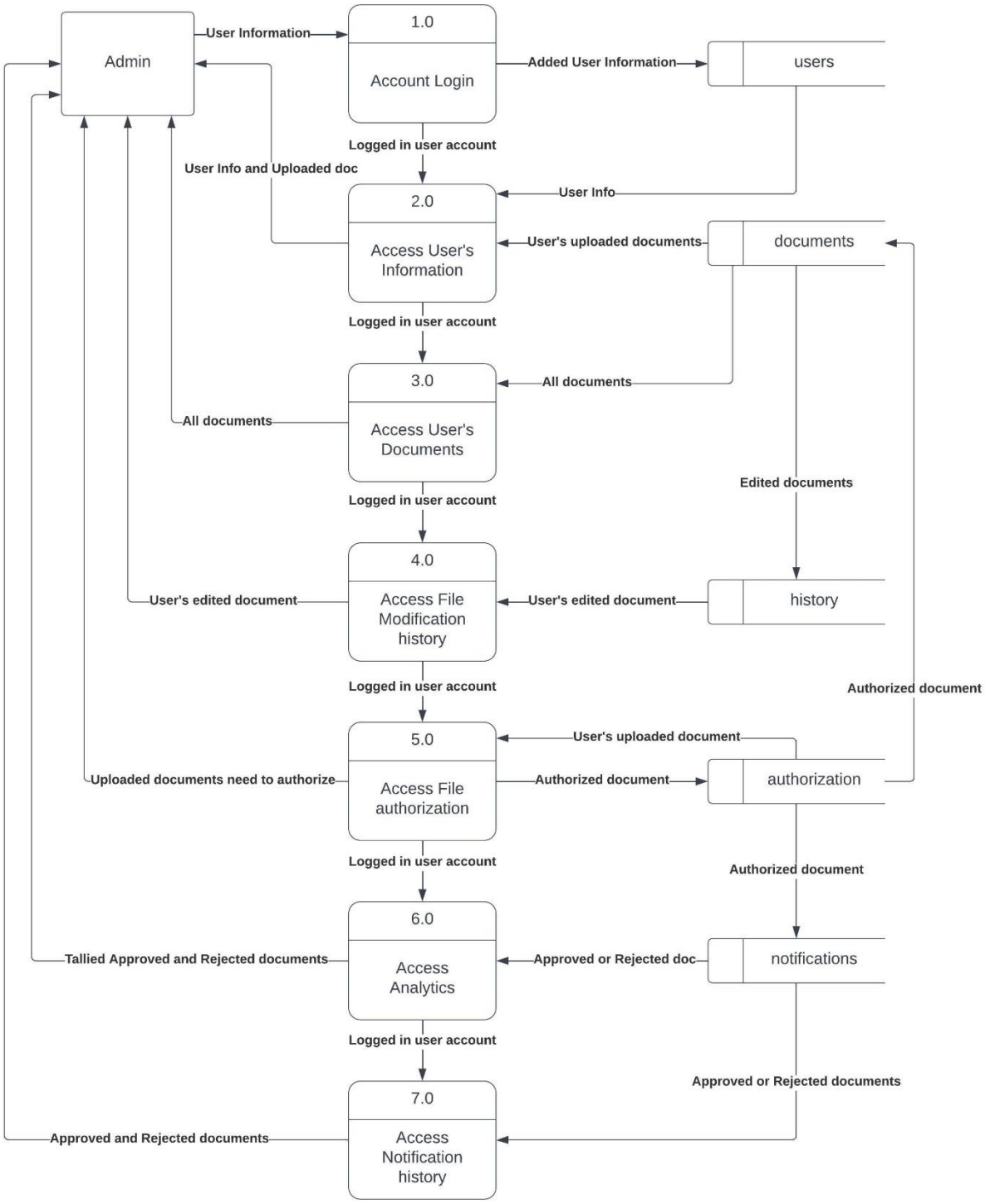


Figure 6: Level 1 Data Flow Diagram (Admin)

1.5 Scope and Limitations

The focus of the research centers on developing an open-source document repository management system tailored specifically for computer science students enrolled at CVSU Main Campus. Though the system, being an open-source web app, is designed to cater to users across the internet. The project aims to enhance the efficiency of study routines by providing a centralized platform for storing, organizing, and accessing educational materials. The scope involves designing a user-friendly web application that facilitates seamless document sharing, contributing to collaborative learning within the academic community. The system is geared towards streamlining document-related workflows, making it a valuable resource for students to access and manage study materials effectively.

Several constraints impact the extent of the research project. Firstly, financial limitations hinder the ability to host a dedicated website for the document repository. Consequently, alternative hosting options will be explored that align with budget constraints. Additionally, storage capacity is limited, necessitating judicious management of information to ensure optimal functionality of the repository. Furthermore, it is crucial to acknowledge that, given the simplified nature of the web application, robust security measures may not be fully implemented. Therefore, users are encouraged to exercise caution when sharing sensitive information on the platform.

SYSTEM REQUIREMENTS SPECIFICATION

2.1 Introduction

The DnD Libraries: An Open Source Document Repository Website is all about creating a cool and user-friendly space for managing documents, thus making sure the documents you upload is accurate and safe. It aims to provide simplified document sharing and enhancing learning experience through collaboration.

2.1.1 Purpose

The purpose of this system is to facilitate free, safe, and convenient document sharing through the web, with the additional goal of enhancing the learning experience for each user, promoting better learning outcomes.

2.1.2 Scope

The proposed system, DnD Libraries: An Open-Source Document Repository, focuses on all students of Cavite State University - Main Campus with the goal of enhancing their study efficiency through convenient collaboration.

2.1.3 Overview

The objective of the system is to elevate the learning experience, facilitate convenient document sharing, and provide efficient file storage. The system incorporates a moderation feature to monitor the documents being uploaded, ensuring a secure environment for student use.

Additionally, it is important to note that the system currently operates with limited storage capacity due to financial constraints on hosting.

The proposed system, DnD Libraries: An Open-Source Document Repository, introduces two distinct user classes: the user (comprising students) and the administrator. Users, specifically students, have the capability to upload multiple files simultaneously and access publicly uploaded files from other users. On the other hand, administrators have the authority to approve or reject user-uploaded files, serving as moderators within the system.2.2 Overall Description.

2.2.1 Product Perspective

The proposed system, DnD Libraries: An Open-Source Document Repository, is a web application with a centralized location or storage space where data, files, and information are systematically organized and stored. It functions as a structured collection that users can easily access, manage, and update.

2.2.2 Product Features/Functions

Functional Requirements:

1. The user can create account.
2. The user can input first name on create account page.
3. The user can input last name on create account page.
4. The user can input password on create account page.
5. The user can input email address on create account page.
6. The user can submit create account information.
7. The user can login.
8. The user can upload multiple files at once.
9. The user can search for #tags, title, or author.
10. The user can choose between Most viewed or Most favorite.
11. The user can choose categories to only show specfic category.
12. The user can Favorite a file.
13. The user can view and receive notification.
14. The user can view his profile page showing his information and uploaded and favorite documents.
15. The user can view the file uploaded publicly of other user.
16. The user can view how many views the file has.
17. The user can download the compressed file format.

18. The user can edit their uploaded files
19. The user can remove notification.
20. The user can input description, title, file format and tags on uploading a file.
21. The user can delete the file row before the user click the upload button.
22. The user can edit their first name, last name, and email address.
23. The user can logout their account.
24. The admin can access the web app on the browser.
25. The admin can login.
26. The admin can view user's information
27. The admin can view user
28. The admin can view user's uploaded files
29. The admin can delete user
30. The admin can search a user
31. The admin can view the documents uploaded by the users.
32. The admin can delete a document file
33. The admin can view a document file
34. The admin can view the document information
35. The admin can search for title, author, or tags.
36. The admin can view the file modification history
37. The admin can receive upload request from the user

38. The admin can approve user's upload request
39. The admin can deny user's upload request
40. The admin can view analytics
41. The admin can view notification for approval
42. The admin can view notification for rejections
43. The admin can view total approvals
44. The admin can view total rejections
45. The admin can view notification history
46. The admin can delete notification
47. The admin can logout.

2.2.3 User Classes and Characteristics

The DnD Libraries, an online repository, consist of both an administrator and a user.

Admin – The one who administer and moderate the web app

Admin	Administer the repository, moderating the files being uploaded, and also handle file upload requests and user accounts.	1.0 System Login 1.1 Sign-in Admin Account. 1.1.1 Input admin email. 1.1.2 Input admin password. 2.0 User Management. 2.1 View User. 2.1.1 View uploaded files by the user.

		2.1.2 Delete user. 2.1.3 View user information. 3.0 Document Management. 3.1 View Document 3.1.1 View User's uploaded files. 3.1.2 View file's Information. 3.1.3 Delete files. 3.2 Authorization 3.2.1 Receive Upload request. 3.2.2 Approve upload request. 3.2.3 Deny upload request. 3.2.4 View Files. 3.2.5 Input message when the uploaded file is denied. 4.0 Notification. 4.1 File Modification History. 4.1.1 View modified files 4.1.2 Delete notification of modified files. 4.2 Upload History.

		4.2.1 View uploaded files by the user. 4.2.2 Delete notification of upload by the user. 4.3 Analytics. 4.3.1 View the total of approved upload request. 4.3.2 View the total of denied upload request. 4.3.3 View notifications for the list of approved files. 4.3.4 View notification for the list of rejected files. 5.0 Logout.

Table 1: System Requirements Specification Table (Admin)

User – The student who uses the repository.

User	The student who utilizes the system has the capability to upload files and navigate through its features.	1.0 Account Creation. 1.1 Input email address. 1.2 Input first name. 1.3 Input last name. 1.4 Input password. 1.5 Input confirm password. 2.0 Account Login. 2.1 Input email address. 2.2 Input password. 3.0 Dashboard. 3.1 View files uploaded publicly by another user. 3.2 Favorite(bookmark)file. 3.3 Search files by author, title, or tags. 3.4 Sort files on dashboard by categories, most viewed, most favorites and other. 4.0 User Information 4.1 Profile 4.1.1 View last name. 4.1.2 View first name. 4.1.3 View user's upload. 4.1.4 View user's favorite. 4.2 Edit Profile 4.2.1 Input first name. 4.2.2 Input last name. 4.2.3 Input email address. 5.0 Notification. 5.1 View upload request information. 5.2 Delete upload request notification. 6.0 Upload. 6.1 Upload Files.

		6.1.1 Input Title. 6.1.2 Choose files format. 6.1.3 Input description. 6.1.4 Input tags. 6.1.5 Delete upload 6.1.6 Add more file to upload. 7.0 Logout.

Table 2: System Requirements Specification Table (User)

2.2.4 Assumption and Dependencies

The proposed system, DnD Libraries: An Open-Source Document Repository, holds the potential to enhance the user's learning experience by offering a user-friendly and simplified interface.

Users can effortlessly upload their notes and other learning materials for public access, while also discovering and accessing others' notes and learning materials. This improvement contributes to an enriched learning experience.

2.3 Specific Requirements

For the development of the proposed project, two (2) components are needed: software and hardware. The identified components are outlined below:

2.3.1 Software Specification

This lists the necessary software for developing the proposed project.

Operating System	Windows 11
Database Server	MySQL Server
Front End	Css, Bootstrap, JavaScript, HTML
Back End	PHP, MySQL
Browser	Edge, Opera Gx, Chrome

Table 3: Software Specification

2.3.2 Hardware Specification

This lists the required hardware for developing the proposed project.

Processor	Intel Celeron 8th gen+
Random-Access Memory	4gb
Hard Drive	128gb

Table 4: Hardware Specification

2.4 External Interface Requirements

The hardware, software, or database components that a system or component needs to communicate with in order to guarantee smooth integration are specified in the external interface requirements. These specifications cover the protocols, data formats, and communication standards required for the proposed system or component and its external environment to effectively communicate and collaborate.

2.4.1 User Interface

The user and admin are the users of the proposed system. Below shows each user's interface.

2.4.2 Non-Admin User Interface

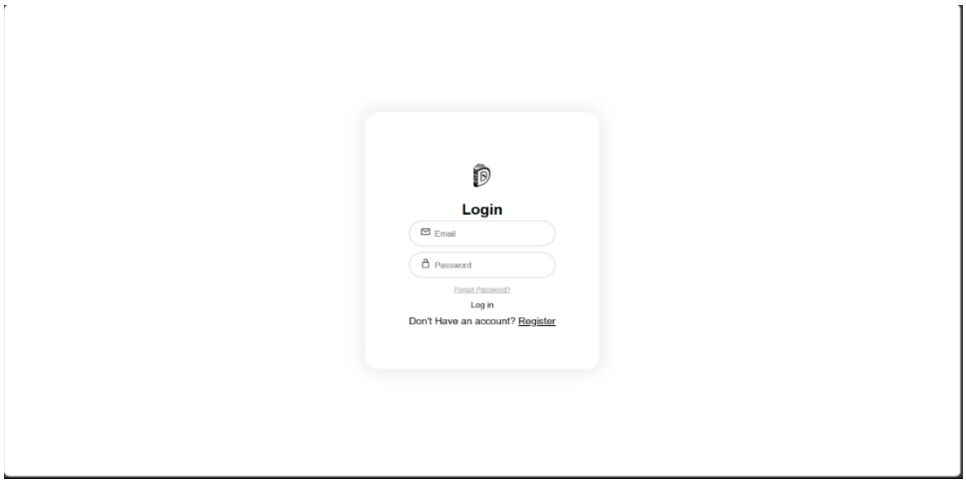


Figure 7: Login Interface where users log in and register

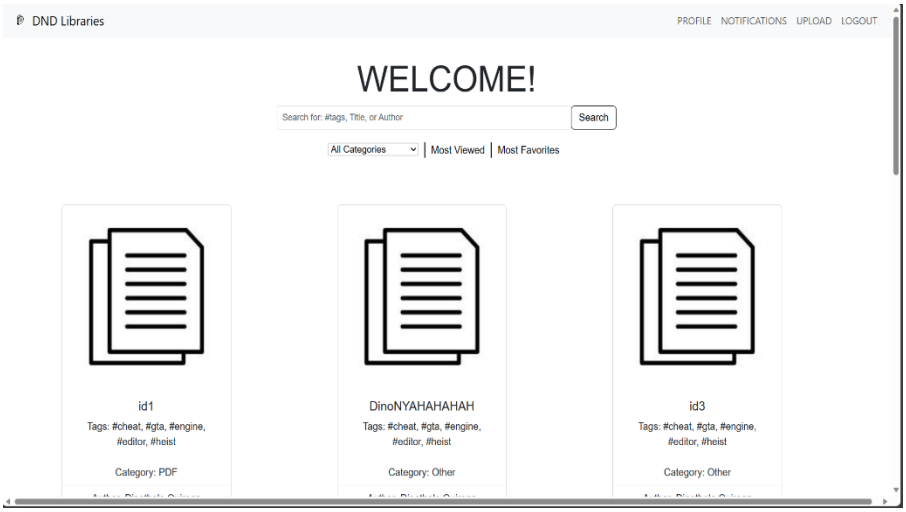


Figure 8: User Dashboard where users can see the public documents other users uploaded

