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SiLA - Team Wombat - Home Page



Welcome to the SiLA - Team Wombat

Project Description:

This project aims to develop an Online Manuscript Submission and Peer Review Platform for the Studies in Language Assessment (SiLA) journal, operated by the Association for Language Testing and Assessment of Australia and New Zealand (ALTAANZ). The envisioned platform will replace the current email-based manuscript submission and review process with a comprehensive, streamlined, online system. This initiative seeks to enhance the efficiency of manuscript handling, review assignments, editorial decision-making, and communication among authors, reviewers, and editors.

Stakeholder:

| Name | Role | Email |
|---------------------|---------------------|--|
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Tools:

| Tool | Description | Link |
|------------|--|-----------------------------------|
| Confluence | Confluence is a collaboration tool developed by Atlassian that provides a platform for project teams to create, share, and manage documents and ideas in a unified space. | Confluence-Wombat |
| Jira | Jira is a project management tool developed designed to help teams plan, track, and manage agile software development projects. | Jira-Wombat |
| Github | GitHub is a web-based platform for version control and collaboration, allowing developers to store, manage, and track changes to their code projects using Git. | Github-Wombat |
| Figma | Figma is a collaborative interface design tool that enables designers to create, share, and iterate on user interface designs in real-time. | Figma-Wombat |
| Slack | Slack is a communication platform used for seamless collaboration and communication between mentors, clients, and project teams, facilitating real-time messaging, file sharing, and project coordination. | Slack-SiLa |
| VScode | <i>Visual Studio Code</i> is a code editor redefined and optimized for building and debugging modern web and cloud applications. | VScode |

Sprint 2 Demo Video

https://youtu.be/m-Q2aA_KJoA?feature=shared

 COMP90082-2024-SM1 Si-Wombat Sprint 2 Demo



Project Overview

This section provides an overview of the project which includes SiLA Overview and Background Description and The Project Scope.

Background

The SiLA journal is a renowned international peer-reviewed publication dedicated to the field of language assessment and testing. Despite its significant contributions to academia, SiLA has been operating with an email-based system for managing manuscript submissions and peer reviews. This manual process has become less efficient due to the increasing number of submissions and the intricate demands of the peer review process. The need for an automated, more organized system has become evident to ensure timely and effective management of submissions and reviews.

Goals

Our goal is to establish a fully functional academic journal website that can streamline the process of manuscript submission.

In Scope

1. User Registration and Management:

- Implement a secure login system for authors, reviewers, and editors.
- Develop dynamic user profiles that accurately track and display individual submission histories, review assignments, and editorial decisions.

2. Manuscript Submission:

- The system is intended to provide a seamless submission process, ensuring that authors can easily upload their work without encountering technical difficulties. A key feature of this platform is the automatic generation and dispatch of confirmation emails to authors immediately after their submission has been successfully received.

3. Manuscript Tracking and Management:

- A dashboard for editors/editorial assistants to track manuscript statuses (submitted, under review, revisions required, accepted).
- Assignment of manuscripts to appropriate reviewers based on expertise. The website must ensure the author can not review their own manuscript as a reviewer.

4. Peer Review System:

- Double-blind review options - There will be a submission guide for authors, which reminds them that is a double-blind review, and they are not allowed to publish their personal information. In addition, authors will be required to fill out the domain conflicts when they submit their articles.
- Space for reviewers to upload their reports and recommendations.
- Communication module for reviewers to interact with editors/editorial assistants if needed.

5. Editorial Decision-Making Tools:

- Facilitates editors in recording verdicts and making decisions on SiLA journal submissions, offering options to accept, request revisions, or reject.
- Proactively updates authors with editorial decisions and detailed feedback, streamlining communication within the manuscript submission process.

6. Data Security and Confidentiality:

- Robust data protection measures to ensure the confidentiality of manuscripts and reviews.

- Implement role-based access controls to ensure only authorized users can access relevant data and functionalities. For instance, reviewers should not access other reviewers' comments, and authors should only see information related to their submissions.
- Protect data stored on servers with encryption to prevent unauthorized access.

7. Scalability and Flexibility:

- Ensure the platform's architecture can easily adapt to increasing submissions and user growth
- Maintain a modular system design to facilitate easy updates and the introduction of new features

8. Integration Capabilities:

- Establish interfaces for integration with academic indexing and archiving services to broaden the journal's reach.
- Ensure compatibility with existing academic software ecosystems for streamlined workflows.

9. Analytics and Reporting:

- Implement tools for tracking and analyzing submission patterns and review timelines, offering strategic insights.
- Enable customizable reporting features for editors to monitor and improve operational efficiency and user engagement.

Out of Scope

- 1. Direct Marketing and Distribution of Published Articles:** Academic platforms focus primarily on the dissemination and archiving of scholarly work rather than on the marketing aspects commonly associated with commercial publications. Marketing efforts like social media campaigns or email promotions may detract from the platform's primary mission of scholarly integrity and impartiality. These activities also require different expertise and resources, which might dilute the platform's focus and investment in academic services.
- 2. Financial Management Systems:** Incorporating financial transactions directly into an academic platform can complicate the primary objective of scholarly dissemination with commercial operations such as payment processing and financial tracking. These functions require compliance with various financial regulations and security standards, which can be resource-intensive. Utilizing external systems for these tasks ensures that the platform can focus on academic publishing without the overhead of financial management.
- 3. Hosting of Non-Academic Content:** The main goal of an academic platform is to support the research community by providing a repository for scholarly articles. Introducing non-academic content, such as personal blogs or commercial advertisements, could undermine the platform's credibility and distract from its educational purpose. Keeping the content strictly academic ensures that the platform remains a dedicated resource for researchers and scholars.

Requirements

This section provides the detailed requirements of the project, including the system personas, user story, Do-Be-Feel, our Goal model, and Prototype and Client Requirements.

Persona

This section introduces 4 types of persona based on the discussion from the client meeting, which are author, reviewer, editor, and web administrator. Those 4 persons are also the major stakeholders in the SiLA project.

Do-Be-Feel

This section shows the motivation model for our major stakeholders which is listed above and includes their roles, expectations, and emotions.

Goal model

This section contains the Goal Model for the stakeholders which includes their roles, expectations, and emotions.

User Story

This section lists all possible user stories that our development team planned, it provides detailed illustrations and justification for the user story which includes story point, size estimation, and priority (importance).

Prototypes

This section displays the prototypes of the SiLA project that are designed on Figma. The prototypes show the home page, login page, register page, dashboard for author, editor, and reviewer, submission page, reviewing page, and chat box.

Client Requirement

This section lists the client requirements that we collect from client meetings, and we list our solution for each requirement.

Author

Nicholas Brea - Author



"Publishing the article on SiLa is one of my biggest goals in my academic life, and I'm always working hard on it."

Age: 25
Work: PhD candidate in the University of Melbourne
Family: Married
Location: Melbourne, Vic

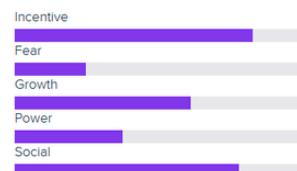
Goals

- Publishing the Article on his focused area.
- Get feedback from experienced reviewers and editors to improve writing skills

Major Responsibilities

- Include research and studying for the focused area and writing the journal publishing on the SiLa.

Motivation



Physical, Social, and Technological Environment:

- Currently, study at the University of Melbourne on Campus.
- Studying and working in a research group with a professor.
- Mainly stayed in the university laboratory for the experiment, and wrote the journal in the library.

Frustration:

- Difficulty in navigating the manuscript submission interface, leading to confusion about how to properly submit manuscripts and supporting documents.
- Experiencing delays in receiving confirmation emails after manuscript submission, causing uncertainty about the submission status.
- Lack of clear communication or updates on the manuscript review process, resulting in anxiety and frustration about waiting times.

Reviewer

Snow - Reviewer



"Efficiency, clarity, and confidentiality in the review process not only save time but also uphold the integrity and quality of scholarly work."

Age: 30
Education: Professor
Work: PhD candidate in the University of Melbourne
Family: Not married yet
Location: Melbourne, Vic

Goals

- Reviewers aim to easily access and manage their assigned manuscripts through a user-friendly dashboard that displays their current review tasks, deadlines, and statuses.
- They seek to communicate effectively with editors and authors, providing clear and constructive feedback through the platform. This includes the ability to ask clarification questions and receive updates or responses.

Major Responsibilities

- Conduct objective reviews of manuscripts submitted to SILA.
- Provide constructive feedback to authors to improve the quality of their research and presentation.
- Make recommendations to the editorial team regarding the suitability of manuscripts for publication.

Physical, Social, and Technological Environment:

- Works primarily from home.
- Engages in scholarly discussions via academic forums, social media groups dedicated to language assessment, and peer collaboration.
- Familiar with using online manuscript submission and review systems and experienced with various digital communication platforms for collaborating with colleagues and participating in virtual conferences.

Motivation

| Motivation Type | Score (approx.) |
|-----------------|-----------------|
| Incentive | 85% |
| Fear | 10% |
| Growth | 70% |
| Power | 80% |
| Social | 90% |

Frustration:

- Challenges in matching their expertise with the assigned manuscripts, resulting in a longer review process or difficulty in providing thorough reviews.
- Difficulties in using the platform for uploading reports and recommendations due to a non-intuitive interface.
- Inadequate communication tools for discussing specific issues with editors or editorial assistants, leading to inefficiencies in the review process.