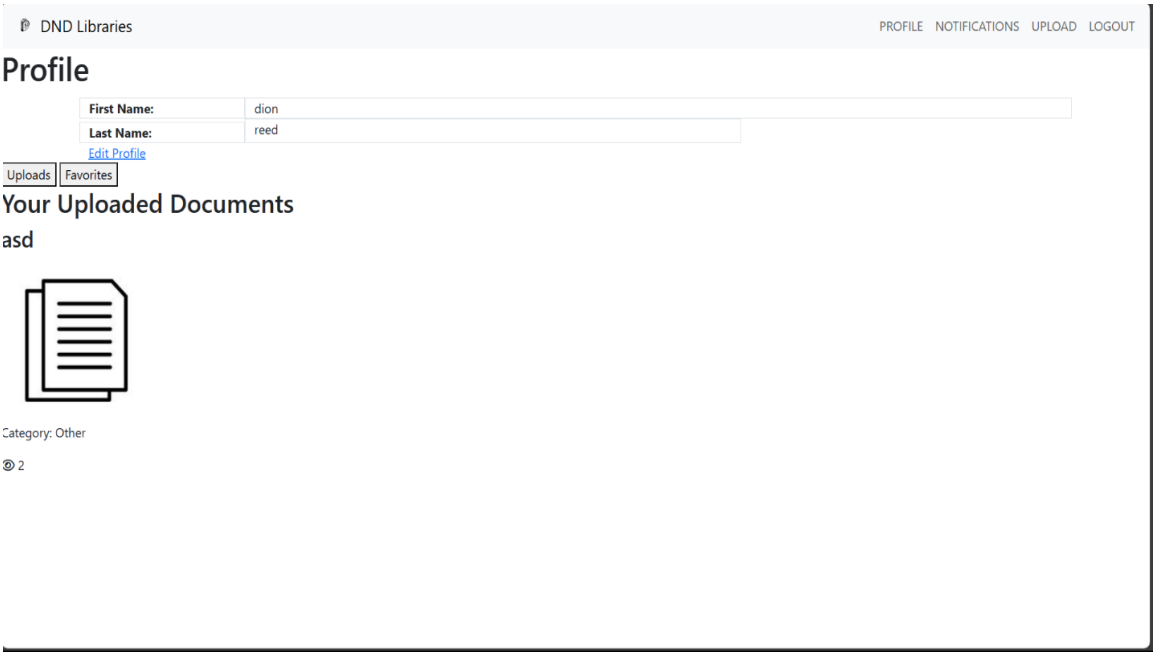


Figure 9: User Profile Page where users can see their profile and their uploaded and favorited document

Figure 10: User Notifications Page where users can see if their documents are approved or rejected

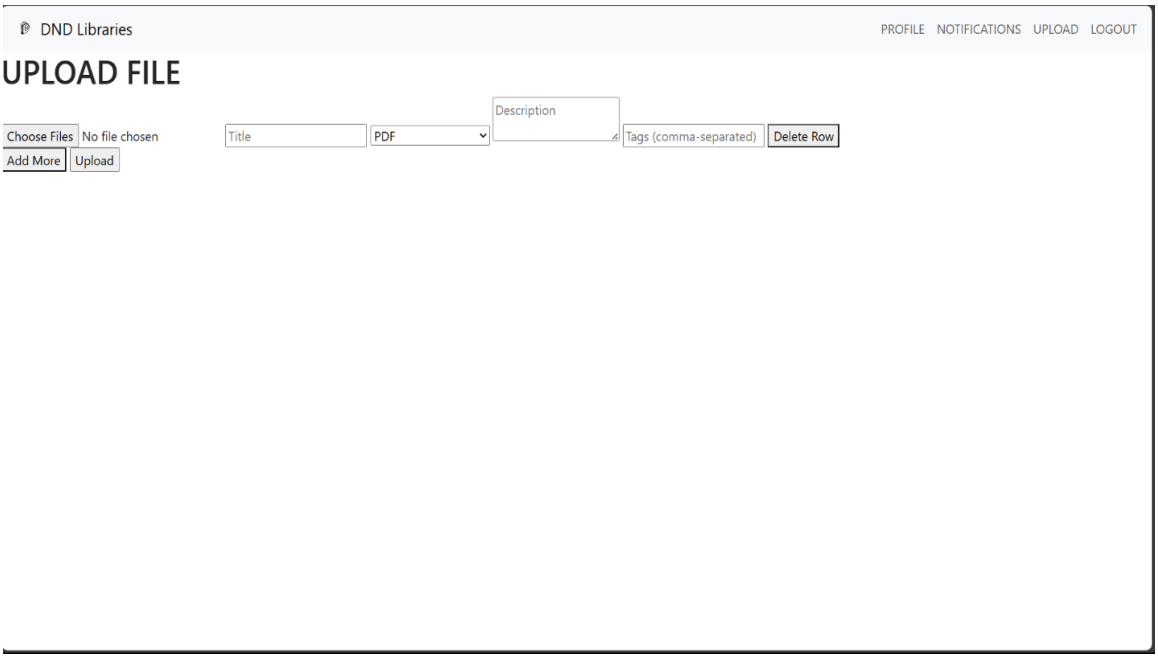


Figure 11: User Upload File Page where users will upload files

2.4.3 Admin User Interface

Figure 12: Login Page is same as the user login

Figure 13: Admin Dashboard where admins can operate the system

Figure 14: View Users Page where admins can see all the users and see the uploaded documents, admins can also delete the user

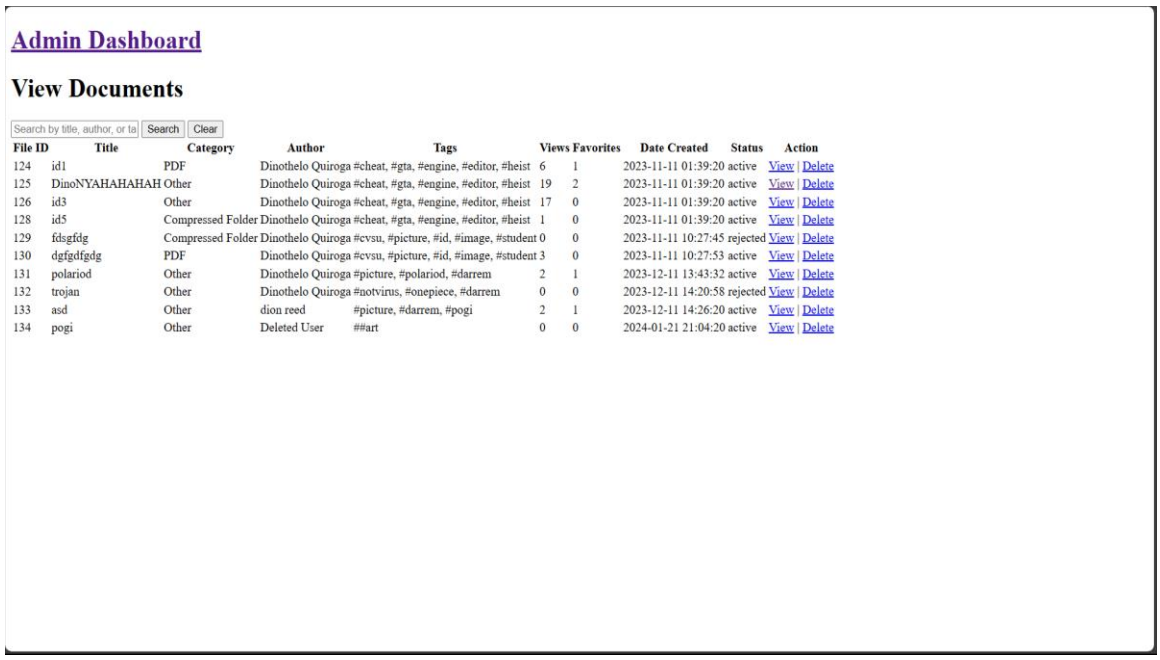


Figure 15: View Documents Page where admins can see all the documents users uploade, admins can view and delete the document

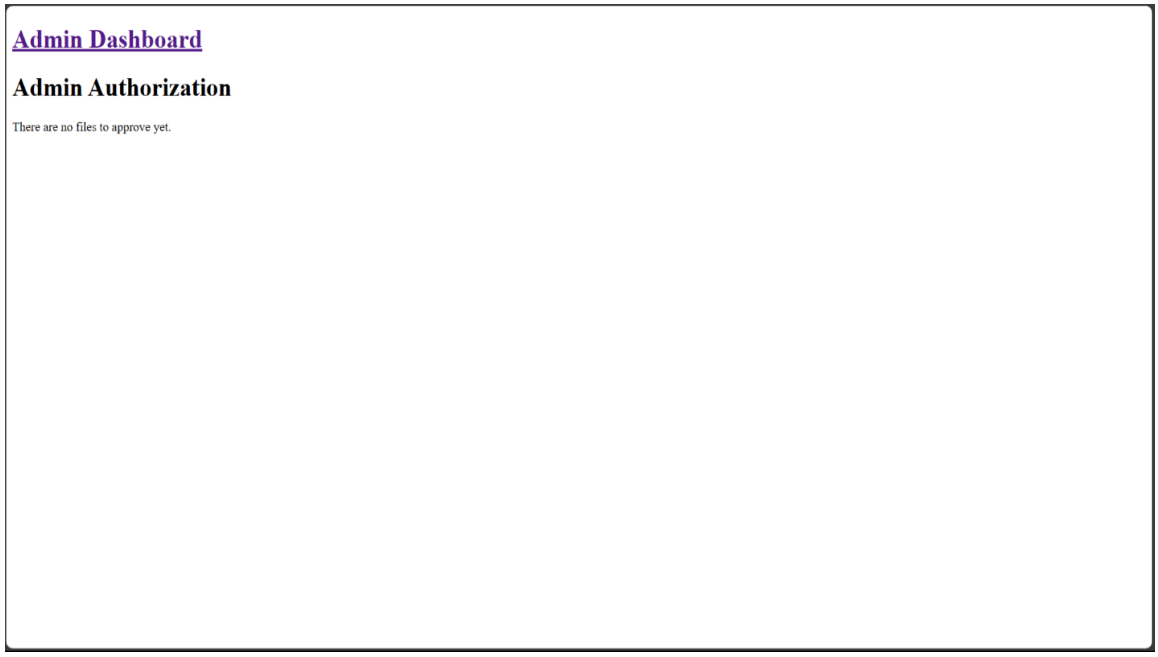


Figure 16: Authorization Page where admins can approve or reject the file uploaded by the user

Figure 17: Analytics Page where admins can see the reports and analytics of the system

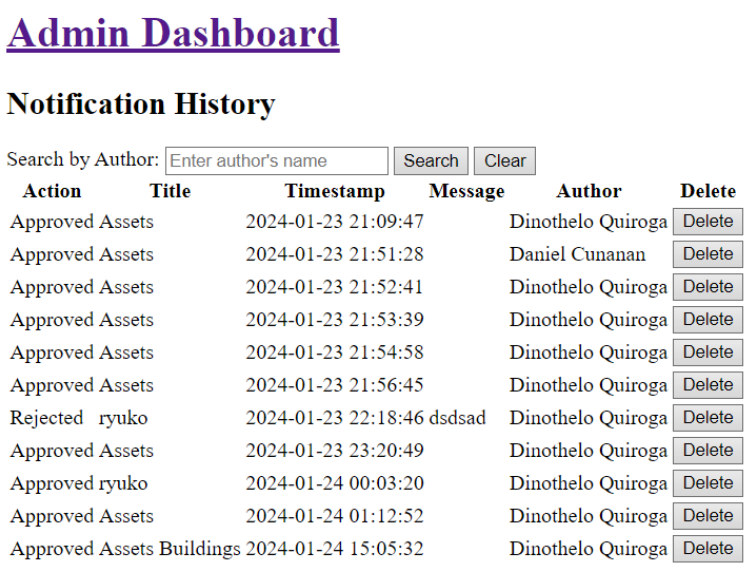


Figure 18: Notifications History Page where admins can see the overall notifications of each users

2.5 Other Non-Functional Requirements

2.5.1 Performance

2.5.1.1 The system should be able to handle a large number of users.

2.5.1.2 The system should provide a fast and responsive user experience.

2.5.1.3 The system should be able to handle unexpected errors or downtime

without losing data or affecting user experience.

2.5.1.4 The system should be available and accessible to users 24/7, with minimal downtime or system failures.

2.5.1.5 The system should be compatible with various devices, platforms, and web browsers, allowing users to access it from a wide range of devices.

2.5.2 Interface

2.5.2.1 The system's color pallet should be consistent to avoid bad design.

2.5.2.2 The system should be user-friendly, easy to navigate, and intuitive to use for both administrators and users.

2.5.3 Security

2.5.3.1 The system should secure the information of the user.

2.5.3.2 The system should be easy to maintain, update, and troubleshoot, with minimal downtime or disruption to users.

2.5.3.3 The system should be able to put secure uploaded files virus free.

SCRUM PROCESS

3.1 Overview

The Scrum process serves as a management framework employed by teams to separately organize and collaborate toward a shared objective. It outlines a collection of meetings, tools, and roles aimed at facilitating effective project delivery. Similar to a sports team preparing for a significant match, Scrum methodologies enable teams to freely oversee their work, collect insights from experiences, and adjust to evolving circumstances. Scrum is utilized to address complex challenges in a cost-effective and sustainable manner. (AWS, 2024)

Scrum plays a crucial role in software development, with its impact extending across diverse teams such as HR, marketing, and design, though it is particularly prevalent in software development and engineering spheres. Its significance lies in the ability to swiftly adapt to changing requirements while maintaining control over costs.

Firstly, it ensures quality in challenging situations by integrating quality assurance checks and defining requirements at the onset of each Sprint, allowing for continual improvement through regular feedback from the Product Owner and Sprint reviews. Secondly, Scrum maximizes return on investment by prioritizing requirements based on customer value and risk analysis, focusing on the early release of a primary working product to gather valuable customer feedback and employing a fail-fast approach that leads to long-term cost savings. Moreover, Scrum fosters happier and more productive teams through self-managed and self-

organized structures, allowing flexibility in organizing work and encouraging cross-functional collaboration for skill-sharing and mentorship. Lastly, Scrum emphasizes the use of relevant metrics chosen by the teams themselves, providing control to the Product Owner, initial support at project initiation, and consistent stakeholder feedback, ensuring ongoing project alignment and success. (Bhaskar S., 2024)

The Scrum process offers several advantages in software development. One notable benefit is its ability to foster adaptability and responsiveness to changing requirements. Through its iterative and incremental approach, Scrum enables teams to break down complex projects into manageable sprints, each typically lasting two to four weeks. This structure allows for frequent reassessment and adjustment, ensuring that the project remains aligned with evolving priorities and customer needs. Additionally, the emphasis on collaboration and communication within cross-functional teams enhances transparency and mitigates the risk of miscommunication or information bottlenecks. The Scrum framework also facilitates early and continuous delivery of valuable increments, contributing to increased customer satisfaction and the ability to gather feedback promptly. Furthermore, the integration of regular reflection points, such as Sprint Retrospectives, promotes a culture of continuous improvement, allowing teams to identify and address challenges proactively. Overall, Scrum's focus on flexibility, collaboration, and iterative development positions it as a valuable methodology for achieving project success and delivering high-quality software products. (Chandana, 2013)

3.2 Project Organization

Web developers play a crucial role in translating project requirements into fully functional websites. In this dynamic field, the development process is typically divided into two main components: the front-end and the back-end, each requiring specialized skills. (Uptech, 2023)

3.2.1 Roles and Responsibilities

3.2.1.1 Front End Developer

Front-end describes the visual part of the website. In other words, the front end is the part where users see and interact on the website. A front-end developer brings the layout of the website into life, by writing scripts and working with dynamic libraries and frameworks (Uptech, 2023). In the context of a particular project, Daniel Lawrence B. Cunanan took on the role of the Front-end developer. His main task is coding and developing the part of the system that users can see. This involves creating the user interface, where he skillfully combines elements of interactivity, creativity, and visual appeal to make sure the user experience is smooth and engaging. As the Front-end developer, Daniel is crucial in turning design ideas into real and interactive elements that enhance the overall look and function of the program.

3.2.1.2 Back End Developer

Data processing on a website often happens on the server-side, which is called the back-end. Back-end developers work closely with database, data processing, and integration with 3rd-party services. They are responsible for ensuring data is exchanged in a secure and efficient manner (Uptech, 2023). Dinothelo P. Quiroga served as the designated back-end developer. He handles crucial aspects of a web program, such as databases and programming. He manages what happens behind the scenes when a user performs any action on a website. You cannot visibly see the outcomes of the work as it occurs in the solution's background. Without back end developing, the intended functions of a program or website wouldn't function properly.

3.3 Work Plan

3.3.1 Schedule Allocation

To organize and plan the project's development systematically, we used a Gantt Chart to show the time aspects of SCRUM in a clear way. According to the Association for Project Management (2023), a Gantt chart is a helpful tool for planning projects of all sizes. It's great for visualizing different project parts. A Gantt chart is basically a picture that shows activities over time. It helps project professionals keep an eye on progress.

The Gantt Chart developers used divides tasks into sprints, making it easier to manage the development of the system.

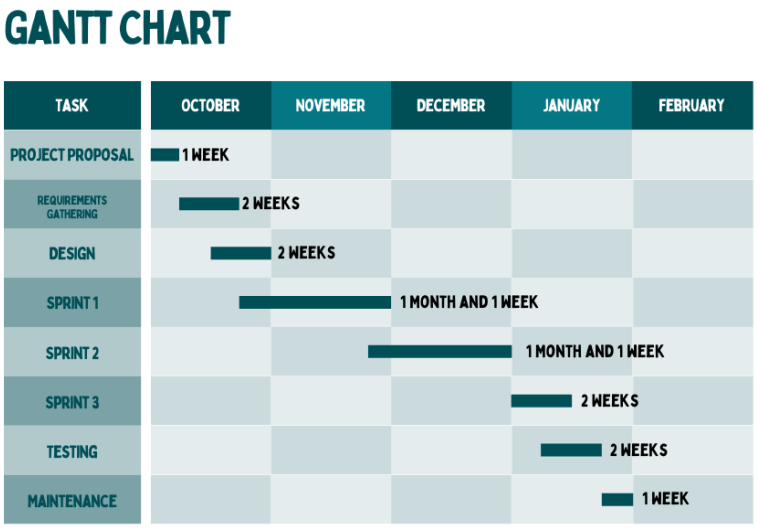


Figure 19: Gantt Chart

In this Gantt chart, there are three sprints. The first sprint will focus on implementing the user interface, enabling users to interact with the website. This includes the implementation of the dashboard, where users can access public documents, the profile page, notifications page, uploads page, search bar, filter categories, and most views and favorites features. The second sprint will be dedicated to developing the admin interface. This involves creating pages for viewing users and documents, an authorization page, analytics, and a notifications history. The third and final sprint will concentrate on the CSS design, refining the visual aspects after completing all the system's functionalities.

3.4 Project Deliverables

Creating a Document Management System for a web application involves several key deliverables to ensure a successful implementation.

Overall Project Plan:

- Define the scope, objectives, and constraints of the project.
- Identify resources, roles, and responsibilities.
- Gather and document functional and non-functional requirements.
- Define user roles and permissions.
- Design the overall architecture of the DMS.
- Define the components and their interactions.
- Create wireframes or mockups for the user interface.

Document Capture and Upload:

- Implement functionality to capture and upload documents.
- Support various file formats and ensure secure uploading.

Search and Retrieval:

- Implement a robust search functionality for quick document retrieval.

User Collaboration Integration:

- Implement features for document approval, review, and collaboration.
- Integrate notifications for user collaboration events.

Testing:

- Conduct unit testing, integration testing, and system testing.
- Ensure the system meets security and performance standards.

3.4.1 Scrum Flow

In the world of project management and software development, Scrum stands out as a straightforward yet powerful approach to collaboration and improvement. It all starts with Backlog Refinement, where the Product Owner and Development Team shape the to-do list. This sets the stage for Sprint Planning, where the team decides what to work on next. During the Sprint, which is like a focused work period, the team gets busy with the tasks they have chosen. Daily Scrum meetings help keep everyone on the same page. After the Sprint, there is a review where the clients check out what has been done and give feedback. The team then takes a moment in the Sprint Retrospective to reflect and find ways to do even better next time. The beauty of Scrum is in the result, a completed piece of work, ready to use. Beyond that, the team and product owner keep tweaking the to-do list and planning for the future. This simple and

effective way of working makes Scrum a rhythm of collaboration and improvement.

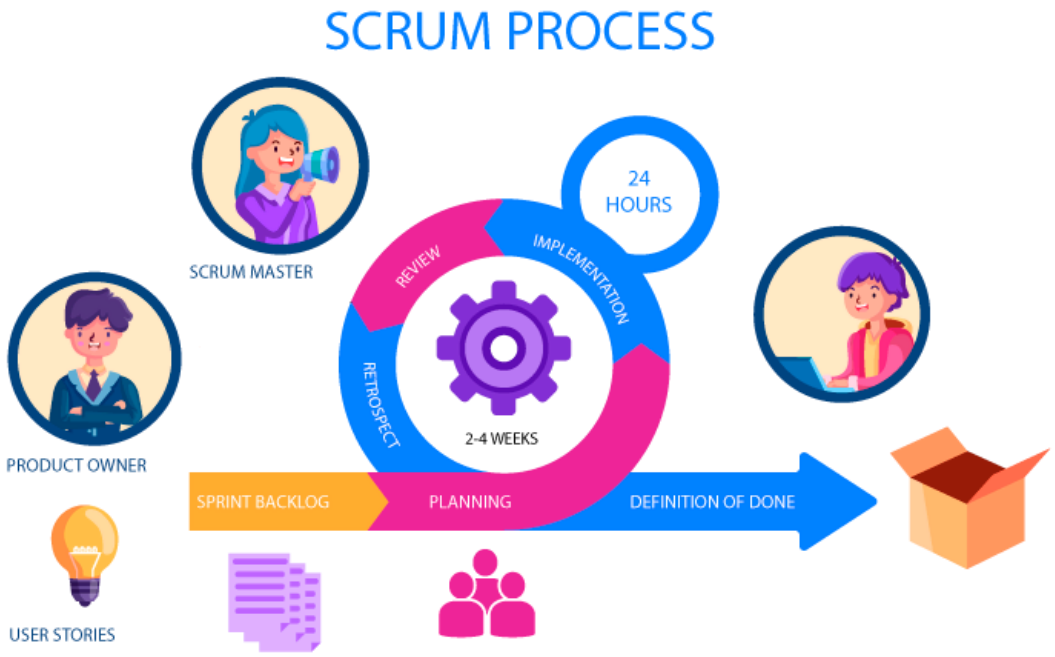


Figure 20: SCRUM Flow

3.4.2 Product Backlog

A product backlog is a prioritized list of tasks, features, and enhancements that need attention in a project. According to scrum.org (2024), The Product Backlog is a continually evolving, prioritized list outlining the necessary improvements for the product and serves as the exclusive source of tasks for the Scrum Team. Product Backlog items ready for completion within a single Sprint become eligible for selection during Sprint Planning, typically achieving this clarity through refinement activities. Product Backlog refinement involves breaking down and specifying items into more precise components, an ongoing process to add details like description, order, and size, which can vary based on the domain of work. The responsibility for sizing lies with the Developers, who are also accountable for the work. While the Product Owner can guide the Developers by aiding in understanding and making trade-offs, it is common for multiple Scrum Teams to collaborate on a single product, managed through a unified Product Backlog describing upcoming work.

See the figure below for the system's product backlog.

ID	AS A...	I WANT TO...	SO THAT...	PRIORITY	SPRINT #	STATUS
1	User	be able to login and sign up to the system.	I can use and access its features.	High	1	COMPLETED
2	User	be able to browse the dashboard.	I can find the document I need.	High	1	COMPLETED
3	User	be able to upload a file.	I can share my materials to others.	High	1	COMPLETED
4	User	be able to see the files I've uploaded	I can track which file I uploaded.	Medium	1	COMPLETED
5	User	be able to see if my uploaded files are approved.	I know if my files are okay.	Low	1	COMPLETED
6	Admin	be able to authorize the files that the user uploaded	I can check if their upload falls into the category.	High	2	COMPLETED
7	Admin	be able to see the analytics of approval and rejection request	I can track how many files and rejected and approved.	High	2	COMPLETED
8	Admin	be able to see the upload history of the users.	I can keep track and record their file uploads.	Medium	2	COMPLETED
9	Admin	be able to see how many users the system have.	I can keep track how many users are using the system.	High	2	COMPLETED
10	Admin	be able to put message to their rejected upload.	I can let them know why their upload is rejected	Low	2	COMPLETED
11	Admin	be able to see the files the user uploaded.	I know what files are present in the system.	High	1	COMPLETED
12	User	browse files smoothly	I don't have to waste time finding the document I need.	Medium	3	COMPLETED
13	Admin	have a fast and convient navbar.	the options is one click away	Low	3	COMPLETED

Figure 21: Product Backlog

3.4.3 Sprint Backlog

The Sprint Backlog is crucial in Scrum that plays a pivotal role in the successful execution of a Sprint. It is essentially a dynamic, evolving plan that outlines the work the Development Team commits to completing during a specific Sprint. The Sprint itself is a time-boxed iteration, typically lasting two to four weeks, during which the team works to deliver a potentially shippable product increment.

The process of creating the Sprint Backlog begins with the Sprint Planning meeting, which occurs at the outset of each Sprint. In this collaborative session, the Product Owner presents the highest-priority items from the Product Backlog to the Development Team. Together, they discuss and clarify the requirements, ensuring a shared understanding. The Development Team then takes responsibility for selecting and committing to the set of items they believe they can complete within the Sprint.

Once the Sprint Backlog is established, the Development Team breaks down the selected Product Backlog items into smaller, manageable tasks. Each task is then estimated in terms of effort or complexity. This breakdown and estimation process contribute to a clearer understanding of the work and enable the team to plan and manage their capacity effectively.

Throughout the Sprint, the Sprint Backlog serves as a real-time guide for the Development Team. It provides visibility into the work that needs to be done, the progress made, and any adjustments needed. Daily Scrum meetings are held to review progress, discuss impediments, and adapt the plan if necessary. The Development Team has the autonomy to adjust the Sprint Backlog based on their insights and changing circumstances, ensuring they can respond to emerging issues or opportunities.

The Sprint Backlog is not set in stone. It is a living document that can be adapted as the team learns more about the work or as external factors influence the project. However, any changes to the Sprint Backlog during the Sprint should be done in collaboration with the entire Development Team to maintain transparency and shared understanding.

See the figure below for the system's sprint backlog 1-3.

BACKLOG TASK & ID	STORY POINTS	ASSIGNED TO	STATUS	ESTIMATE EFFORT	WEEK 1	WEEK 2	WEEK 3	WEEK 4
User Index	56							
Set up System database		Dino	COMPLETED	2	1	1		
Add login and sign up		Dino	COMPLETED	5	2	1	1	1
Create user dashboard		Dino	COMPLETED	8	2	2	3	1
Create profile page		Dino	COMPLETED	10	2	4	2	2
Create upload function		Dino	COMPLETED	8	5	2	1	
Create notification function		Dino	COMPLETED	4	2	1	1	
Add edit profile information		Dino	COMPLETED	4	1	1	2	
Create search function		Dino	COMPLETED	7	4	2	1	
Create sorting function		Dino	COMPLETED	8	5	1	1	1

Figure 22: Sprint #1 Backlog

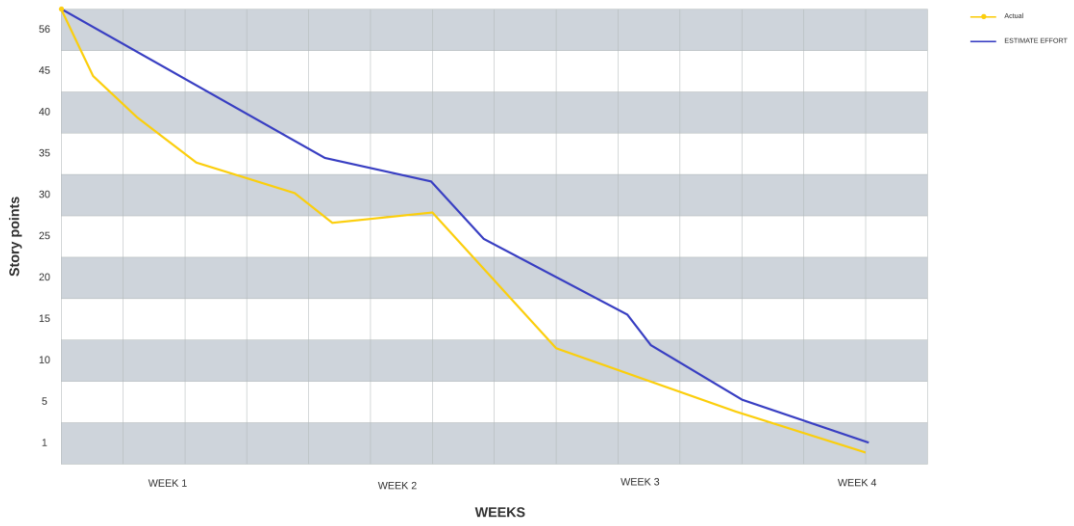


Figure 23: Sprint #1 Burndown Chart

BACKLOG TASK & ID	STORY POINTS	ASSIGNED TO	STATUS	ESTIMATE EFFORT	WEEK 1	WEEK 2	WEEK 3	WEEK 4
Admin Index	39							
Create Admin dashboard		Dino	COMPLETED	6	6			
Set up View user function		Dino	COMPLETED	3	1	2		
Set up View document function		Dino	COMPLETED	5	1	1	2	1
Create file modification history		Dino	COMPLETED	4	1	2	1	
Create upload authorization		Dino	COMPLETED	8	2	3	2	1
Create analytics		Dino	COMPLETED	7	1	1	3	2
Add nofication		Dino	COMPLETED	6	1	1	1	3

Figure 24: Sprint #2 Backlog

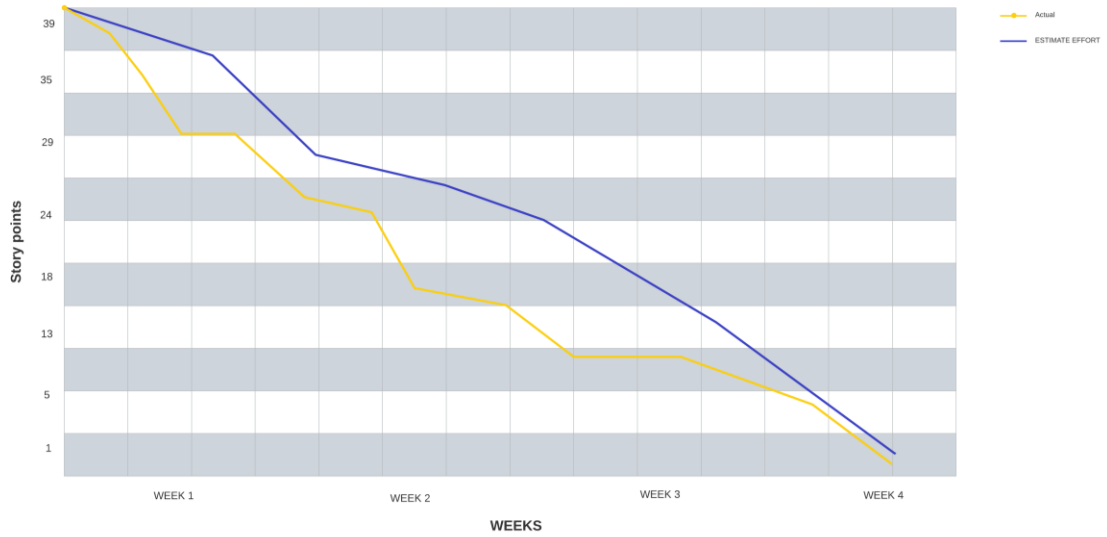


Figure 25: Sprint #2 Burndown Chart

BACKLOG TASK & ID	STORY POINTS	ASSIGNED TO	STATUS	ESTIMATE EFFORT	WEEK 1	WEEK 2	WEEK 3	WEEK 4
Designing User interface	34							
Add design to login page		Daniel	COMPLETED	4	4			
Add design to Sign-up page		Daniel	COMPLETED	4	4			
Add design to user dashboard		Daniel	COMPLETED	7	1	3	2	1
Add design to upload page		Daniel	COMPLETED	6	1	2	2	1
Add design to user's notification page		Daniel	COMPLETED	5	1	1	3	
Add design to profile page		Daniel	COMPLETED	8	2	1	2	3
Designing Admin interface	30							
Add design to admin dashboard		Daniel	COMPLETED	4	1	1	2	
Add design to view user page		Daniel	COMPLETED	3		1	1	1
Add design to view document page		Daniel	COMPLETED	4	2	1	1	
Add design to file modification history page		Daniel	COMPLETED	8	4	1	1	2
Add design to authorization page		Daniel	COMPLETED	5	1	2	1	1
Add design to analytics page		Daniel	COMPLETED	3		1	1	1
Add design to admin's notification page		Daniel	COMPLETED	3	1		1	1

Figure 26: Sprint #3 Backlog

Figure 27: Sprint #3 Burndown Chart

3.5 Quality Control

Testing is crucial in developing the document repository to make sure it's high-quality, functions well, and stays stable. Test cases are specific scenarios or conditions that are carefully checked to confirm that the document repository works as expected. In this study, researchers will test the features added in an overall sprint.