Editor

KK - Editor



"I will bring your manuscript to life and ensure our journal is the premier choice for showcasing your work."

Age: 40
Education: Professor
Work: PhD candidate in the University of Melbourne
Family: Not married yet
Location: Melbourne, Vic

Goals

- ensuring that all submitted manuscripts are being processed properly.
- to effectively manage the peer review process by selecting and inviting qualified reviewers.
- to make well-informed editorial decisions on manuscripts based on peer review feedback.

Major Responsibilities

- Manuscript Assessment: evaluate the submitted manuscripts, this includes a check for plagiarism and compliance with the submission guidelines.
- Peer Review Management: oversee the peer review process, including selecting and inviting appropriate reviewers, and monitoring the review progress.
- Decision Making: make decisions on manuscripts based on peer review feedback, including accept, request revisions, or reject.

Motivation

Incentive

Fear

Growth

Power

Social

Physical, Social, and Technological Environment:

- Physical environment: editors work in office settings equipped with computers and necessary software for manuscript handling and communication.
- Social environment: integrate with authors, reviews, publishers and editorial board.
- Technological environment: Editors use specialized software and online platforms for manuscript submission, peer review management, plagiarism checks, and editorial decision-making.

Frustration:

- Overseeing the entire submission and review process manually, including tracking manuscript statuses and coordinating between authors and reviewers, which can be time-consuming and prone to errors.
- Making editorial decisions without an efficient way to compile and view all reviewer reports and recommendations in one place.
- Challenges in maintaining data security and confidentiality, especially when handling sensitive information or feedback.

Web Administrator

Ken - Web Administrator



"Ensuring the SiLA platform runs smoothly and securely is my top priority. It's about creating a safe, efficient environment where researchers and editors can focus on their work, knowing the technical side is taken care of."

Age: **35**
Education: **Bachelor**
Work: **Bachelor**
Family: **Married**
Location: Melbourne, **Vic**

Goals

- Maintain high availability and reliability of the SiLA platform.
- Protect sensitive data and ensure the platform meets the latest security standards.
- Efficiently manage user accounts and permissions, providing prompt support when issues arise.

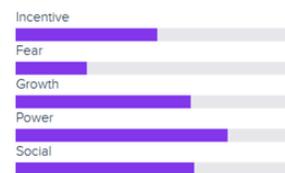
Major Responsibilities

- Include the daily maintenance of the site, ensuring data security, managing user accounts, and providing technical support to both the editorial team and users.

Physical, Social, and Technological Environment:

- Works primarily from home, but also maintains close communication with user groups.
- Regularly interacts with users and the editorial team to address their technical inquiries and needs.
- Utilizes a variety of tools for network monitoring, security analysis, and user management, staying abreast of technological advancements and security trends.

Motivation



Frustration:

- Ensuring the platform's scalability and flexibility to accommodate an increasing number of submissions without compromising performance.
- Implementing robust data protection measures that adequately safeguard manuscript and review information against breaches.
- Continuously updating and adding new features to the platform based on user feedback, which requires staying ahead of technological advancements and user needs.

DO-BE-FEEL

| Roles | Function Goal | Quality Goal | Emotional Goal |
|---------------|---|--|--|
| Editor | <ul style="list-style-type: none"> Ensuring that all submitted manuscripts are being processed properly. To effectively manage the peer review process by selecting and inviting qualified reviewers. To make well-informed editorial decisions on manuscripts based on peer review feedback. | <ul style="list-style-type: none"> Ensure accuracy and thoroughness in editorial decisions | <ul style="list-style-type: none"> Feel confident and empowered in managing the editorial process |
| Reviewer | <ul style="list-style-type: none"> Reviewers aim to easily access and manage their assigned manuscripts through a user-friendly dashboard that displays their current review tasks, deadlines, and statuses. Reviewers seek to communicate effectively with editors and authors, providing clear and constructive feedback through the platform. This includes the ability to ask clarification questions and receive updates or responses. | <ul style="list-style-type: none"> Ensure fairness and integrity in the peer review process | <ul style="list-style-type: none"> Feel engaged and respected as a valued contributor |
| Author | <ul style="list-style-type: none"> Easily submit manuscripts and track their status Publishing the Article on his focused area. Get feedback from experienced reviewers and editors to improve writing skills | <ul style="list-style-type: none"> Ensure visibility and transparency in the submission process | <ul style="list-style-type: none"> Feel supported and informed throughout the publication journey |
| Administrator | <ul style="list-style-type: none"> Maintain high availability and reliability of the SiLA platform. Protect sensitive data and ensure the platform meets the latest security standards. Efficiently manage user accounts and permissions, providing prompt support when issues arise. | <ul style="list-style-type: none"> Ensure reliability and confidentiality of user data | <ul style="list-style-type: none"> Feel empowered and in control of the platform's operations |

Editor:

1. Efficiently manage manuscript submissions and peer review process:
 - a. Streamline the process of receiving, assigning, and tracking manuscripts.
 - b. Facilitate seamless communication between authors, reviewers, and the editorial team.
 - c. Enable quick decision-making on manuscript acceptance/rejection

Reviewer :

1. Provide comprehensive and constructive feedback on manuscripts:
 - a. - Conduct thorough evaluation of manuscript content, methodology, and relevance.
 - b. - Offer clear and actionable suggestions for improvement.
 - c. - Assess manuscripts impartially and with attention to detail.
2. Ensure fairness and integrity in the peer review process:
 - a. - Maintain anonymity in reviewing process where required.
 - b. - Avoid bias and conflicts of interest in evaluating manuscripts.

- c. - Uphold ethical standards and guidelines set by the journal.
3. Feel engaged and respected as a valued contributor:
- a. - Receive recognition for expertise and contributions.
 - b. - Appreciate clear guidelines and expectations for the review process.
 - c. - Experience satisfaction in contributing to the advancement of scholarly work.

Author:

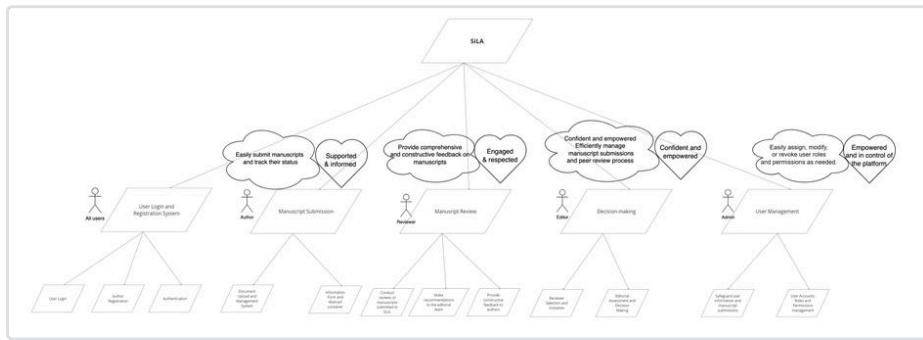
- 1. Easily submit manuscripts and track their status:
 - a. - Navigate an intuitive submission interface.
 - b. - Receive timely updates on manuscript progress and review status.
 - c. - Access submission history and feedback for reference. |
- 2. Ensure visibility and transparency in the submission process:
 - a. - Understand submission guidelines and requirements clearly.
 - b. - Have access to submission history and review reports.
 - c. - Receive prompt notifications on editorial decisions.
- 3. Feel supported and informed throughout the publication journey:
 - a. - Receive guidance and assistance in preparing and submitting manuscripts.
 - b. - Experience responsiveness and professionalism from the editorial team.
 - c. - Celebrate achievements and milestones in the publication process.

Administrator

- 1. Ensure reliability and confidentiality of user data:
 - a. - Safeguard user information and manuscript submissions from breaches or leaks.
 - b. - Comply with data protection regulations and industry standards.

GOAL MODEL

This page contains the Goal Model for the stakeholder which include their roles, expectation to do, and emotions.



User Story

In this project, we estimate the **Story Point** by the time cost of the task. In each task, we estimate the time cost and assign the story point based on the three scale: **1 point** for the task that could done within 1 hour. **2 points** for the task that should spend half a day (4 hours). **4 points** for the task that took one day (8 hours or longer). By adding all the task's story points in a user story, we can get the story point for the user story.

For Size Estimation, we have 3 scales - **small, medium, and large** as follows:

Small - the user story with. story points less or equal to 5.

Medium - the user story with. story points larger than 5 and less or equal to 10.

Large - the user story with. story points larger than 10.

For **MoSCoW priority**, the '**Must have**' user story is the mandatory user story in this project, detailly all the 'must have' user stories are the key function or base function of the SiLA project. The missing 'Must Have' user story will cause the incomplete of the project, and might affect the development of other related functions.

The '**Should have**' user story is the user story that is important but not mandatory. Unlike the 'Must have' user story, The missing 'Should Have' user story might not cause the incomplete of the project, and might affect the development of other related functions. But, the missing 'Should Have' will greatly reduce the user experience.

Could-have: These items would be nice to have but are not essential. Still less important than the two preceding categories, these elements are considered a third-level priority. If including them will have negative consequences on cost or meeting deadlines, they should be omitted. It is only when they don't negatively affect other project elements that they should be included.

Will not Have (this time): These items are not essential and can be excluded from the project without jeopardizing its success. Being the lowest priority category, omitting them won't hurt the project and they can be included when project conditions are more favorable.

| Epic ID | Epic Start Date | Epic Due Date | User stor y ID | AS | I Want To | So that | Story Poi nt | Size Estim ation | MoSC oW Priori ty | Justificatio n | |
|---------|-----------------|---------------|----------------|-------|-------------------------|-------------------------------------|---|------------------|-------------------|----------------|--|
| SW-84 | Home Page | 23-Mar-24 | 01-Apr-24 | SW-16 | Home page for All Users | a user access a welcoming home page | it can ensure a positive first impression and ease of use | 10 | Medium | Will not Have | Size Estimation: It's complex enough to require significant design and development time but doesn't involve extensive backend logic complexities . |

| | | | | | | | | | | | | |
|--------|---------------------------|-----------|-----------|--------|-----------------------------|------------------|---|--|----|-------|-----------|---|
| | | | | | | | | | | | | MoSCoW priority: The home page is the entry point to the platform, crucial for engaging users right from their first visit. |
| SW-122 | Database Design and Setup | 23-Mar-24 | 25-Apr-24 | SW-123 | Database for Account system | an administrator | create a robust database schema for the account system | we can securely store and efficiently manage user information, roles, permissions, and sensitive data, supporting the dynamic needs of our platform as it grows. | 14 | Large | Must have | Size Estimation: the basic component of our system, so that it should take a long time to design and implement. MoSCoW priority: the users' account information must store in a reliable database. |
| | | | | SW-124 | Database for Manuscripts | an administrator | create a database schema that efficiently organizes, stores, and retrieves manuscripts, along with their submission details, review statuses, and associated metadata | authors can submit their work, reviewers can assess submissions, and editors can make informed decisions. | 20 | Large | Must have | Size Estimation: the basic component of our system, so that it should take a long time to design and implement. MoSCoW priority: the articles' relevant information must store |

| | | | | | | | | | | | | | |
|-------|--------------------|-----------|-----------|-------|---|------------|--|--|----|--------|-----------|---|-------------------------|
| | | | | | | | | | | | | | in a reliable database. |
| SW-8 | Account Management | 01-Apr-24 | 11-Apr-24 | SW-2 | Login page for different user types | an user | log in to the system as my specific user group | access different kinds of functions of the website tailored to my role | 6 | Medium | Must have | Size Estimation: a simple page for user to login will be just fine. MoSCoW priority: the author/reviewer/editor can only use the functions of the website once they have logged into the system. | |
| | | | | | | | | | | | | | |
| SW-49 | Submit System | 12-Apr-24 | 22-Apr-24 | SW-30 | Dashboard page for Author to Start New Submission | an auth or | submit the manuscripts to the journal in an efficient manner | I can publish my article via the system | 10 | Medium | Must have | Size Estimation: the main function of the system, should take a relatively long time to complete. MoSCoW priority: the | |

| | | | | | | | | | | | | |
|-------|------------------------|-----------|-----------|--------|-------------------------------|------------|--|--|---|--------|-----------|--|
| | | | | | | | | | | | | journal use this website to gather article from authors, this is the only portal for author to submit their manuscripts. |
| SW-45 | Review System | 20-Apr-24 | 03-May-24 | SW-14 | Review page for Reviewer | A Reviewer | be able to securely log in to the online submission and review platform, see all the relevant comments to articles, submit my own comments, and contact the editors conveniently | I can access and review manuscripts assigned to me, participate fully in the peer review process, provide comprehensive feedback, and communicate to the editors directly and efficiently. | 8 | Medium | Must have | Size estimation: should take a relatively long time to design the review page and implement the functions. MoSCoW priority: the basic functionality for reviewers to review an article and give the comment. |
| SW-50 | Decision-Making System | 27-Apr-24 | 04-May-24 | SW-135 | Decision make page for Editor | An Editor | decide whether to accept an article or not | I can guarantee the quality of the journal. | 5 | Medium | Must Have | Size Estimation: could reuse some functions from review page, it only adds decision make function. MoSCoW priority: the basic functionality for the editor to decide whether to accept an |

| | | | | | | | | | | | | article or not. |
|-------|------------------|-----------|-----------|-------|--------------------------------|------------|---|--|----|--------|-------------|--|
| SW-36 | Dashboard System | 01-May-24 | 18-May-24 | SW-26 | Dashboard - Reviewer and Score | A Reviewer | have a centralized dashboard to track manuscript statuses (submitted, under review, revisions required, and accepted) and to show my assigned tasks | I can efficiently manage the review process and stay organized with my responsibilities. | 12 | Large | Must have | Size Estimation: It is a sizable task due to its complexity and requires significant resources. MoSCoW priority: Since it is for efficient task management and communication among team members. |
| | | | | SW-28 | Dashboard - Reviewer - History | A Reviewer | have a dashboard to display all edited manuscripts | I can access and review them easily, facilitating collaboration and ensuring efficient processing. | 8 | Medium | Must have | Size Estimation: Developing these feature is a sizable task due to its complexity and requires significant resources. MoSCoW Priority: It is essential for facilitating collaboration among team members and ensuring efficient review processes. |
| | | | | SW-17 | Dashboard page for Author | An Author | have a user-friendly page that | I can edit and change my personal information. | 8 | Medium | Should have | Size Estimation: Creating a user-friendly page for |

| | | | | | | | | | | | | |
|-------|---------------------------|------------|---|---|-----------------------------------|-----------|--------------------------------|--|---|--------|--|---------------------------------------|
| | | | | | | | displays the information | | | | displaying and editing personal information involves moderate effort. | |
| | | | | | | | | | | | MoSCoW priority: As it enhances user experience by allowing authors to easily manage their personal information, though it's not critical for immediate functionality. | |
| SW-18 | Dashboard page for Editor | An Edit or | have a dedicated section to record the number of those decisions (accept, revise, reject) | my decisions are clearly communicated to the authors. | 8 | Medium | Must have | Size Estimation: It needs design the interface and implement to display data on the dashboard. | | | MoSCoW priority: It should show all the data about articles in the dashboard, which is also the requirement of client. | |
| SW-51 | Communication System | 01-May-24 | 18-May-24 | SW-118 | Automatic confirmation emails for | A auth or | receive the confirmation email | I can ensure I submit the article successfully. | 5 | Medium | Should have | Size estimation: it should design the |

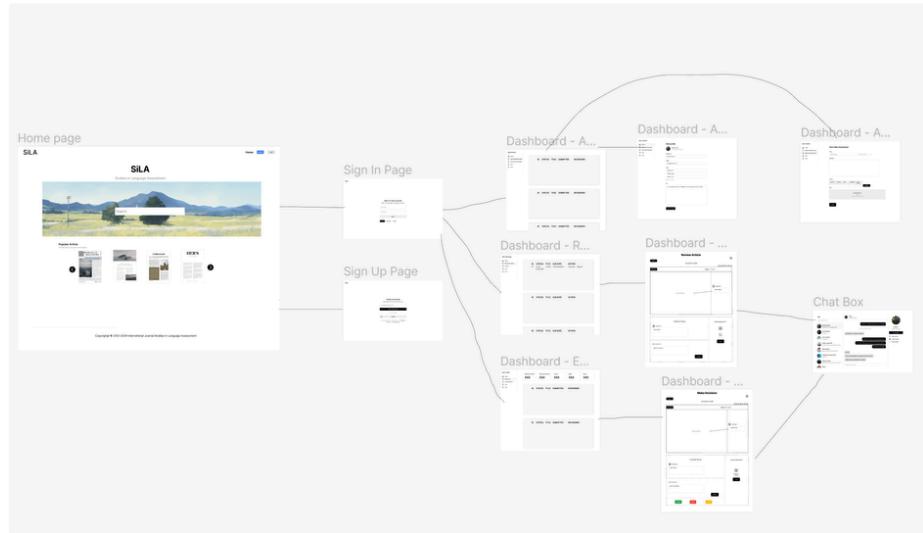
| | | | | | | | | | | | | |
|--------|----------------------|-----------|-----------|--------|--|--------------------|---|--|----|--------|-------------|---|
| | | | | | successful submission | | from the SiLA | | | | | email format and integrate with submission system. |
| | | | | SW-67 | Chat Functionality for Reviewer-Editor Communication | A review or editor | be able to engage in text-based communication within a dedicated pop-up chat window on the platform | I can discuss manuscripts, share feedback, and clarify queries directly and efficiently. | 10 | Medium | Should have | Size estimation: chatting each other should design the interface and the backend environment . MoSCoW Priority: important function which also be required by client. |
| SW-140 | Navigation Component | 04-May-24 | 18-May-24 | SW-141 | Role-Based Dynamic Navigation for logged-in users | A logged-in user | dynamically adjust based on my permissions and role (author, reviewer, editor) | I can easily access modules specific to my tasks, including Submission, Profile, Review, Decision-Making, and Communication, enhancing my efficiency and | 8 | Medium | Should have | Size Estimation: a simple toolbar that navigates the user through the website. MoSCoW priority: The navigation component is important but it is not vital to the system. |

| | | | | | | | | | | | | |
|--------|---------------|-----------|-----------|-------|-----------------------------------|------------------------|--|---|---|--------|-------------|---|
| | | | | | | | | experience on the platform. | | | | |
| SW-116 | Data Security | 04-May-24 | 19-May-24 | SW-76 | Data Security and Confidentiality | a system administrator | implements robust data protection measures for manuscript and review confidentiality | sensitive data is safeguarded from unauthorized access or disclosure, instilling user trust and upholding review process integrity. | 8 | Medium | Should have | Size Estimation: It involves moderate effort due to the complexity of encryption protocols, access controls, and audit trails. MoSCoW Priority: As it enhances data security and instills user trust, although it's not critical for immediate functionality. |