3.5.1 Unit Testing

ID	Test Case	Steps	Expected Results	Actual Result	Status
1	Create Account	1. Navigate to the "Register" page. 2. Enter valid information: First Name: John, Last Name: Doe, Password: secure123, Email: john.doe@example.com. 3. Click on the "Submit" button.	Account is created successfully.	As Expected	Passed
2	Upload File	1. Navigate to the document upload page. 2. Choose a file, provide title, description, file format, and tags. 3. Click on the "Upload" button.	File uploaded successfully, awaiting authorization.	As Expected	Passed
3	Delete Uploaded File	1. Go to the user's profile page. 2. Click on the "Delete" button next	File deleted successfully.	As Expected	Passed

		to a specific uploaded file. 3. Confirm the deletion.			
4	Download Document	1. Click the document. Click the download button.	Document is downloaded successfully.	As Expected	Passed

Table 5: Unit Testing

3.5.2 System Testing

User Account Management:

ID	Test Case	Steps	Expected Results	Actual Result	Status
1	Create Account	4. Navigate to the "Register" page. 5. Enter valid information: First Name: John, Last Name: Doe, Password: secure123, Email: john.doe@example.com. 6. Click on the "Submit" button.	Account is created successfully.	As Expected	Passed
2	Login	1. Navigate to the login page. 2. Enter valid credentials: Username: john.doe@example.com, Password: secure123.	Successfully logged in.	As Expected	Passed

		3. Click on the "Login" button.			
3	Edit Profile Information	1. Go to the user's profile page. 2. Edit the profile information (Change First Name to "Johnny", Last Name to "Doe Jr."). 3. Click on the "Save" button	Profile information updated successfully.	As Expected	Passed
4	Logout	1. Click on the "Logout" button.	User successfully logged out.	As Expected	Passed

Table 6: User Account Management

Document Upload and Management:

ID	Test Case	Steps	Expected Results	Actual Result	Status
5	Upload File	4. Navigate to the document upload page. 5. Choose a file, provide title, description, file format, and tags. 6. Click on the "Upload" button.	File uploaded successfully, awaiting authorization.	As Expected	Passed
6	View Uploaded Files	1. Go to the user's profile page. 2. Navigate to the	User can see a list of their uploaded files.	As Expected	Passed

		"Uploaded Documents" section.			
7	Edit Uploaded File	1. Go to the user's profile page. 2. Click on the "Edit" button next to a specific uploaded file. 3. Change the title of the file. 4. Click on the "Save" button.	File information updated successfully.	As Expected	Passed
8	Delete Uploaded File	4. Go to the user's profile page. 5. Click on the "Delete" button next to a specific uploaded file. 6. Confirm the deletion.	File deleted successfully.	As Expected	Passed
9	Search Files	1. Use the search bar and enter a specific tag, title or author.	List of files with the specified tag, author, or title is displayed.	As Expected	Passed
10	Sort Files	1. Choose to view files based on "Most Viewed."	Files are displayed according to the selected	As Expected	Passed

		2. Choose to view files based on "Most Favorites."	sorting criteria.		
11	Filter Files by Category	1. Choose a specific category to view files.	Only files belonging to the selected category are displayed.	As Expected	Passed

Table 7: Document Upload and Management

Notifications:

ID	Test Case	Steps	Expected Results	Actual Result	Status
12	Receive Notification	1. Go the Notifications Page	User receives a notification for file approval or rejection.	As Expected	Passed
13	Remove Notification	1. Go to the notifications section. 2. Click on the "Remove" button next to a specific notification.	Notification removed successfully.	As Expected	Passed

Table 8: Notifications

Document Download and View:

ID	Test Case	Steps	Expected Results	Actual Result	Status
14	View Public Documents	1. Login to see the dashboard.	User can view a list of publicly approved documents.	As Expected	Passed
15	Download Document	2. Click the document. 3. Click the download button.	Document is downloaded successfully.	As Expected	Passed
16	View Document Information	1. Click on a document to view detailed information.	Detailed information about the document is displayed.	As Expected	Passed

Table 9: Document Download and View

Admin Functionality:

ID	Test Case	Steps	Expected Results	Actual Result	Status
17	Admin Login	1. Navigate to the admin login page. 2. Enter valid admin credentials. 3. Click on the "Login" button.	Successfully logged into the admin dashboard.	As Expected	Passed
18	View User Information	1. Click View Users Page.	Admin can view detailed information about a user.	As Expected	Passed
19	Delete User Account	1. Select a user to delete. 2. Confirm the deletion.	User account deleted successfully.	As Expected	Passed
20	View Uploaded Documents by Users	1. Click View Documents Page.	Admin can view a list of documents uploaded by users.	As Expected	Passed
21	Delete Document	1. Select a document to delete. 2. Confirm the deletion.	Document deleted successfully.	As Expected	Passed
22	Approve Upload Request	1. Click Authorization Page. 2. Admin approves a user's upload request.	Upload request approved, and the document is featured on the dashboard.	As Expected	Passed

23	Deny Upload Request	1. Click Authorization Page. 2. Admin denies a user's upload request.	Upload request denied, and the user is notified.	As Expected	Passed
24	View Analytics	1. Click Analytics Page.	Admin can view analytics with insights into total approvals, rejections, notification history, etc.	As Expected	Passed
25	Logout (Admin)	1. Click on the "Logout" button.	Admin successfully logs out.	As Expected	Passed

Table 10: Admin Functionality

3.6 Lessons Learned

3.6.1 Dinothelo P. Quiroga

The experience of building a web app document repository has taught important lessons. It is crucial to have clear requirements, listen to user feedback, and plan for scalability early on. Testing, especially for security, is really important, and making the design work well on different devices is a big plus. Making sure users know how to use the system and keeping an eye on things regularly all play a big role. Writing down how everything works and staying open to new technologies are key, as is working closely with everyone involved. These lessons show that a balanced approach, focusing on users, security, and ongoing care, is vital for a successful web app document repository.

3.6.2 Daniel Lawrence B. Cunanan

While working on this project, I have not only acquired invaluable knowledge and insights into the workings of website development but also honed my understanding of factors such as security, functionality, and particularly, UI/UX. Recognizing the significance of a streamlined website for user-friendly navigation has been a key takeaway from this experience, emphasizing the importance of avoiding unnecessary clutter.

The engagement in this project has proven to be nothing short of fantastic, serving as fertile ground for enhancing my creativity, particularly in UI design. Working collaboratively with a team has been instrumental in

refining both my communication skills and my capacity to work seamlessly with others. Undoubtedly, the skills and experiences garnered from this project will prove to be a valuable asset as I navigate my way into the industry. The foundation laid here, from the technical aspects of website development to the collaborative dynamics within a team, will undoubtedly contribute to my success and growth in future professional endeavors.

CONCLUSION

The document repository web application represents a significant step forward in addressing the challenges associated with accessing lecture materials. By centralizing document storage and implementing features such as notifications for new additions or updates, the platform ensures that users remain up-to-date with the latest information without the need for manual searches or reliance on traditional library systems. This proactive approach to information accessibility not only saves users valuable time but also fosters a more dynamic learning environment where knowledge dissemination is continuous and effortless. Furthermore, the system's advanced search functionalities, including filters by topic, date, author, and document type, provide users with precise tools for navigating through the vast repository of materials. This streamlined document discovery process empowers users to locate relevant resources quickly and efficiently, enhancing their overall productivity and learning outcomes.

Moreover, the document repository serves as more than just a storage facility; it is a collaborative platform where users can contribute their own materials and engage with peers. The introduction of a tagging system allows for easy categorization and organization of documents, facilitating knowledge sharing and collaboration among users with similar interests or areas of study. Additionally, the platform's centralized structure ensures data security and integrity, mitigating concerns associated with disparate sources or unregulated sharing practices. Overall, the document repository web application represents a holistic solution to the challenges of accessing lecture materials, offering a user-centric approach

that prioritizes accessibility, collaboration, and security. Through its innovative features and intuitive design, the platform not only simplifies tasks related to document management but also fosters a dynamic learning ecosystem where knowledge is readily available and easily accessible to all.

Based on the evaluation data developers provided, it seems that document repository generally received positive feedback across usability, features, performance, and user satisfaction. Here's an analysis of the evaluation results:

Usability:

Navigation: The majority of respondents (39 out of 49) found the navigation within the document repository very easy, with an additional 13 respondents finding it easy.

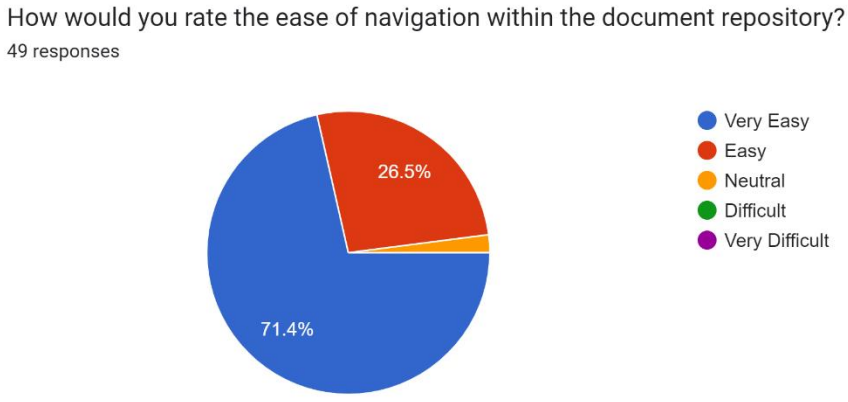


Figure 28: Evaluation results for Navigation

User Interface: Nearly all respondents (48 out of 49) found the user interface easy to understand and use.

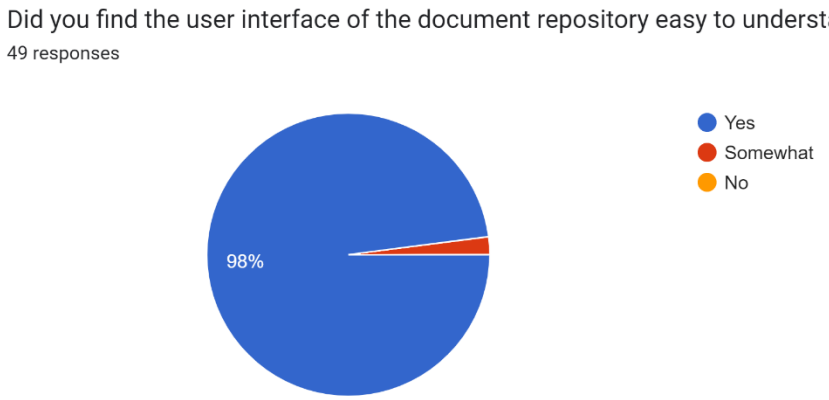


Figure 29: Evaluation results for User Interface

Document Management: Most respondents (47 out of 49) were able to easily locate and manage documents within the repository.

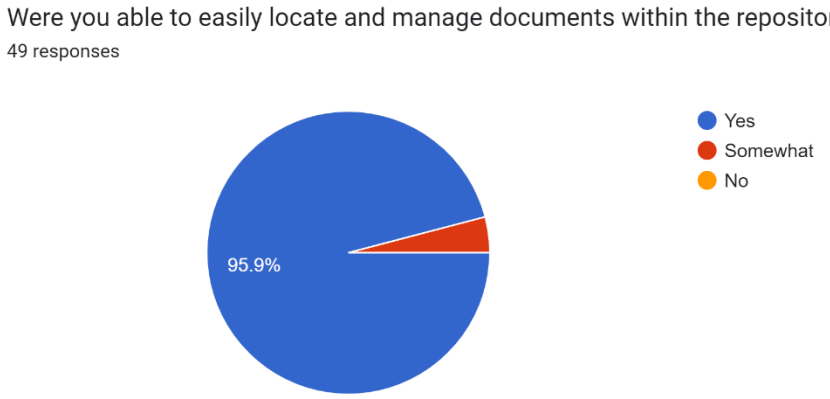


Figure 30: Evaluation results for Document Management

Features:

Document Management Capabilities: A majority of respondents (30 out of 49) were very satisfied with the document management capabilities, with an additional 19 respondents being satisfied.

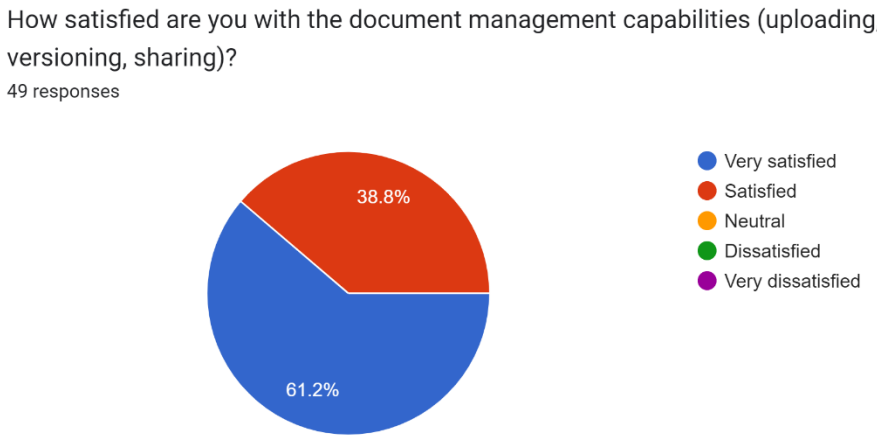


Figure 31: Evaluation results for Document Management Capabilities

Security Measures: A significant number of respondents (26 out of 49) were very confident in the security measures of the repository, with an additional 23 respondents being confident.

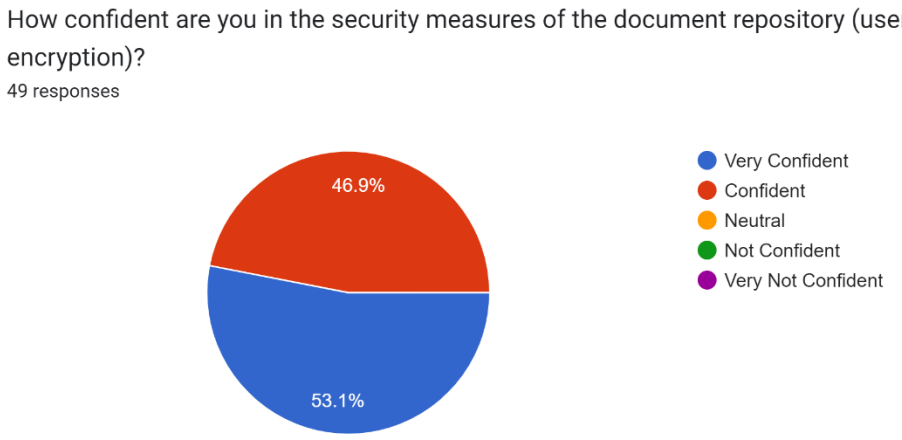


Figure 32: Evaluation results for Security Measures

Performance:

Performance Issues: The majority of respondents (46 out of 49) did not encounter any performance issues during their usage. However, three respondents reported experiencing slow loading times.