Prototypes

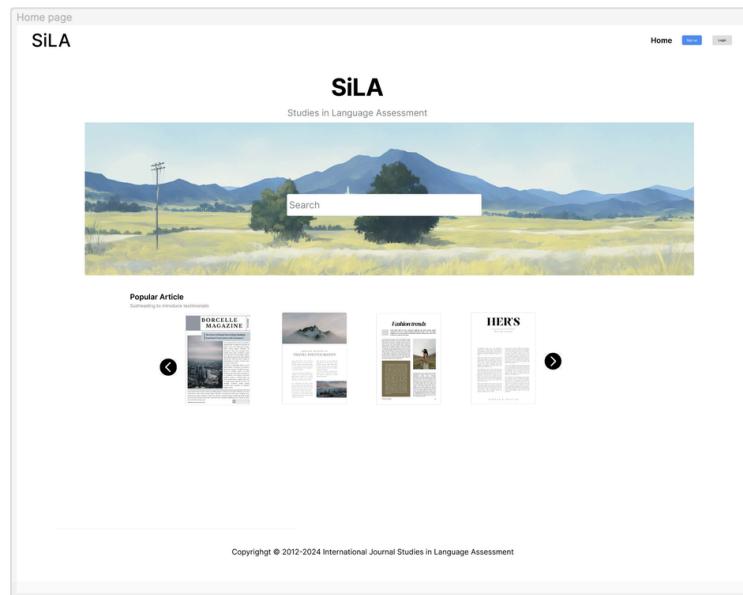
This Section displays the prototypes of SiLA:

Flow of the Prototypes:



Page Detail

Home page



Sign In page

Sign In Page

SILA

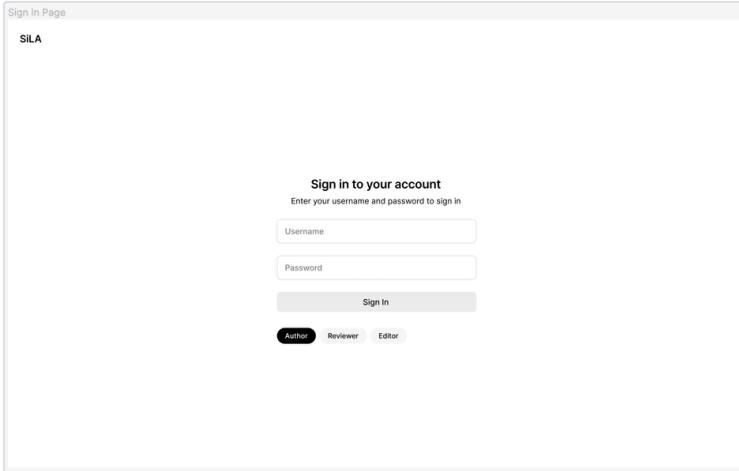
Sign in to your account
Enter your username and password to sign in

Username

Password

Sign In

Author Reviewer Editor



Sign Up page

Sign Up Page

SILA

Create an account
Enter your email to sign up for this app

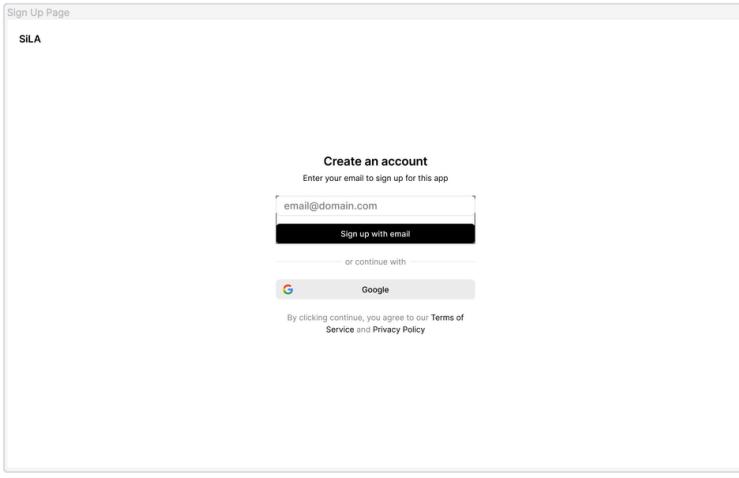
email@domain.com

Sign up with email

or continue with

Google

By clicking continue, you agree to our Terms of Service and Privacy Policy



Dashboard for Author home

Dashboard - Author-Home

SILA-Author

- Home
- Submitted Manuscr...
- Start New Submissi...
- xxxx
- xxxx

Edit profile

Helena Hills Change profile photo

Username

@username123

Email

email@domain.com

URLs

website.net

website.place

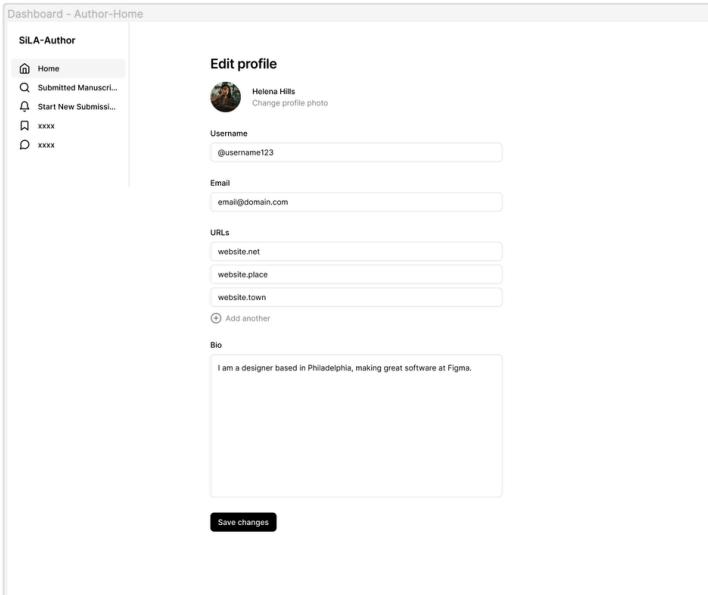
website.town

Add another

Bio

I am a designer based in Philadelphia, making great software at Figma.

Save changes



Dashboard for Author - start new submission

Dashboard - Author - start new submission

SILA-Author

- Home
- Submitted Manuscript
- Start New Submission
- xxxx
- xxxx

Start New Submission

Title
 Title name

Abstract*

Author

| | | | | |
|------------|-----------|-------|--------------|-----------------------|
| First Name | Last Name | Email | Organization | Primary contact |
| | | | | <input type="radio"/> |

Add

Files

Drop files here
-or-
Upload from computer

Submit

Dashboard for Author - Submitted manuscript

Dashboard - Author - Submitted manuscript

SILA-Author

- Home
- Submitted Manuscript
- Start New Submission
- xxxx
- xxxx

| ID | STATUS | TITLE | SUBMITTED | DECISIONED |
|----|--------|-------|-----------|------------|
|----|--------|-------|-----------|------------|

| ID | STATUS | TITLE | SUBMITTED | DECISIONED |
|----|--------|-------|-----------|------------|
|----|--------|-------|-----------|------------|

| ID | STATUS | TITLE | SUBMITTED | DECISIONED |
|----|--------|-------|-----------|------------|
|----|--------|-------|-----------|------------|

Dashboard for Reviewer - Review and Score

Dashboard - Reviewer - Review and Score

SilA-Reviewer

- Home
- Review and Score
- History
- xxxx
- xxxx

| ID | STATUS | TITLE | DU DATE | ACTION |
|-----|----------------|-------|------------|--------|
| 111 | To be reviewed | XXXX | 03/19/2025 | Review |

| ID | STATUS | TITLE | DU DATE | ACTION |
|----|--------|-------|---------|--------|
|----|--------|-------|---------|--------|

| ID | STATUS | TITLE | DU DATE | ACTION |
|----|--------|-------|---------|--------|
|----|--------|-------|---------|--------|

Dashboard for Reviewer - Review and Score - Review

Dashboard - Reviewer - Review and Score - Review

Review Article

Article ID: XXXX

Double Blind Mode

Download Page <1> of x

Body Article...

Reviewer 1
GOOD GOOD

Comments History

Reviewer 1
GOOD GOOD

Add a comment...
Sure it is very good

Need Assistance?

Editor 1 Online
Chat

Submit

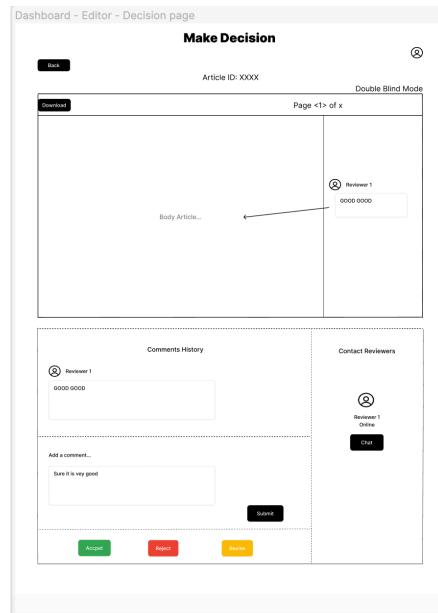
Dashboard for Reviewer - History

The screenshot shows a dashboard titled "Dashboard - Reviewer - History". On the left, there is a sidebar menu under "SILA-Reviewer" with options: Home, Review and Score, Submitted, xxxx, and xxxx. The main area contains three separate sections, each with a header "ID STATUS TITLE ACTION". These sections are currently empty.