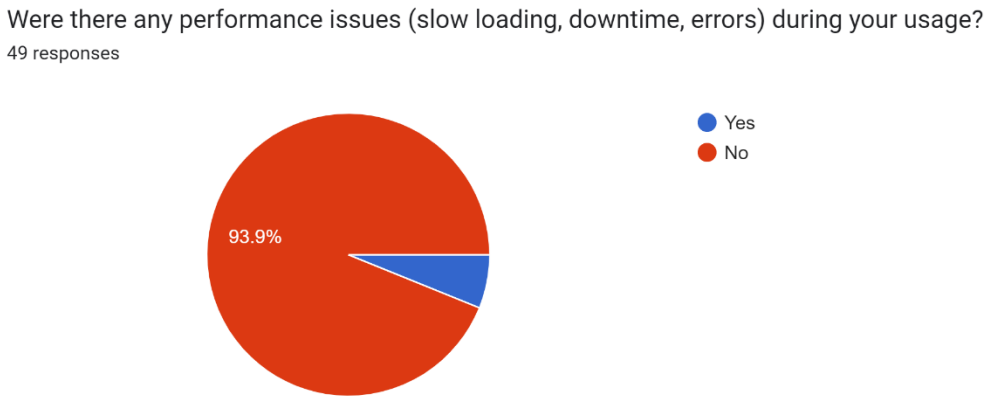


Figure 33: Evaluation results for Performance Issues

User Feedback:

Overall Satisfaction: While a notable number of respondents (23 out of 49) were very satisfied with the document repository, the majority (26 out of 49) were satisfied.

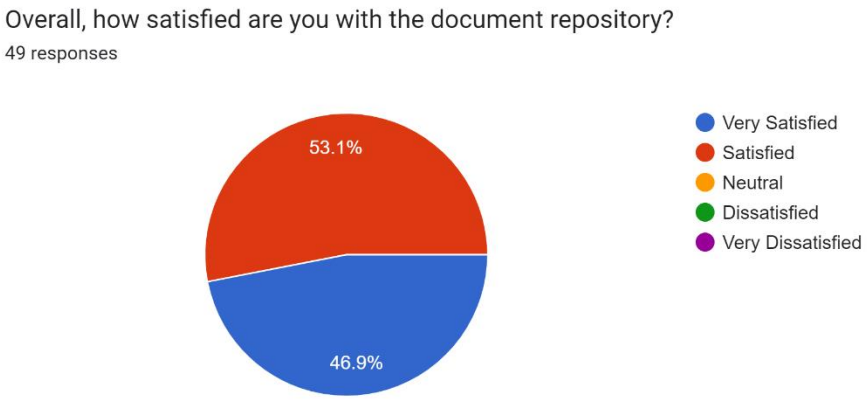


Figure 34: Evaluation results for Overall Satisfaction

Recommendation: Almost all respondents (48 out of 49) would recommend the document repository to others.

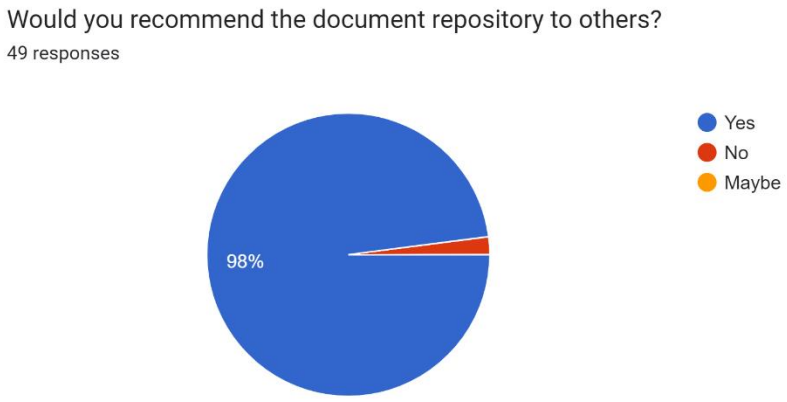


Figure 35: Evaluation results for Recommendation

Suggestions for Improvement: The majority of respondents did not have any specific comments or suggestions for improvement. However, some suggested improving navigation and usability, enhancing security and privacy measures, and addressing slow loading times.

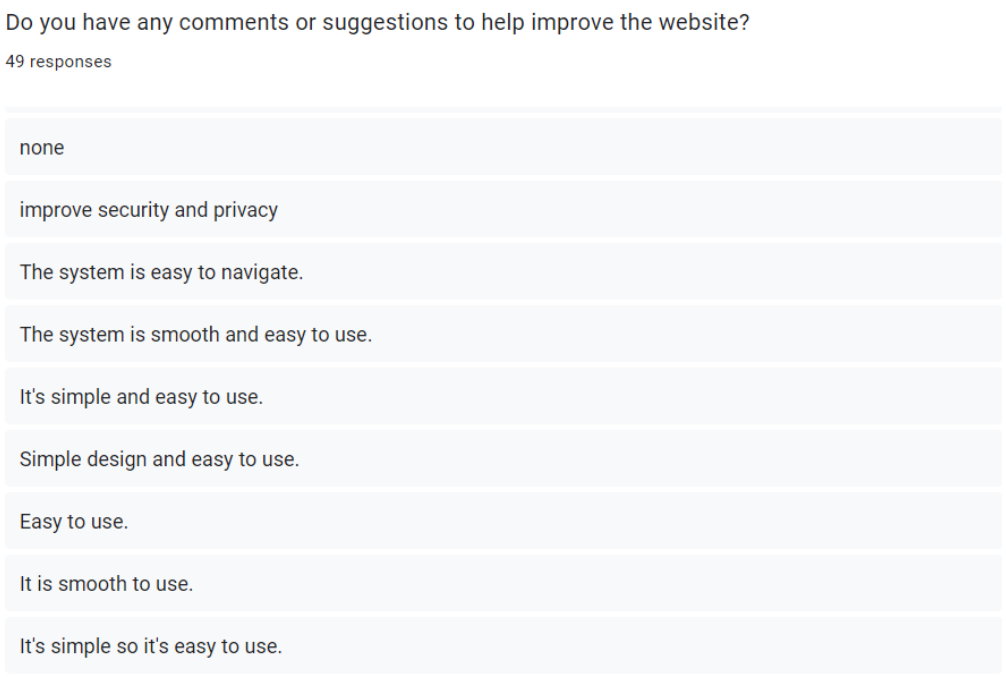


Figure 36: Evaluation results for Suggestions and Improvement

REFERENCES

GCFGlobal. (n.d.). All About Google Drive. https://edu.gcfglobal.org/en/googledriveanddocs/all-about-google-drive/1/

Shredall. (n.d.). What Is a Document Repository? | Shredall. https://www.shredall.co.uk/blogs/news/what-is-a-document-repository#:~:text=A%20document%20repository%20is%20used,easily%2C%20whenever%20they%20need%20them.

Laserfiche. (n.d.). What Is a Document Repository and What Are the Benefits of Using One? | Laserfiche. https://www.laserfiche.com/resources/blog/what-is-a-document-repository-and-what-are-the-benefits-of-using-one/

Business.com. (n.d.). What Is a Document Repository? https://www.business.com/articles/what-is-document-repository/

UpTech Team. (n.d.). Web Development Team - UpTech Team. https://www.uptech.team/blog/web-development-team

Association for Project Management. (n.d.). Gantt Chart - APM. https://www.apm.org.uk/resources/find-a-resource/gantt-chart/

Nimblework. (2022, December 23). What Is Scrum Methodology? & Scrum Project Management. https://www.nimblework.com/agile/scrum-methodology/

Amazon Web Services, Inc. (2024). What is Scrum? - Scrum Methodology Explained - AWS. https://aws.amazon.com/what-is/scrum/

Chandana. (2013, March 13). Scrum Project Management: Advantages and Disadvantages. Simplilearn. https://www.simplilearn.com/scrum-project-management-article

Brakel, P. (2019). The Library in the Digital Age: Some Challenges and Opportunities. Library and Information Science Digest, 3(2), 56-69. Retrieved from https://www.lisdigest.org/index.php/lisd/article/view/152

Library Journal. (n.d.). Retrieved from https://www.libraryjournal.com

American Library Association. (n.d.). Retrieved from https://www.ala.org

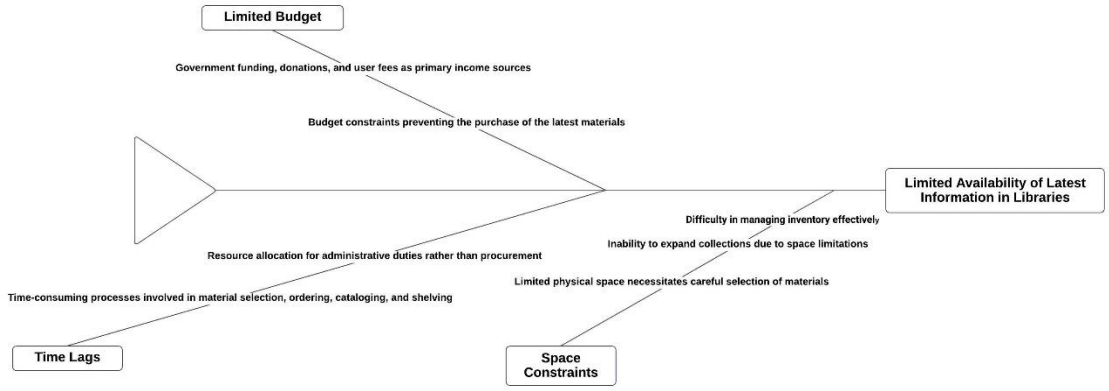
School Library Journal. (n.d.). Retrieved from https://www.slj.com

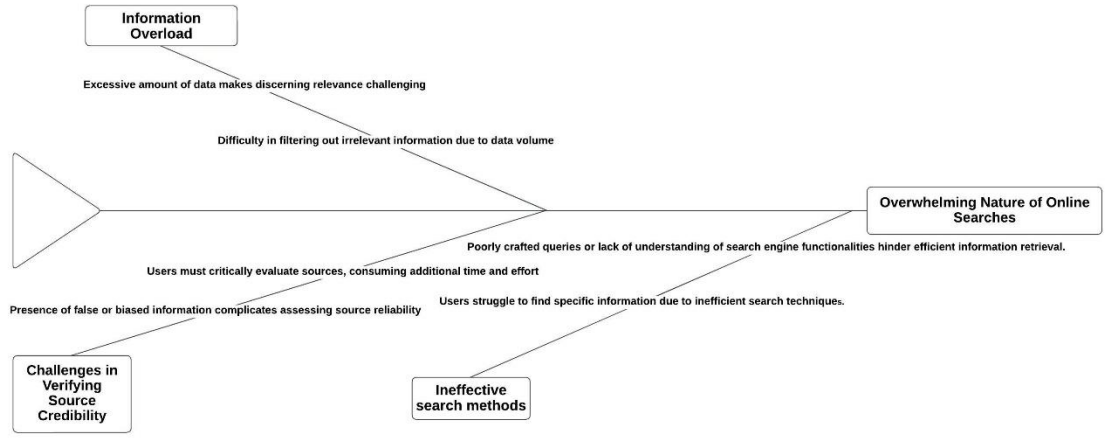
Smith, J. (2020). Challenges of Searching Information Online. Retrieved from https://example.com/challenges-of-searching-information-online