Dashboard for Editor

The screenshot shows a dashboard titled "Dashboard - Editor". On the left, there is a sidebar menu under "SILA-Editor" with options: Home, Article List, Invite Reviewer, xxxx, and xxxx. Above the main content area, there are five buttons labeled: Waiting for Review (XXX), Waiting for Decision (XXX), Accept (XXX), Reject (XXX), and Revise (XXX). Below these buttons are two tables. The first table has headers "ID STATUS TITLE SUBMITTED DECISIONED" and is currently empty. The second table also has headers "ID STATUS TITLE SUBMITTED DECISIONED" and is currently empty.

Dashboard for Editor - Decision Page



Chat Box

Client Requirement

This section lists the client requirements that we collect at the client meeting. The client requirement is one of the most important guidelines for the project development.

Ver.1

The version 1 requirement provided a brief development guideline for the SiLA project. This section lists client requirements including account roles, avoiding self-review, special issue submission, Admin role, double-blind submission, decision on double-blind submission, reviewer template, and reviewer requirement.

Ver.2

The version 2 requirement provided a more detailed development requirement for each page and role which includes the Manuscript submission page, Editors' dashboard, Authors' dashboard, and Reviewers' dashboard.

Client Requirement ver.1

The version 1 requirement provided a brief development guideline for the SiLA project. This section lists client requirements including account roles, avoiding self-review, special issue submission, Admin role, double-blind submission, decision on double-blind submission, reviewer template, and reviewer requirement.

Key Points Discussed:

1. **Account Roles:** It was discussed that an account can have two roles, author or reviewer, with a role selection option available either at login or within the account settings.
2. **Avoiding Self-Review:** To prevent authors from reviewing their own papers, a domain conflicts feature will be implemented, which will prevent authors from reviewing papers within their conflicted domains. Further discussions with the client are needed to finalize this feature.
3. **Special Issue Submission:** The option for authors to select from different journal options for their paper submissions was discussed. It was noted that paper categories can be modified and new categories can be added.
4. **Admin Role:** The necessity of a data management backend for the admin role was discussed, with the possibility of not requiring it or discussing further based on client's server provisions or finding free alternatives.
5. **Double-Blind Submission:** An option for authors to submit papers without their personal information for double-blind review processes was discussed. It was suggested that guidelines for authors on how to submit for a double-blind review should be clearly stated in the submission guide, possibly with client-provided text.
6. **Decision on Double-Blind Process:** There was a debate on whether the decision for a double-blind process should be made by the editor or the author.
7. **Reviewer Template:** The implementation of a template for reviewers to use when giving reviews was discussed.
8. **Reviewer Recruitment:** It's usually the editor's responsibility to send emails to invite individuals to register as reviewers.

Decisions Made:

1. **Role Selection:** Agreed upon allowing an account to have dual roles with a selection mechanism.
2. **Domain Conflicts and Self-Review:** Decided to implement a domain conflicts feature to avoid self-review scenarios, pending further discussion with the client.
3. **Special Issue and Category Flexibility:** Confirmed the addition of options for special issue submissions and the flexibility to modify and add paper categories.
4. **Admin Role and Server Provision:** Agreed to further discuss the necessity of a data management back-end for the admin role and server provisions with the client.
5. **Double-Blind Submission Option:** Decided to include an option for double-blind submissions, with guidelines to be clearly provided for authors.
6. **Double-Blind Process Decision:** Pending further discussion on whether the editor or author should decide on the double-blind process.
7. **Reviewer Template:** Agreed on creating a template for reviewers.
8. **Reviewer Recruitment Process:** Confirmed that editors are responsible for inviting reviewers.

Action Items Summary:

1. **Role Selection Implementation:** Explore options for implementing the role selection feature.
2. **Discuss Domain Conflicts Feature with Client:** Scheduled meeting with the client to discuss the implementation of the domain conflicts feature and self-review prevention.
3. **Update Submission Options:** Work on adding options for special issue submissions and updating category flexibility.

4. **Admin Role and Server Discussion:** Arrange a discussion with the client regarding the admin role's data management back-end and server provisions.
5. **Prepare Double-Blind Submission Guidelines:** Draft guidelines for authors on submitting papers for double-blind review, awaiting client's input.
6. **Decide on Double-Blind Process Authority:** Organize a team discussion to finalize who decides on the double-blind process.
7. **Develop Reviewer Template:** Assign a team member to create a template for reviewers.
8. **Reviewer Recruitment Protocol:** Formalize the process for editors to invite reviewers.

Client Requirement ver.2

The version 2 requirement provided a more detailed development requirement for each page and role which includes the Manuscript submission page, Editors' dashboard, Authors' dashboard, and Reviewers' dashboard.

General comments:

1. Reviewers will be signed up by editors/editorial assistant
2. User details during sign-up (all mandatory): first name, last name, email address, institution/affiliation (users should be able to change these themselves at any given time)

Manuscript submission page

- Include progress bar: Author details (see Q1 below) – Submission details (see Q2-5) – Conflict of interest (Q6) – Attach files (Q7)
- Note to authors at top of the submission page:

You will need the following documents to complete your submission:

- Full names and affiliations of all authors
- Anonymized manuscript
- Appendices (if applicable)
- Supplementary materials (if applicable)
- Fields marked * below should be mandatory

1. Author Details
 - a. Author 1: first name*, last name*, affiliation*, academic title*, ORCID, q: is this the corresponding author (checkbox)?
 - b. Author 2: idem
 - c. Etc. (up to 8?)
2. Type of submission (drop-down menu)*
3. Title of paper*
4. Abstract* (include word count if possible)
5. Acknowledgments and/or funding information (text box)
6. Conflict of interest declaration* (yes/no tick box, we can provide you with a generic declaration)
 - a. If yes, please specify
7. Attach files, dropdown menu with the following options:
 - a. Anonymized manuscript (incl. tables, figures, and appendices)
 - b. Other, add a text box for authors to specify what the document is

Editors' dashboard

1. Receive notification of new submission
2. Review submission: desk reject or external review
 - a. If desk rejects: editors should be able to include comments, authors will receive outcome + comments from editors once released
 - b. If external review: editors will approach potential reviewers within the platform
3. Send anonymized paper to external reviewers
4. Receive a notification when the review is in
5. Receive notification when both reviews are in ('both reviews have now been submitted')
6. Decide: accept (ACC), accept with minor revisions (AR), revise&resubmit (RR), reject (RJ)

7. Release anonymous reviews, decisions, and additional comments to the author(s)
 - a. If revisions: specify the deadline
8. Receive a notification when a revised manuscript has been submitted
9. Decide: accept (ACC), accept with minor revisions (AR), revise&resubmit (RR), second-round reviews (RV2)
 - a. ACC/AR/RR: send notification + comments to authors, specify deadline
 - b. RV2: send revised manuscript back to reviewers, specify the deadline
10. Receive notification when resubmission/external reviews are in
11. Repeat steps 7-9

Author's dashboard

1. Submission is made (as per above)
2. Receive notification: desk-reject or external review
 - a. If desk-reject: should include comments from editors
3. Receive notification when editors have made a decision and have sent through reviews
4. Accept new deadline/request extension/withdraw submission
5. Submit revised manuscript
6. Repeat steps 3-5

Reviewer's dashboard

1. Receive notification of review request
 - a. Title of manuscript
 - b. Abstract
 - c. Proposed deadline
2. Decide: accept, accept but propose a new deadline, decline. They should be able to leave comments as well.
3. If accepted: Receive anonymized manuscript
4. On the review page there should be:
 - a. Up the top of the page, the deadline and reviewing guidelines should be visible at all time
 - b. Text box with comments for editors
 - c. Text box with comments for authors
 - d. Tick box (yes/no): Would you be willing to review a revision of this manuscript?
 - e. Possibility to add comments to the manuscript and/or download a Word version, work on it, and upload it again
5. Receive a reminder 1 week prior to the deadline
6. If needed, receive a reminder 2 days after the deadline (to allow for different time zones)
7. Reviewers should be able to save progress and come back later

Note: notifications and reminders should be received at email address

Development

Development environment

The tools and development environment will be listed and introduced in this section which includes Confluence, GitHub and Technical Details.

Confluence

The project uses confluence to streamline our document. Confluence is a collaborative workspace where teams can efficiently create, share, and update documents and information in a centralized location.

GitHub

GitHub is a web-based platform for version control using Git, primarily used for computer code. It provides a collaborative environment for developers to host and review code, manage projects, and build software alongside millions of other developers.

The GitHub address of our project is <https://github.com/COMP90082-2024-SM1/SI-Wombat> RESTRICTED CONTENT

Workflow

- master: The `master` branch is the primary branch where the source code reflects the production-ready state of this project. It is the definitive branch where code is fully tested, stable, and ready to be released to end-users.
- dev: The `dev` branch serves as the active development branch where new features and fixes are integrated and tested. The branch contains the latest ongoing work and once stable, changes are merged into the `master` branch for release.

Branch Naming Conventions

- Task Branches: Prefix with `task/` followed by a brief description of the feature, e.g., "task/login".
- Bug Fixes Branches: Use `bugfix/` along with a short description, like `bugfix/fix-login-error`.