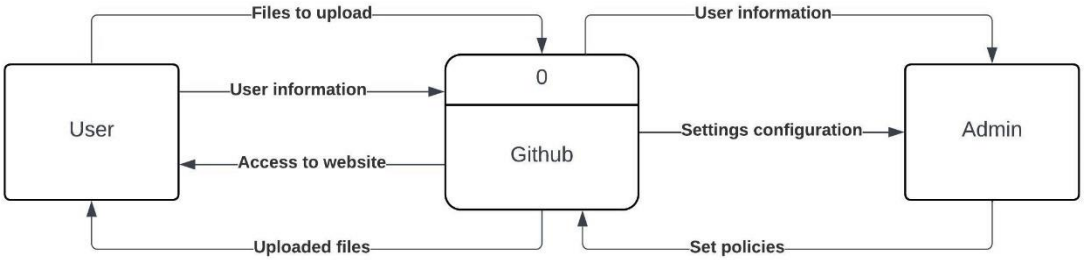
APPENDICES

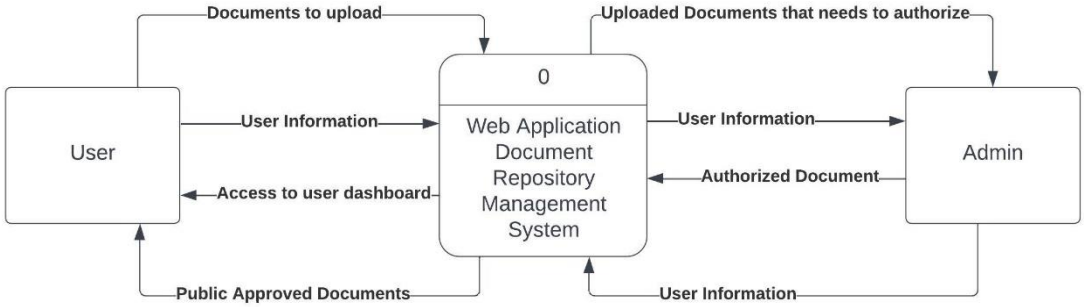
Appendix A

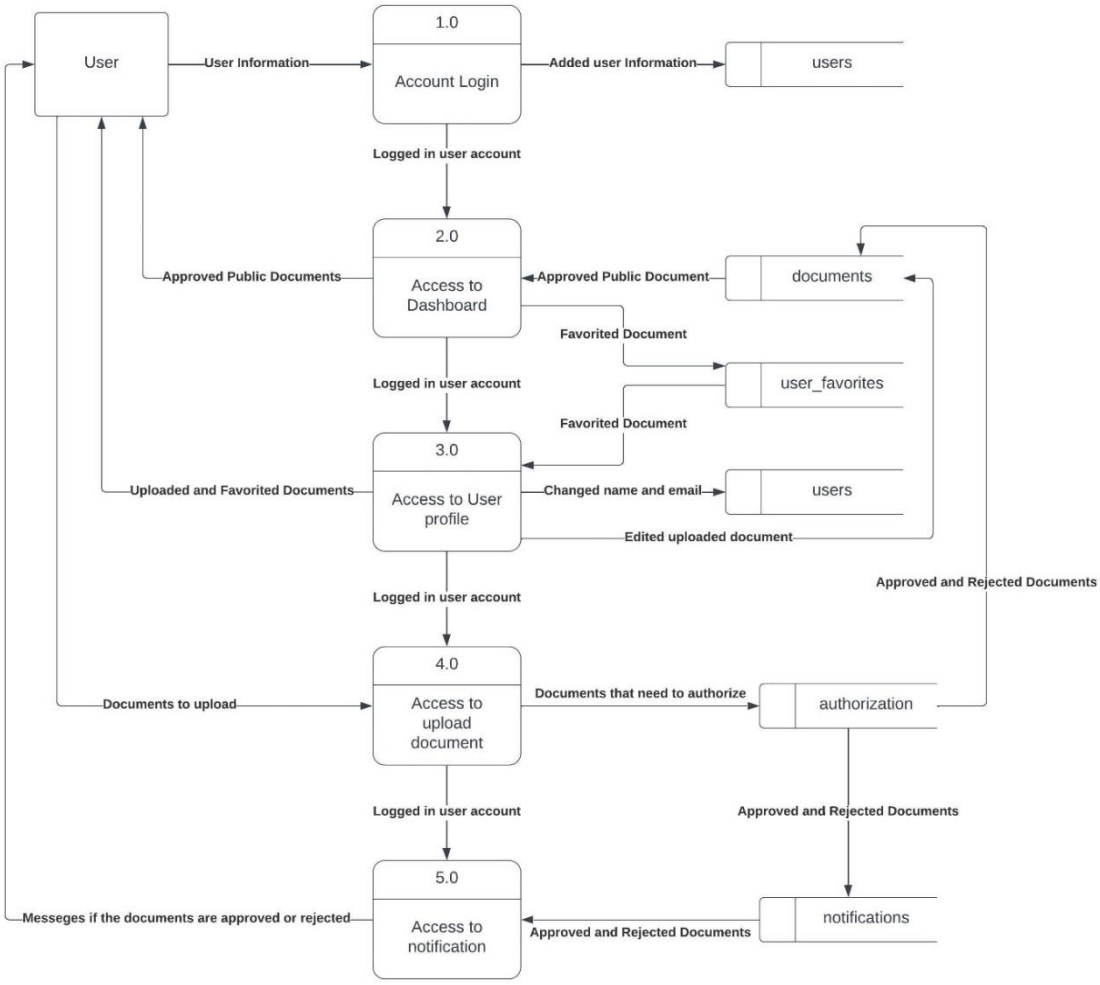
Figures

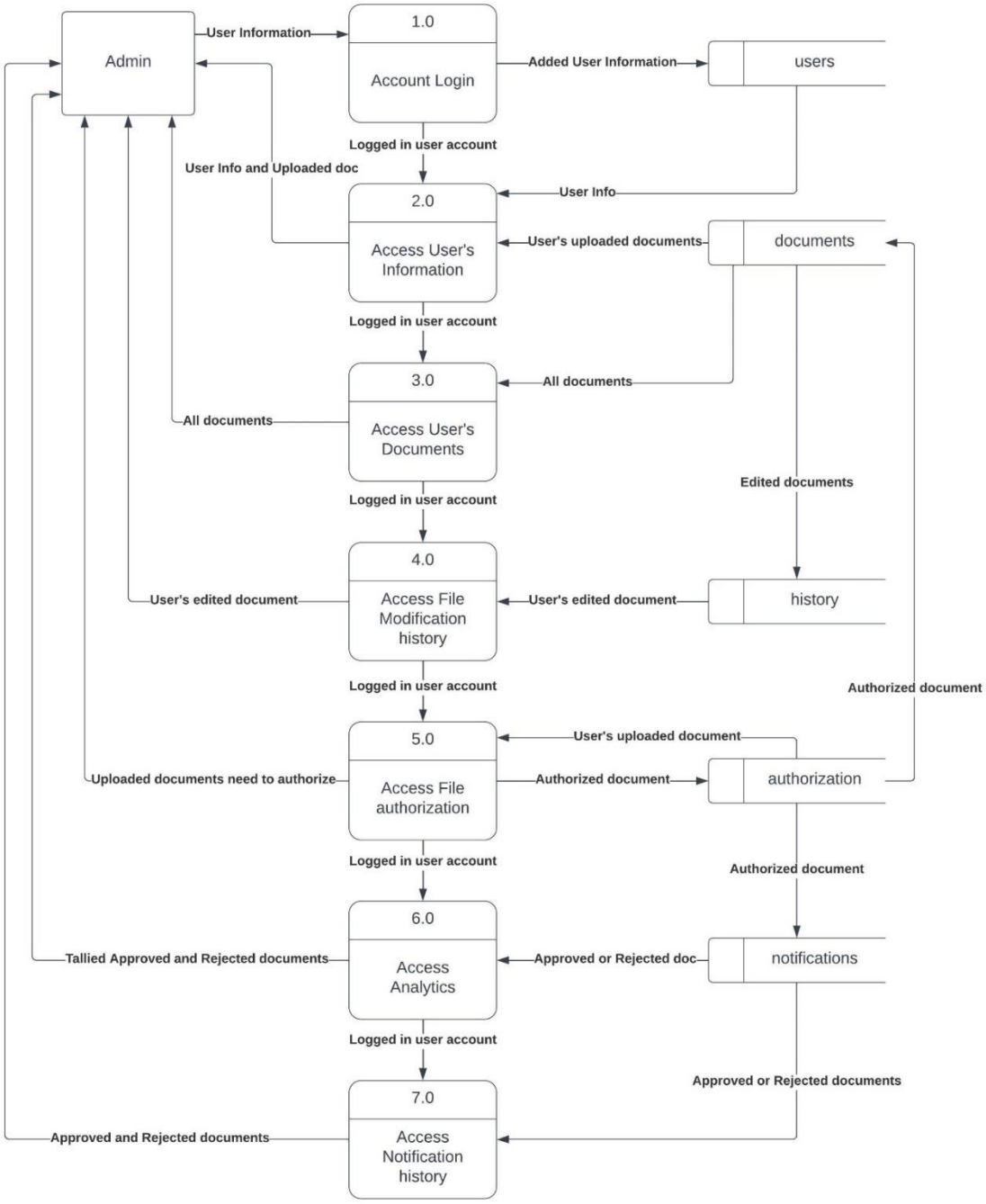

Limited Budget
Government funding, donations, and user fees as primary income sources
Budget constraints preventing the purchase of the latest materials
Limited Availability of Latest Information in Libraries
Difficulty in managing inventory effectively
Inability to expand collections due to space limitations
Resource allocation for administrative duties rather than procurement
Limited physical space necessitates careful selection of materials
Time-consuming processes involved in material selection, ordering, cataloging, and shelving
Time Lags
Space Constraints

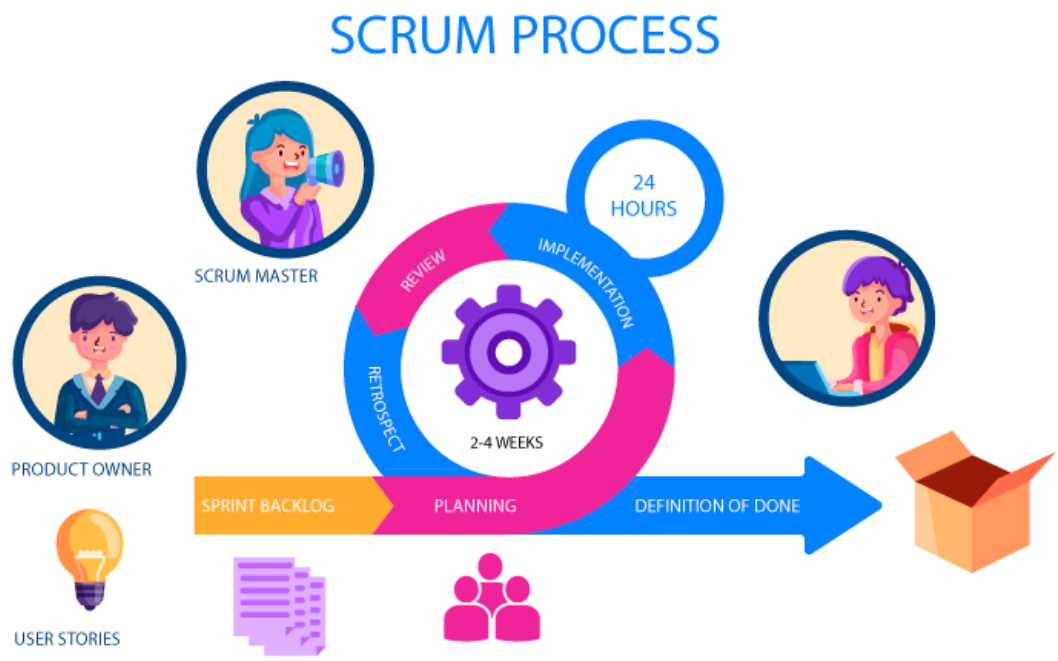

Information Overload
Excessive amount of data makes discerning relevance challenging
Difficulty in filtering out irrelevant information due to data volume
Overwhelming Nature of Online Searches
Poorly crafted queries or lack of understanding of search engine functionalities hinder efficient information retrieval.
Users must critically evaluate sources, consuming additional time and effort
Users struggle to find specific information due to inefficient search techniques.
Presence of false or biased information complicates assessing source reliability
Challenges in Verifying Source Credibility
Ineffective search methods


Files to upload
User information
User
User information
Access to website
0
Github
Settings configuration
Admin
Uploaded files
Set policies


Documents to upload
Uploaded Documents that needs to authorize
0
User
User Information
Web Application Document Repository Management System
User Information
Admin
Access to user dashboard
Authorized Document
Public Approved Documents
User Information

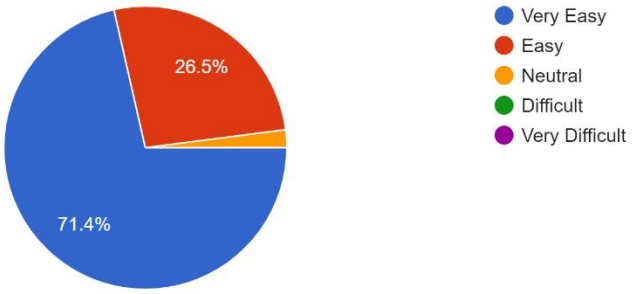

User
User Information
1.0
Account Login
Added user Information
users
Logged in user account
2.0
Access to Dashboard
Approved Public Documents
Approved Public Document
documents
Favorited Document
user_favorites
Logged in user account
Favorited Document
3.0
Access to User profile
Uploaded and Favorited Documents
Changed name and email
users
Edited uploaded document
Approved and Rejected Documents
Logged in user account
4.0
Access to upload document
Documents to upload
Documents that need to authorize
authorization
Logged in user account
Approved and Rejected Documents
5.0
Access to notification
Messeges if the documents are approved or rejected
Approved and Rejected Documents
notifications


Admin
User Information
1.0
Account Login
Added User Information
users
Logged in user account
User Info and Uploaded doc
User Info
2.0
Access User's Information
User's uploaded documents
documents
Logged in user account
All documents
3.0
Access User's Documents
All documents
Edited documents
Logged in user account
4.0
Access File Modification history
User's edited document
User's edited document
history
Logged in user account
Authorized document
User's uploaded document
5.0
Access File authorization
Uploaded documents need to authorize
Authorized document
authorization
Logged in user account
Authorized document
6.0
Access Analytics
Tallied Approved and Rejected documents
Approved or Rejected doc
notifications
Logged in user account
Approved or Rejected documents
7.0
Access Notification history
Approved and Rejected documents



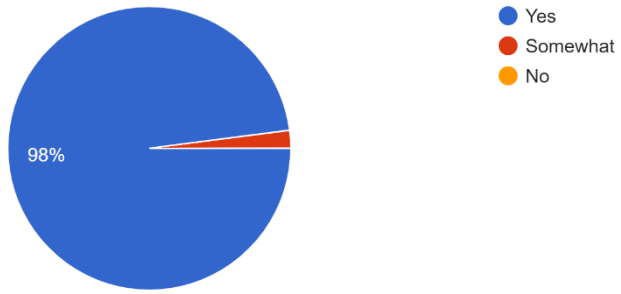
How would you rate the ease of navigation within the document repository?

49 responses



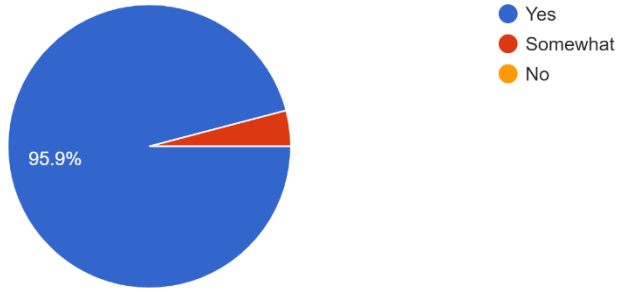
Did you find the user interface of the document repository easy to understand and use?

49 responses



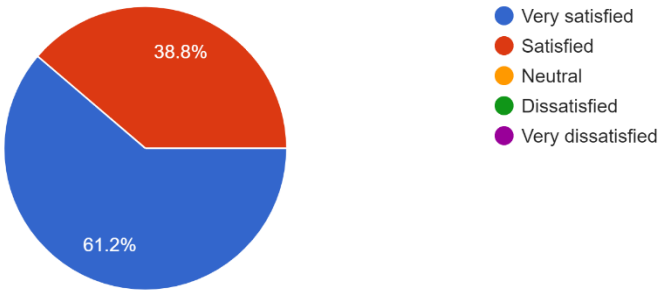
Were you able to easily locate and manage documents within the repository?

49 responses



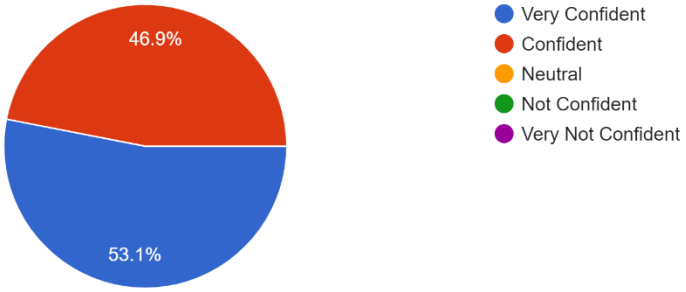
How satisfied are you with the document management capabilities (uploading, organizing, versioning, sharing)?

49 responses



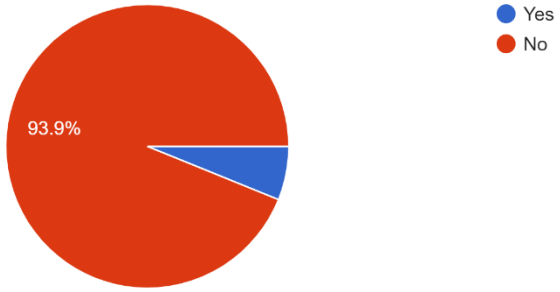
How confident are you in the security measures of the document repository (user permissions, encryption)?

49 responses



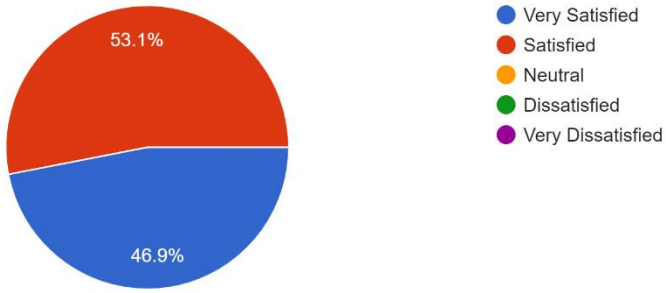
Were there any performance issues (slow loading, downtime, errors) during your usage?

49 responses



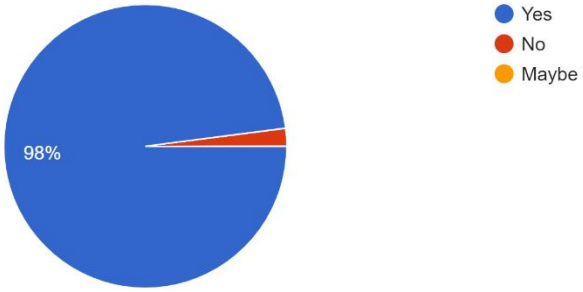
Overall, how satisfied are you with the document repository?

49 responses



Would you recommend the document repository to others?

49 responses



Do you have any comments or suggestions to help improve the website?

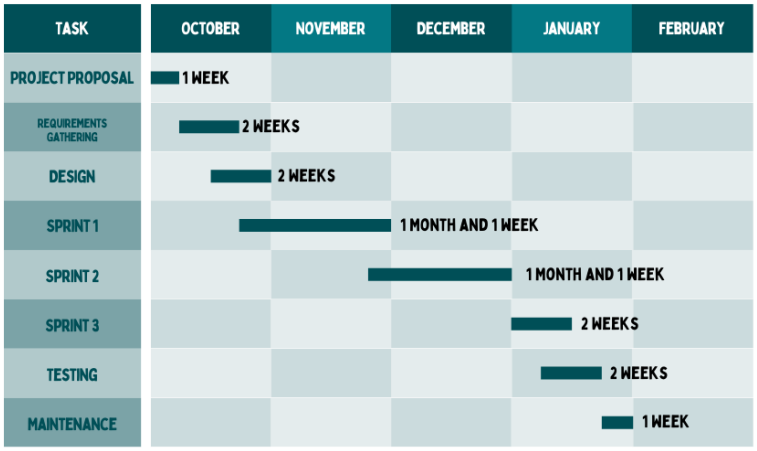
49 responses

none
improve security and privacy
The system is easy to navigate.
The system is smooth and easy to use.
It's simple and easy to use.
Simple design and easy to use.
Easy to use.
It is smooth to use.
It's simple so it's easy to use.