Technical Details

Framework and Programming Language:

- Front-End Development Environment:
 - React: is a popular JavaScript library for building user interfaces. It will be used to create dynamic and responsive UI components for the submission and review platform.
 - TypeScript: is a statically typed superset of JavaScript, providing enhanced tooling and type safety. It will help catch errors early in the development process and improve code maintainability.
- Back-End Development Environment:
 - C#: is a robust and versatile programming language, well-suited for building scalable and performant backend systems. It will be used to implement the server-side logic and data management for the submission and review platform.
 - Dot Net: is a cross-platform framework for building various types of applications, including web applications. It provides libraries and tools for rapid development and deployment of backend services.
- IDE:
 - Visual Studio Code: is a lightweight and versatile code editor with excellent support for React and TypeScript development. It will facilitate efficient coding and debugging workflows.

Additional Tools:

- Version Control: Git
- Hosting Service: AWS
- Database: MySQL

Environment Setup:

1. Set up React project using create-react-app.
2. Install necessary TypeScript typings and configurations.
3. Install .NET SDK and Visual Studio Code extensions for C# development.
4. Initialize a new .NET project for backend development.

Collaboration:

- Communication: Utilize Slack for real-time communication among team members.
- Version Control: Use Git for version control, with GitHub as the remote repository.
- Code Review: Implement a code review process using GitHub pull requests.

GitHub Process

We will discuss the method of how we use GitHub on this page.

1. Main Branching Structure

In the beginning, we created a `dev` branch out of `master`.

1.1 Main branch

The `master` branch is used as the main branch where the source code of HEAD always reflects a production-ready state. It is the definitive branch where final releases are cut from, ensuring stability and reliability in our project production environment.

1.2 Developing branch

The `dev` branch, aka the development branch, serves as an active development environment where developers merge new features and changes. This branch acts as a preparation branch before changes are moved to the master branch, allowing for testing and adjustments without affecting the stable version.

2. Branching Strategy

We break the project into several small features. For each new feature, we create a new branch for it such as ``auth-manuscripts-userinfo-relevant-backend-endpoint``. Codes relevant to this new feature will be developed in this new branch. In order to distinguish between frontend and backend environment. The branch corresponding to the front-end will be denoted by “frontend”, and “backend” for backend.

Once a new feature is tested and done successfully, a pull request will then be created for code reviewing. The reviewers will be able to leave comments for that pull request on the GitHub website, a detailed explanation of `pull request` is introduced in the following chapter. If all reviewers approve, the corresponding branch will be deleted from GitHub, both locally and remotely.

3. Structure of Pull Request:

We have a doc structure for Pull Request. The following picture illustrates an example of Pull Request.



GG2T commented 2 weeks ago • edited

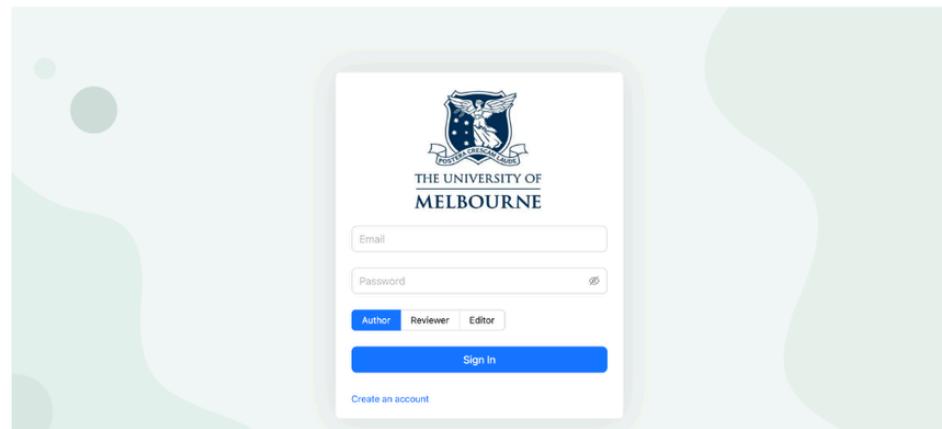
...

Close

Close issue

- [Login Page for different user types] [https://wombat123.atlassian.net/browse/SW-2?
atOrigin=eyJpIjoiZGEzODMwM2NmZDRkNDI0ZGI5NTQ1NzFjNTIyY2M4NDIiLCJwIjoiJ9](https://wombat123.atlassian.net/browse/SW-2?atOrigin=eyJpIjoiZGEzODMwM2NmZDRkNDI0ZGI5NTQ1NzFjNTIyY2M4NDIiLCJwIjoiJ9)
- [Register page for author] [https://wombat123.atlassian.net/browse/SW-5?
atOrigin=eyJpIjoiNGUyYWNkOTIxMDc5NDViYWIwNzhIMzhYTbhOTMyYTAiLCJwIjoiJ9](https://wombat123.atlassian.net/browse/SW-5?atOrigin=eyJpIjoiNGUyYWNkOTIxMDc5NDViYWIwNzhIMzhYTbhOTMyYTAiLCJwIjoiJ9)
- [Login and Register api endpoint]

Screenshot



Source Code Structure

For this project, we developed the front-end and back-end separately, this page introduces the main functionalities of each document in the system.

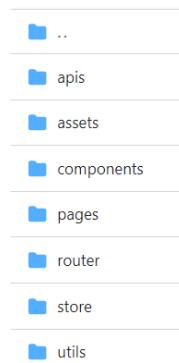
1. The root directory of the project

The root directory contains two documents, which are `docs` and `src`. The `docs` file consists of different kinds of documentation for this project, including confluence files and images.

2. Front-end files system

Codes associated with front-end are included in `src/front_end/sila-frontend`, where the `public` file stores the static resource and `src` contains the source code.

The following image reveals the detailed directory structure of `src/front_end/sila-frontend/src`.

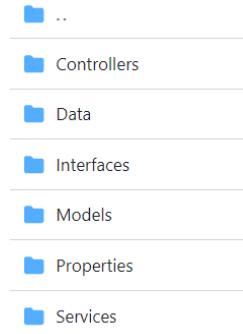


| Folder | Functionality |
|-------------------------|--|
| <code>apis</code> | This directory contains all the API-related code. It is where the front-end interacts with back-end services, handles API requests and manages responses. |
| <code>assets</code> | Static files such as images, fonts and any other files that are part of the visual resources of the project can be found here. |
| <code>components</code> | This holds all the React components that we use to build the user interface. Each component is a piece of the UI that can be reused throughout the application. |
| <code>pages</code> | It includes the files that represent the different pages or routes in the application. Typically, each file corresponds to a different view that users can navigate to. |
| <code>router</code> | In this directory, we configure the routing for the application, defining how to navigate between the pages/components based on the URL in the browser and hyperlinks. |
| <code>store</code> | This is used for state management such as Redux, it will contain actions, reducers, and the store configuration. |
| <code>utils</code> | Contains utility functions and helper code that can be used across different parts of the project. This is where we will place generic functions that are not tied to any specific |

component or page.

3. Back-end files system

The root directory of back-end is `/src/back_end/SiLA-Backend/SiLA-Backend`.



| Folder | Functionality |
|-------------|--|
| Controllers | This directory contains controller classes that handle client requests, process them (possibly using services), and return responses. They act as an intermediary between the Models and Views in an MVC architecture. |
| Data | Code that interacts with your database, such as database context configurations, migrations, and data seeding files. |
| Interfaces | This folder is for interface definitions, which provide blueprints for the classes. They help to define contracts within the code and ensure that certain classes provide specific public methods. |
| Models | Contains classes that represent the data structures used in the application. These models are typically mirrored by database tables. |
| Properties | This directory usually includes configuration files, such as <code>launchSettings.json</code> , which configures project behaviours and environment variables. |
| Services | In this folder, it will place the business logic of the application. Services encapsulate business logic, data access, and computations, and are used by the controllers. |

APIs

The below table is the API we have for the SiLA project.

| Endpoint | Method | Description | Request Content-Type | Response Codes | Parameters | Body |
|--------------------------------|----------|---|---|----------------|---------------------------|---------------------------|
| /Auth/register | POST | Register a new user. | application/json, text/json, application/*+json | 200: Success | - | RegisterModel |
| /Auth/login | POST | Log in an existing user. | application/json, text/json, application/*+json | 200: Success | - | LoginModel |
| /Auth/logout | POST | Log out a user by invalidating their session token. | - | 200: Success | id (query), token (query) | - |
| /Manuscripts/uploadfile | POST | Upload a manuscript file. | multipart/form-data | 200: Success | - | file: binary |
| /Manuscripts/submit | POST | Submit a manuscript with metadata. | application/json, text/json, application/*+json | 200: Success | - | ManuscriptSubmissionModel |
| /User/{userId} | GET, PUT | Retrieve or update user details. | application/json, text/json, application/*+json for PUT | 200: Success | userId (path) | UserDTO for PUT |
| /User/AuthorDashboard/{userId} | GET | Access a specific user's author dashboard. | - | 200: Success | userId (path) | - |