Appendix B

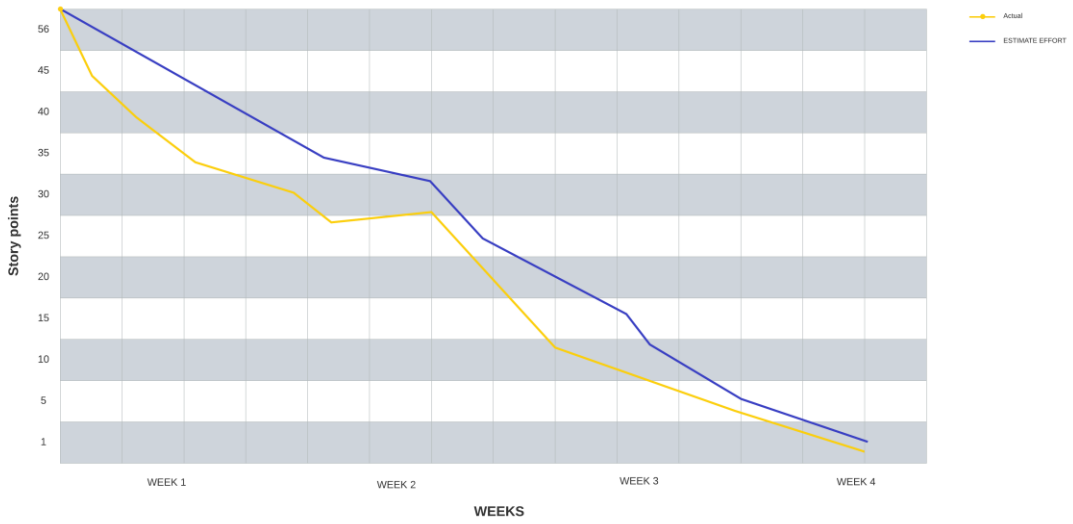
Tables

GANTT CHART

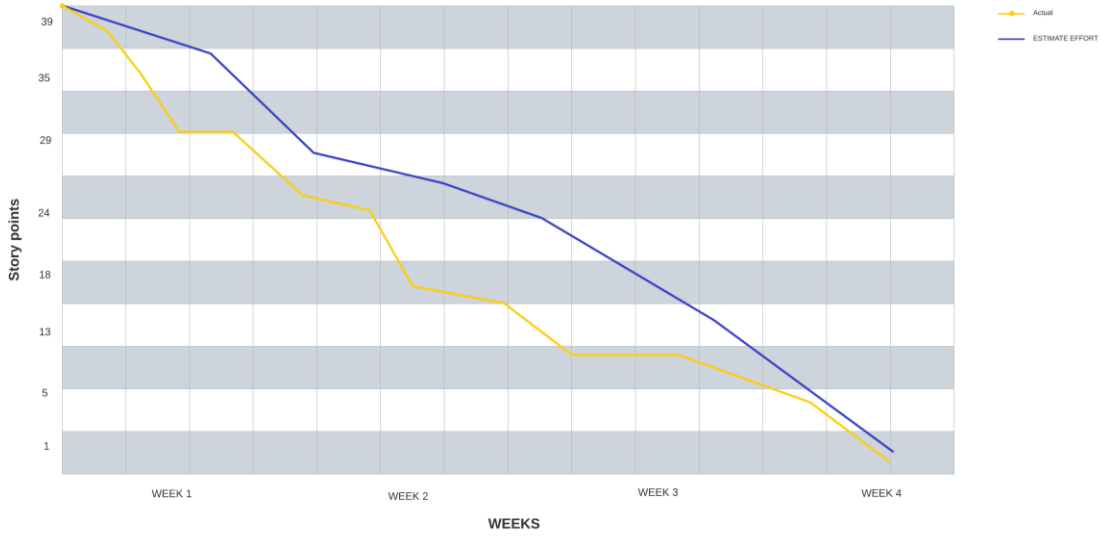


ID	AS A...	I WANT TO...	SO THAT...	PRIORITY	SPRINT #	STATUS
1	User	be able to login and sign up to the system.	I can use and access its features.	High	1	COMPLETED
2	User	be able to browse the dashboard.	I can find the document I need.	High	1	COMPLETED
3	User	be able to upload a file.	I can share my materials to others.	High	1	COMPLETED
4	User	be able to see the files I've uploaded	I can track which file I uploaded.	Medium	1	COMPLETED
5	User	be able to see if my uploaded files are approved.	I know if my files are okay.	Low	1	COMPLETED
6	Admin	be able to authorize the files that the user uploaded	I can check if their upload falls into the category.	High	2	COMPLETED
7	Admin	be able to see the analytics of approval and rejection request	I can track how many files and rejected and approved.	High	2	COMPLETED
8	Admin	be able to see the upload history of the users.	I can keep track and record their file uploads.	Medium	2	COMPLETED
9	Admin	be able to see how many users the system have.	I can keep track how many users are using the system.	High	2	COMPLETED
10	Admin	be able to put message to their rejected upload.	I can let them know why their upload is rejected	Low	2	COMPLETED
11	Admin	be able to see the files the user uploaded.	I know what files are present in the system.	High	1	COMPLETED
12	User	browse files smoothly	I don't have to waste time finding the document I need.	Medium	3	COMPLETED
13	Admin	have a fast and convient navbar.	the options is one click away	Low	3	COMPLETED

BACKLOG TASK & ID	STORY POINTS	ASSIGNED TO	STATUS	ESTIMATE EFFORT	WEEK 1	WEEK 2	WEEK 3	WEEK 4
User Index	56							
Set up System database		Dino	COMPLETED	2	1	1		
Add login and sign up		Dino	COMPLETED	5	2	1	1	1
Create user dashboard		Dino	COMPLETED	8	2	2	3	1
Create profile page		Dino	COMPLETED	10	2	4	2	2
Create upload function		Dino	COMPLETED	8	5	2	1	
Create notification function		Dino	COMPLETED	4	2	1	1	
Add edit profile information		Dino	COMPLETED	4	1	1	2	
Create search function		Dino	COMPLETED	7	4	2	1	
Create sorting function		Dino	COMPLETED	8	5	1	1	1



BACKLOG TASK & ID	STORY POINTS	ASSIGNED TO	STATUS	ESTIMATE EFFORT	WEEK 1	WEEK 2	WEEK 3	WEEK 4
Admin Index	39							
Create Admin dashboard		Dino	COMPLETED	6	6			
Set up View user function		Dino	COMPLETED	3	1	2		
Set up View document function		Dino	COMPLETED	5	1	1	2	1
Create file modification history		Dino	COMPLETED	4	1	2	1	
Create upload authorization		Dino	COMPLETED	8	2	3	2	1
Create analytics		Dino	COMPLETED	7	1	1	3	2
Add nofication		Dino	COMPLETED	6	1	1	1	3



BACKLOG TASK & ID	STORY POINTS	ASSIGNED TO	STATUS	ESTIMATE EFFORT	WEEK 1	WEEK 2	WEEK 3	WEEK 4
Designing User interface	34							
Add design to login page		Daniel	COMPLETED	4	4			
Add design to Sign-up page		Daniel	COMPLETED	4	4			
Add design to user dashboard		Daniel	COMPLETED	7	1	3	2	1
Add design to upload page		Daniel	COMPLETED	6	1	2	2	1
Add design to user's notification page		Daniel	COMPLETED	5	1	1	3	
Add design to profile page		Daniel	COMPLETED	8	2	1	2	3
Designing Admin interface	30							
Add design to admin dashboard		Daniel	COMPLETED	4	1	1	2	
Add design to view user page		Daniel	COMPLETED	3		1	1	1
Add design to view document page		Daniel	COMPLETED	4	2	1	1	
Add design to file modification history page		Daniel	COMPLETED	8	4	1	1	2
Add design to authorization page		Daniel	COMPLETED	5	1	2	1	1
Add design to analytics page		Daniel	COMPLETED	3		1	1	1
Add design to admin's notification page		Daniel	COMPLETED	3	1		1	1

Appendix C

Test Cases

Unit Testing

ID	Test Case	Steps	Expected Results	Actual Result	Status
1	Create Account	7. Navigate to the "Register" page. 8. Enter valid information: First Name: John, Last Name: Doe, Password: secure123, Email: john.doe@example.com. 9. Click on the "Submit" button.	Account is created successfully.	As Expected	Passed
2	Upload File	7. Navigate to the document upload page. 8. Choose a file, provide title, description, file format, and tags. 9. Click on the "Upload" button.	File uploaded successfully, awaiting authorization.	As Expected	Passed
3	Delete Uploaded File	7. Go to the user's profile page. 8. Click on the "Delete" button next to a specific uploaded file. 9. Confirm the deletion.	File deleted successfully.	As Expected	Passed
4	Download Document	4. Click the document. Click the download button.	Document is downloaded successfully.	As Expected	Passed

User Account Management:

ID	Test Case	Steps	Expected Results	Actual Result	Status
1	Create Account	10. Navigate to the "Register" page. 11. Enter valid information: First Name: John, Last Name: Doe, Password: secure123, Email: john.doe@example.com. 12. Click on the "Submit" button.	Account is created successfully.	As Expected	Passed
2	Login	4. Navigate to the login page. 5. Enter valid credentials: Username: john.doe@example.com, Password: secure123. 6. Click on the "Login" button.	Successfully logged in.	As Expected	Passed
3	Edit Profile Information	4. Go to the user's profile page. 5. Edit the profile information (Change First Name to "Johnny", Last Name to "Doe Jr."). 6. Click on the "Save" button	Profile information updated successfully.	As Expected	Passed
4	Logout	2. Click on the "Logout" button.	User successfully logged out.	As Expected	Passed

Document Upload and Management:

ID	Test Case	Steps	Expected Results	Actual Result	Status
5	Upload File	10. Navigate to the document upload page. 11. Choose a file, provide title, description, file format, and tags. 12. Click on the "Upload" button.	File uploaded successfully, awaiting authorization.	As Expected	Passed
6	View Uploaded Files	3. Go to the user's profile page. 4. Navigate to the "Uploaded Documents" section.	User can see a list of their uploaded files.	As Expected	Passed
7	Edit Uploaded File	5. Go to the user's profile page. 6. Click on the "Edit" button next to a specific uploaded file. 7. Change the title of the file. 8. Click on the "Save" button.	File information updated successfully.	As Expected	Passed

8	Delete Uploaded File	10. Go to the user's profile page. 11. Click on the "Delete" button next to a specific uploaded file. 12. Confirm the deletion.	File deleted successfully.	As Expected	Passed
9	Search Files	2. Use the search bar and enter a specific tag, title or author.	List of files with the specified tag, author, or title is displayed.	As Expected	Passed
10	Sort Files	3. Choose to view files based on "Most Viewed." 4. Choose to view files based on "Most Favorites."	Files are displayed according to the selected sorting criteria.	As Expected	Passed
11	Filter Files by Category	2. Choose a specific category to view files.	Only files belonging to the selected category are displayed.	As Expected	Passed

Notifications:

ID	Test Case	Steps	Expected Results	Actual Result	Status
12	Receive Notification	2. Go the Notifications Page	User receives a notification for file approval or rejection.	As Expected	Passed
13	Remove Notification	3. Go to the notifications section. 4. Click on the "Remove" button next to a specific notification.	Notification removed successfully.	As Expected	Passed

Document Download and View:

ID	Test Case	Steps	Expected Results	Actual Result	Status
14	View Public Documents	2. Login to see the dashboard.	User can view a list of publicly approved documents.	As Expected	Passed
15	Download Document	5. Click the document. 6. Click the download button.	Document is downloaded successfully.	As Expected	Passed
16	View Document Information	2. Click on a document to view detailed information.	Detailed information about the document is displayed.	As Expected	Passed

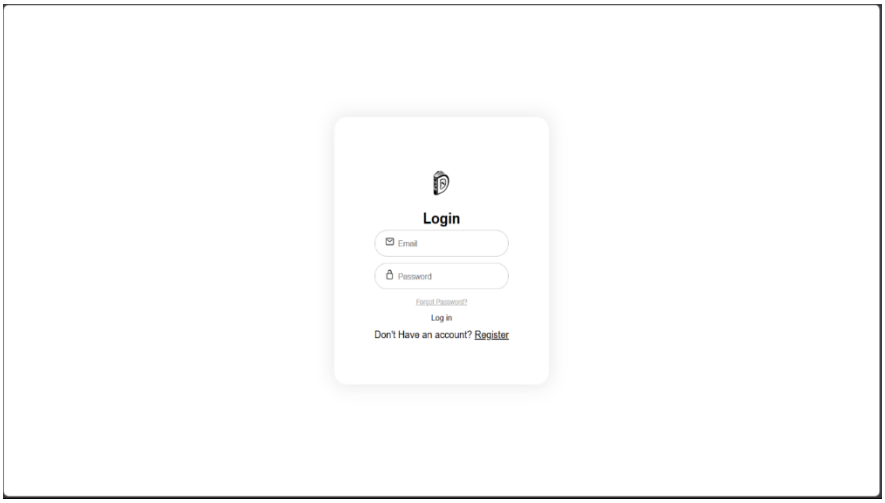
Admin Functionality:

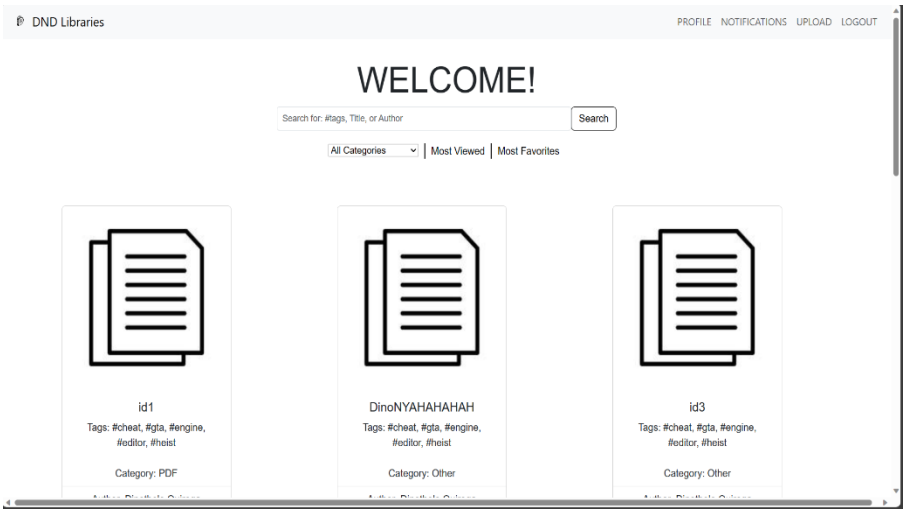
ID	Test Case	Steps	Expected Results	Actual Result	Status
17	Admin Login	4. Navigate to the admin login page. 5. Enter valid admin credentials. 6. Click on the "Login" button.	Successfully logged into the admin dashboard.	As Expected	Passed
18	View User Information	2. Click View Users Page.	Admin can view detailed information about a user.	As Expected	Passed
19	Delete User Account	3. Select a user to delete. 4. Confirm the deletion.	User account deleted successfully.	As Expected	Passed
20	View Uploaded Documents by Users	2. Click View Documents Page.	Admin can view a list of documents uploaded by users.	As Expected	Passed
21	Delete Document	3. Select a document to delete. 4. Confirm the deletion.	Document deleted successfully.	As Expected	Passed
22	Approve Upload Request	3. Click Authorization Page. 4. Admin approves a user's upload request.	Upload request approved, and the document is featured on the dashboard.	As Expected	Passed