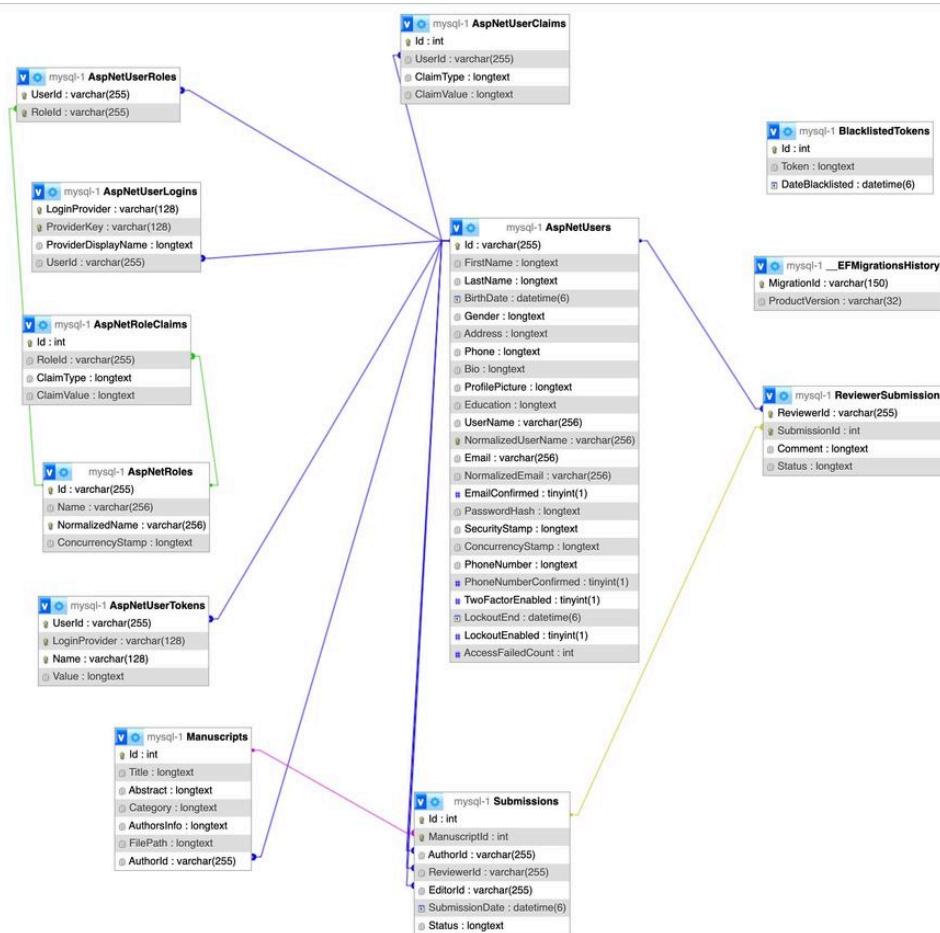
Additional Notes:

- Parameters:** 'userId' is a path parameter required for the GET and PUT requests under '/User/{userId}' and '/User/AuthorDashboard/{userId}'.
- Body:** Describes expected schema objects which are linked to detailed schemas defined under components. 'RegisterModel', 'LoginModel', 'ManuscriptSubmissionModel', and 'UserDTO' are the main models used.
- Content-Type:** Indicates the type of data that should be in the request body. Multiple types are supported for flexibility.

This table is designed to provide a clear and concise overview, making it easier to understand the API's capabilities and requirements without delving into the full complexity of the original Swagger-generated documentation. If needed, more specific details like security requirements, exact schema properties, and additional response messages could be further expanded upon in supplementary documentation or detailed API guides.

Database Development

ER(Entity–relationship) Diagram



Explanation:

This Entity Relationship Diagram (ERD) depicts a part of a manuscript review system's database design, explaining the entities involved and their relationships as follows:

- **AspNetUsers**: This table holds the users in the system, containing essential information such as the unique identifier, username, email, password hash, etc.
- **AspNetRoles**: This is the roles table, defining various user roles such as editor, author, reviewer, etc.
- **AspNetUserRoles**: It's a many-to-many relationship table between users and roles, indicating which users belong to which roles.
- **AspNetUserClaims**: Stores additional claim information for users, which can be used to hold extra attributes of a user.
- **AspNetUserLogins**: Maintains user login information, especially concerning third-party login providers.
- **AspNetUserTokens**: Used to store user token information, like security or authentication tokens.
- **AspNetRoleClaims**: Used to store specific permission claims for roles, aiding in defining the capabilities of a role.
- **BlacklistedTokens**: This appears to be a table used to store tokens that are invalid or have been revoked, important for managing security and user sessions.
- **Submissions**: Represents the table for submission records, likely including manuscripts or reports submitted to the review system.
- **Manuscripts**: Represents the entity for manuscripts or documents, storing title, abstract, category, authorship information, etc.

- **ReviewerSubmissions:** Represents the relationship between reviewers and the manuscripts they review, storing reviewer feedback and status information.
- **EFMigrationsHistory:** Records the database migration history for Entity Framework, important for maintaining the changes in the database structure.

From this ERD, it can be seen that the database design of the review system pays significant attention to user authentication and role authorization, while also focusing on the submission and review processes of manuscripts. Relationships between entities are manifested through foreign key connection tables, ensuring data consistency and integrity.

GPT Code Review

In Sprint 2, our team conducted a detailed review of several key documents and components of the project. Here's a breakdown of what was reviewed and the feedback received:

Time Reviewed

- About now, we tried about 30 times, but it failed a lot.

Selection Criteria

- We decide to review the code for the key features from the front and back end. The quality of key features could greatly affect the user experience. The GPT could provide some valuable commons that help us improve the code structure which greatly improves the project quality.

Our Decision

- Once the code is reviewed, the group will discuss the GPT suggestion together, and decide rather accept or reject the common. The following section "GPT Code Review [File Name]" will detailly show the example of GPT Review with our decision.

Documents and Components Reviewed:

- Author Dashboard - The interface that allows authors to view and manage their submissions.
- Login - The authentication mechanism for users to access their specific roles and functions.
- Submission - The process and interface for authors to submit their manuscripts.
- Reviewer Editor FormModal - The forms used by reviewers and editors to provide feedback or make decisions on manuscripts.
- ManuscriptsController - The backend controller manages the requests related to manuscripts.
- Submission Service - The service handling the business logic for manuscript submissions.

Feedback Received:

- Author Dashboard - We will improve code comments and error handling as suggested, and consider pagination based on data growth.
- Login - Refining error handling and enhancing comments. We'll explore modular error management to simplify the logic.
- Submission - Acknowledged the need for better comments and simplification of PDFUploader components. Robust error handling will be prioritized.
- Reviewer Editor FormModal - Useful suggestions on improving documentation and component abstraction. We'll implement enhanced state management and validation.
- ManuscriptsController - Add detailed comments and break down complex lines for clarity. Enhanced error handling for external operations is planned.
- Submission Service - Restructuring database operations and improving API documentation for clarity and security.

GPT Instruction

Please evaluate the {code} below.

Use the following checklist to guide your analysis:

1. Documentation Defects:
 - a. Naming: Assess the quality of software element names.
 - b. Comment: Analyze the quality and accuracy of code comments.
2. Visual Representation Defects:
 - a. Bracket Usage: Identify any issues with incorrect or missing brackets.

- b. Indentation: Check for incorrect indentation that affects readability.
 - c. Long Line: Point out any long code statements that hinder readability.
3. Structure Defects:
- a. Dead Code: Find any code statements that serve no meaningful purpose.
 - b. Duplication: Identify duplicate code statements that can be refactored.
4. New Functionality:
- a. Use Standard Method: Determine if a standardized approach should be used for single-purpose code statements.
5. Resource Defects:
- a. Variable Initialization: Identify variables that are uninitialized or incorrectly initialized.
 - b. Memory Management: Evaluate the program's memory usage and management.
6. Check Defects:
- a. Check User Input: Analyze the validity of user input and its handling.
7. Interface Defects:
- a. Parameter: Detect incorrect or missing parameters when calling functions or libraries.
8. Logic Defects:
- a. Compute: Identify incorrect logic during system execution.
 - b. Performance: Evaluate the efficiency of the algorithm used.
- Provide your feedback in a numbered list for each category. At the end of your answer, summarize the recommended changes to improve the quality of the code provided.

File List

- src/front_end/sila-frontend/src/pages/Author/Home/index.js
- src/front_end/sila-frontend/src/pages/Login/index.js
- src/front_end/sila-frontend/src/pages/Author/StartNewSubmission/index.js
- src/front_end/sila-frontend/src/pages/Editor/FormModal/index.js
- src/back_end/SiLA-Backend/SiLA-Backend/Controllers/ManuscriptsController.cs
- src/back_end/SiLA-Backend/SiLA-Backend/Services/SubmissionService.cs

GPT Code Review Author Dashboard

File: /SI-Wombat/src/front_end/sila-frontend/src/pages/Author/Home/index.js

GPT feedback

 ChatGPT

Evaluation of Provided Code:

1. Documentation Defects:

• a. Naming:

- The naming of the function `get_articles_by_author` and the variable `articles` are clear and describe their purposes well. However, `data` in the component could be more specifically named to reflect its role or contents.

• b. Comments:

- The comments are minimal and could be improved for clarity, especially regarding the logic of the API call and data handling.

2. Visual Representation Defects:

• a. Bracket Usage:

- No issues with bracket usage were noted in the provided code snippet.

• b. Indentation:

- Indentation appears consistent and adheres to common practices, facilitating readability.

array, are quite long and could benefit from line breaks for enhanced readability.

3. Structure Defects:

• a. Dead Code:

- There doesn't seem to be any dead code; all parts of the code serve a purpose.

• b. Duplication:

- The code shows no obvious duplication, and functionality is encapsulated in reusable functions and components.