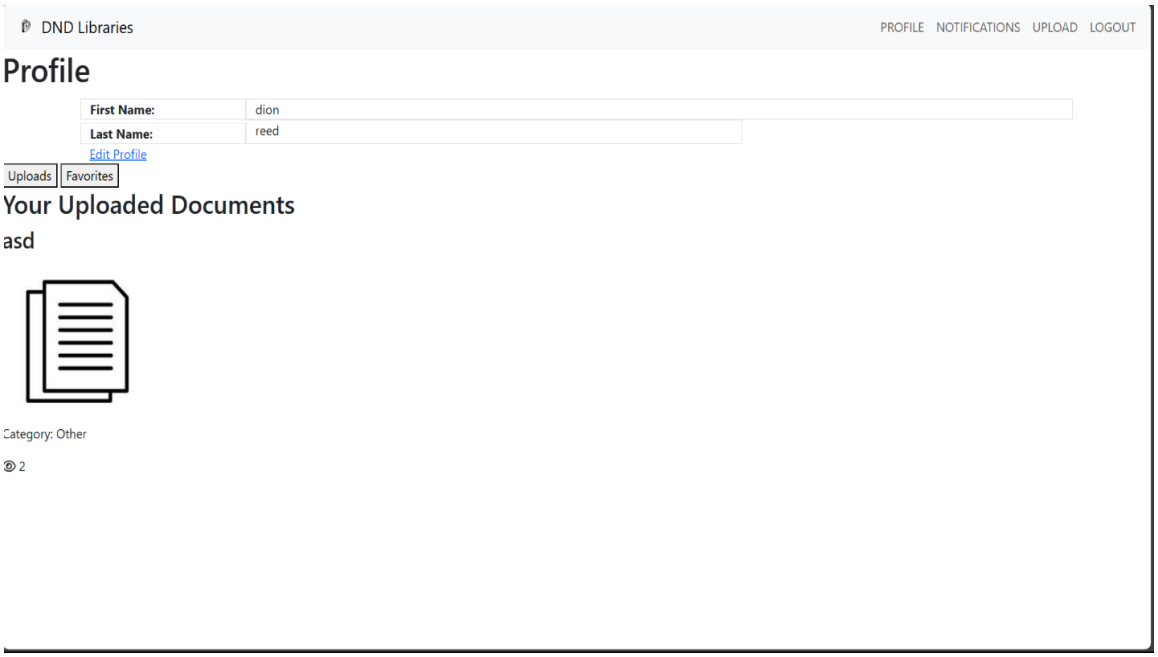
23	Deny Upload Request	3. Click Authorization Page. 4. Admin denies a user's upload request.	Upload request denied, and the user is notified.	As Expected	Passed
24	View Analytics	2. Click Analytics Page.	Admin can view analytics with insights into total approvals, rejections, notification history, etc.	As Expected	Passed
25	Logout (Admin)	2. Click on the "Logout" button.	Admin successfully logs out.	As Expected	Passed

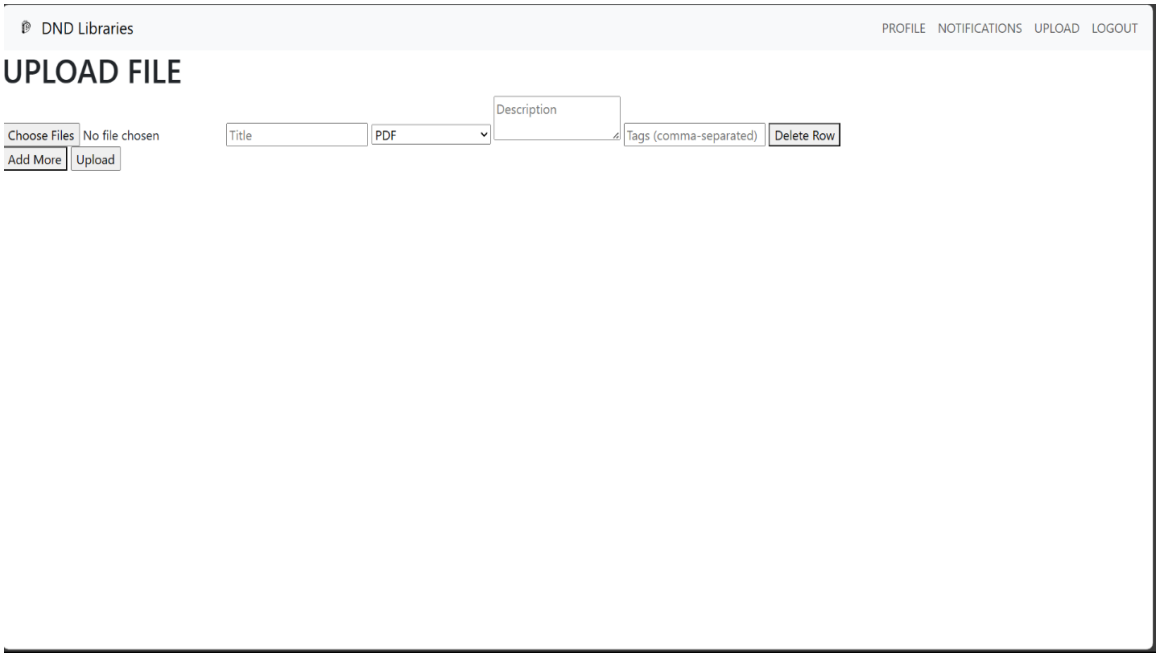
Appendix D

Screenshots

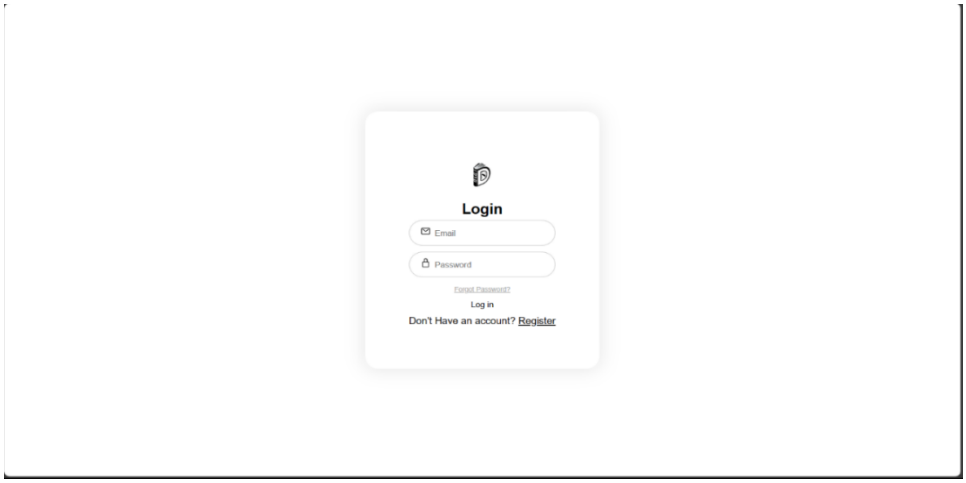

Login
Email
Password
Forgot Password?
Log in
Don't Have an account? Register


DND Libraries
PROFILE NOTIFICATIONS UPLOAD LOGOUT
WELCOME!
Search for: #tags, Title, or Author
Search
All Categories
Most Viewed
Most Favorites
id1
Tags: #cheat, #gta, #engine, #editor, #heist
Category: PDF
DinoNYAHAHAHAH
Tags: #cheat, #gta, #engine, #editor, #heist
Category: Other
id3
Tags: #cheat, #gta, #engine, #editor, #heist
Category: Other


DND Libraries
PROFILE NOTIFICATIONS UPLOAD LOGOUT
Profile
First Name: dion
Last Name: reed
Edit Profile
Uploads Favorites
Your Uploaded Documents
asd
Category: Other
2

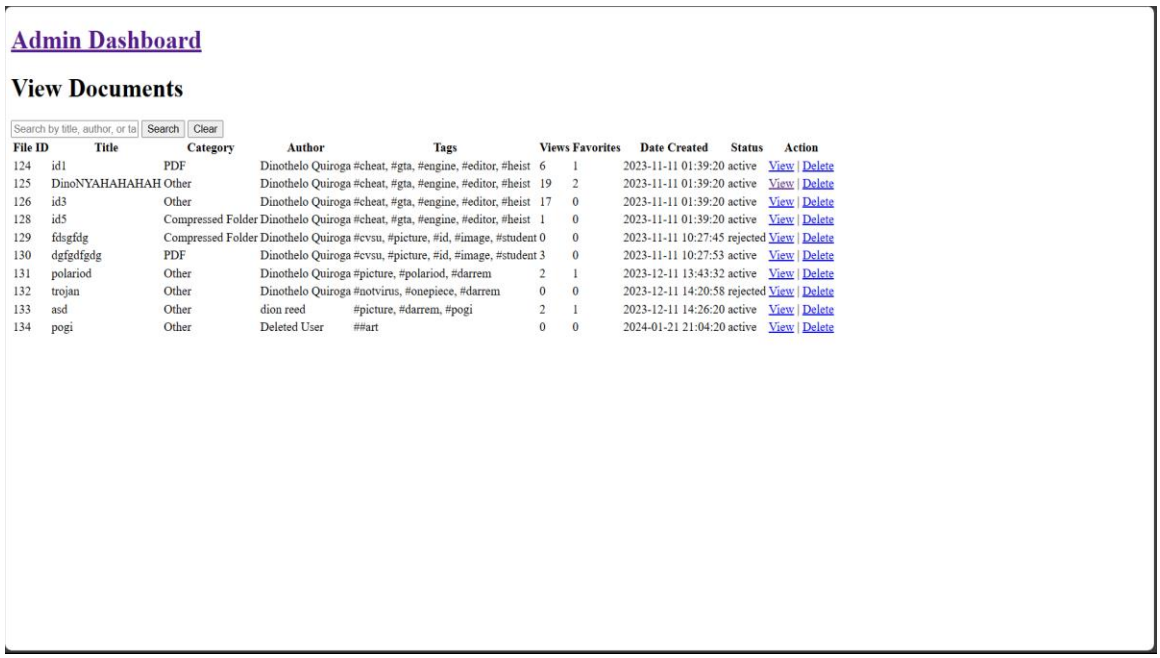

DND Libraries
PROFILE NOTIFICATIONS UPLOAD LOGOUT
UPLOAD FILE
Choose Files No file chosen
Title
PDF
Description
Tags (comma-separated)
Delete Row
Add More
Upload


DND Libraries
PROFILE NOTIFICATIONS UPLOAD LOGOUT
Notifications
Action Title Timestamp Message Delete
Approved asd 2023-12-11 14:26:51
Delete


Login
Email
Password
Forgot Password?
Log in
Don't Have an account? Register


Admin Dashboard
LOGOUT
Options
View Users View Documents History Authorizations Analytics Notification History


Admin Dashboard
View Users
Search by Author: Enter author's name Search Clear
User ID First Name Last Name Email Account Created Actions
13 Dinothelo Quiroga quirogadinothelo@gmail.com 2023-11-11 01:37:39 View Uploaded Files | Delete
14 dion reed dionreed123@gmail.com 2023-12-04 18:24:23 View Uploaded Files | Delete

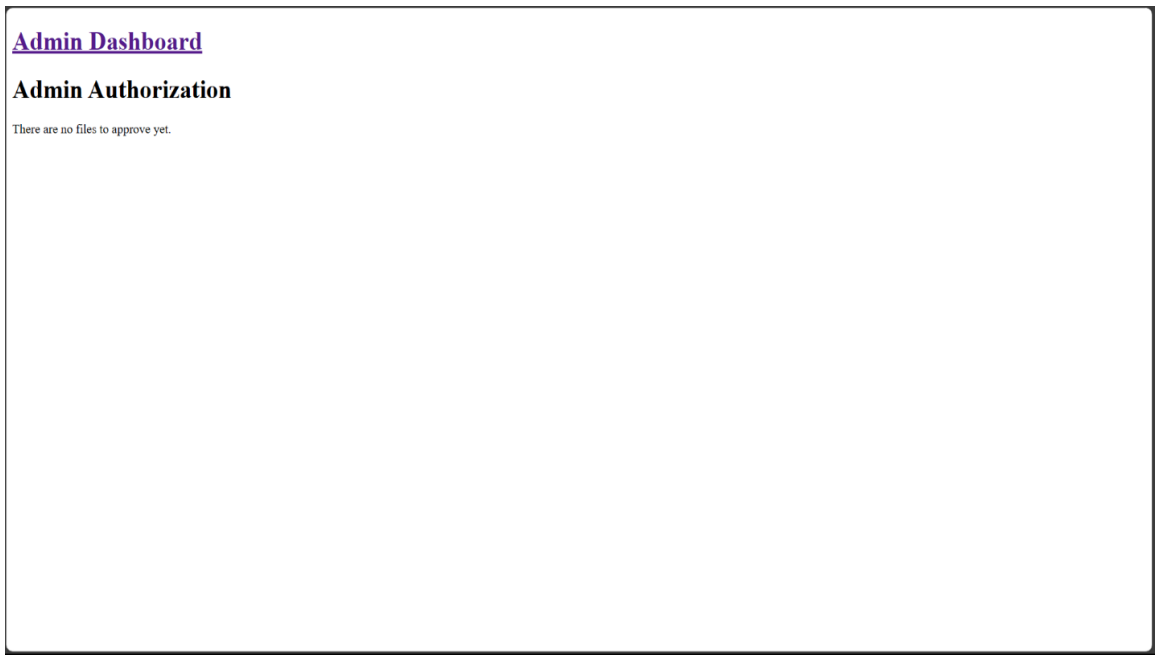


Admin Dashboard

View Documents

Search by title, author, or ta | Search | Clear

File ID	Title	Category	Author	Tags	Views	Favorites	Date Created	Status	Action
124	id1	PDF	Dinothelo Quiroga	#cheat, #gta, #engine, #editor, #heist	6	1	2023-11-11 01:39:20	active	View | Delete
125	DinoNYAHAHAHAH	Other	Dinothelo Quiroga	#cheat, #gta, #engine, #editor, #heist	19	2	2023-11-11 01:39:20	active	View | Delete
126	id3	Other	Dinothelo Quiroga	#cheat, #gta, #engine, #editor, #heist	17	0	2023-11-11 01:39:20	active	View | Delete
128	id5	Compressed Folder	Dinothelo Quiroga	#cheat, #gta, #engine, #editor, #heist	1	0	2023-11-11 01:39:20	active	View | Delete
129	fdsgfdg	Compressed Folder	Dinothelo Quiroga	#cvsu, #picture, #id, #image, #student	0	0	2023-11-11 10:27:45	rejected	View | Delete
130	dgfgdfgdg	PDF	Dinothelo Quiroga	#cvsu, #picture, #id, #image, #student	3	0	2023-11-11 10:27:53	active	View | Delete
131	polariod	Other	Dinothelo Quiroga	#picture, #polariod, #darrem	2	1	2023-12-11 13:43:32	active	View | Delete
132	trojan	Other	Dinothelo Quiroga	#notvirus, #onepiece, #darrem	0	0	2023-12-11 14:20:58	rejected	View | Delete
133	asd	Other	dion reed	#picture, #darrem, #pogi	2	1	2023-12-11 14:26:20	active	View | Delete
134	pogi	Other	Deleted User	##art	0	0	2024-01-21 21:04:20	active	View | Delete



Admin Dashboard

Admin Authorization

There are no files to approve yet.

Admin Dashboard

Notification History

Search by Author: Enter author's name Search Clear

Action	Title	Timestamp	Message	Author	Delete
Approved	Assets	2024-01-23 21:09:47		Dinothelo Quiroga	Delete
Approved	Assets	2024-01-23 21:51:28		Daniel Cunanan	Delete
Approved	Assets	2024-01-23 21:52:41		Dinothelo Quiroga	Delete
Approved	Assets	2024-01-23 21:53:39		Dinothelo Quiroga	Delete
Approved	Assets	2024-01-23 21:54:58		Dinothelo Quiroga	Delete
Approved	Assets	2024-01-23 21:56:45		Dinothelo Quiroga	Delete
Rejected	ryuko	2024-01-23 22:18:46	dsdsad	Dinothelo Quiroga	Delete
Approved	Assets	2024-01-23 23:20:49		Dinothelo Quiroga	Delete
Approved	ryuko	2024-01-24 00:03:20		Dinothelo Quiroga	Delete
Approved	Assets	2024-01-24 01:12:52		Dinothelo Quiroga	Delete
Approved	Assets Buildings	2024-01-24 15:05:32		Dinothelo Quiroga	Delete