4. New Functionality:

• a. Use Standard Method:

- The code uses React and Ant Design standards effectively; no changes are recommended here.

5. Resource Defects:

• a. Variable Initialization:

- All variables are initialized properly. The use of `useState` and `useEffect` hooks are appropriately used for managing state and side effects.

• b. Memory Management:

- The component does not manually handle memory, and given the context of a React application, this is typically managed by the framework.

• a. Check User Input:

- There is no direct user input handling in the snippet provided; it assumes the API and navigational functions receive correct input.

7. Interface Defects:

• a. Parameter:

- The parameter passing in `get_articles_by_author` and API calls seem appropriate, although the snippet assumes correct API functionality.

8. Logic Defects:

• a. Compute:

- The logical structures seem correct, though the snippet lacks error handling for API calls which could be improved.

• b. Performance:

- The code uses efficient React patterns such as `useState` and `useEffect` for state management and side effects. However, the lack of pagination or lazy loading in data fetching might impact performance with large datasets.

Summary of Recommended Changes:

- ↓ Improve comments to describe more clearly what each major block of code is doing, particularly around API calls and data processing.
- Consider breaking longer lines within the `columns` array for better readability.
- Implement error handling for the API call within `useEffect` to manage cases where the fetch fails or returns unexpected results.
- Add checks for user input where relevant, especially if this code interfaces with broader parts of the application where user input is possible.

- Consider implementing pagination or lazy loading for the article data if performance becomes a concern with large datasets.



Evaluation of Provided Code:

1. Documentation Defects:

o a. Naming:

- The naming of the function `get_articles_by_author` and the variable `articles` are clear and describe their purposes well. However, `data` in the component could be more specifically named to reflect its role or contents.

✓ Accept, we modified the naming conventions as per the GPT suggestions.

1. b. Comments:

- The comments are minimal and could be improved for clarity, especially regarding the logic of the API call and data handling.

2. Visual Representation Defects:

o a. Bracket Usage:

- No issues with bracket usage were noted in the provided code snippet.

o b. Indentation:

- Indentation appears consistent and adheres to common practices, facilitating readability.

o c. Long Line:

- The code is generally well formatted, but some lines, particularly within the `columns` array, are quite long and could benefit from line breaks for enhanced readability.

✓ Accept, we plan to break long lines into several short lines.

1. Structure Defects:

o a. Dead Code:

- There doesn't seem to be any dead code; all parts of the code serve a purpose.

o b. Duplication:

- The code shows no obvious duplication, and functionality is encapsulated in reusable functions and components.

2. New Functionality:

o a. Use Standard Method:

- The code uses React and Ant Design standards effectively; no changes are recommended here.

3. Resource Defects:

o a. Variable Initialization:

- All variables are initialized properly. The use of `useState` and `useEffect` hooks are appropriately used for managing state and side effects.

o b. Memory Management:

- The component does not manually handle memory, and given the context of a React application, this is typically managed by the framework.

4. Check Defects:

o a. Check User Input:

- There is no direct user input handling in the snippet provided; it assumes the API and navigational functions receive correct input.

✗ Reject. We handle user's input at back-end portal. It doesn't be displayed at here.

1. Interface Defects:

o a. Parameter:

- The parameter passing in `get_articles_by_author` and API calls seem appropriate, although the snippet assumes correct API functionality.

2. Logic Defects:

o a. Compute:

- The logical structures seem correct, though the snippet lacks error handling for API calls which could be improved.

✓ Accept. We plan to write relevant code to handle error for API calls.

1. b. Performance:

- The code uses efficient React patterns such as `useState` and `useEffect` for state management and side effects. However, the lack of pagination or lazy loading in data fetching might impact performance with large datasets.

✗ Reject. It is not necessary since we have a lot functions need to implement.

Summary of Recommended Changes:

- Improve comments to describe more clearly what each major block of code is doing, particularly around API calls and data processing.
- Consider breaking longer lines within the `columns` array for better readability.
- Implement error handling for the API call within `useEffect` to manage cases where the fetch fails or returns unexpected results.
- Add checks for user input where relevant, especially if this code interfaces with broader parts of the application where user input is possible.
- Consider implementing pagination or lazy loading for the article data if performance becomes a concern with large datasets.

GPT Code Review - Submission

File: src/front_end/sila-frontend/src/pages/Author/StartNewSubmission/index.js

GPT Feedback



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Evaluation of Provided Code:

1. Documentation Defects:

a. Naming:

- The names of variables and functions (``setAuthorsInfo``, ``uploadedFilePaths``, ``submit``) are mostly clear and convey their purposes well. However, the name `normFile` could be more descriptive.

b. Comment:

- The code snippet has minimal comments, especially lacking in areas that perform complex operations like file handling and state management. More comments would improve maintainability and understanding.

2. Visual Representation Defects:

a. Bracket Usage:

- Brackets are used correctly and consistently in the React component and functions.

b. Indentation:

- The indentation is consistent throughout, which helps maintain readability.

c. Long Line:

- Some lines, especially within the `Form.Item` definitions, are quite long. Breaking these down would enhance readability.

3. Structure Defects:

a. Dead Code:

- No dead code is evident in this snippet.

b. Duplication:

- The usage of multiple `PDFUploader` components with similar functionality could be refactored into a single component that is rendered multiple times with different props.

4. New Functionality:

a. Use Standard Method:

- The usage of Ant Design components and React patterns is standard and appropriate. The structured approach to form handling and state management adheres to React best practices.

5. Resource Defects:

a. Variable Initialization:

- All variables are initialized appropriately. The use of React's `useState` for state management ensures variables are not left uninitialized.

b. Memory Management:

- React handles memory management well, and there are no obvious leaks in this snippet. The use of local state and controlled components is correctly implemented.

6. Check Defects:

a. Check User Input:

- The form validation through Ant Design's rules is a robust method for checking user input. This ensures that inputs like title, category, and abstract are not only present but adhere to specific requirements.

7. Interface Defects:

a. Parameter:

- Parameters to functions like `onFileListChange` and `onFileUploaded` are correctly used. The code could benefit from documentation specifying the expected structure of these parameters.

8. Logic Defects:

a. Compute:

- The logic implemented for file handling, data aggregation, and submission appears correct, but it could be enhanced by handling potential asynchronous errors more robustly.

- **b. Performance:**

- The performance seems adequate for the given functionality. However, improving the efficiency of state updates, especially with large data sets or files, could be beneficial.

Summary of Recommended Changes:

- Enhance commenting throughout the code, especially in complex sections like file upload handling and JSON data preparation for submission.
- Break down longer lines within `Form.Item` and other lengthy expressions to improve readability.
- Consider refactoring the usage of multiple `PDFUploader` components into a single, more generic component that can be reused with different properties.
- Ensure robust error handling in asynchronous operations to manage exceptions more effectively.
- Document function parameters and expected data structures to enhance clarity and maintainability, particularly for functions handling external interactions or complex data.



Evaluation of Provided Code:

1. Documentation Defects:

- **a. Naming:**

- The names of variables and functions (`setAuthorsInfo`, `uploadedFilePaths`, `submit`) are mostly clear and convey their purposes well. However, the name `normFile` could be more descriptive.

✓ Accept, we modified the naming conventions as per the GPT suggestions.

- **b. Comment:**

- The code snippet has minimal comments, especially lacking in areas that perform complex operations like file handling and state management. More comments would improve maintainability and understanding.

✓ Accept.

2. Visual Representation Defects:

- **a. Bracket Usage:**

- Brackets are used correctly and consistently in the React component and functions.

- **b. Indentation:**

- The indentation is consistent throughout, which helps maintain readability.

- **c. Long Line:**

- Some lines, especially within the `Form.Item` definitions, are quite long. Breaking these down would enhance readability.

✓ Accept, we plan to break long lines into several short lines.

3. Structure Defects:

- **a. Dead Code:**

- No dead code is evident in this snippet.

- **b. Duplication:**

- The usage of multiple `PDFUploader` components with similar functionality could be refactored into a single component that is rendered multiple times with different props.

 Reject. We may improve it when all necessary functions implement.

4. New Functionality:

- a. Use Standard Method:

- The usage of Ant Design components and React patterns is standard and appropriate. The structured approach to form handling and state management adheres to React best practices.

5. Resource Defects:

- a. Variable Initialization:

- All variables are initialized appropriately. The use of React's `useState` for state management ensures variables are not left uninitialized.

- b. Memory Management:

- React handles memory management well, and there are no obvious leaks in this snippet. The use of local state and controlled components is correctly implemented.

6. Check Defects:

- a. Check User Input:

- The form validation through Ant Design's rules is a robust method for checking user input. This ensures that inputs like title, category, and abstract are not only present but adhere to specific requirements.

7. Interface Defects:

- a. Parameter:

- Parameters to functions like `onFileListChange` and `onFileUploaded` are correctly used. The code could benefit from documentation specifying the expected structure of these parameters.

8. Logic Defects:

- a. Compute:

- The logic implemented for file handling, data aggregation, and submission appears correct, but it could be enhanced by handling potential asynchronous errors more robustly.

 Accept. We will improve it in next sprint.

- b. Performance:

- The performance seems adequate for the given functionality. However, improving the efficiency of state updates, especially with large data sets or files, could be beneficial.

 Reject. We may improve it when all necessary functions implement.

Summary of Recommended Changes:

- Enhance commenting throughout the code, especially in complex sections like file upload handling and JSON data preparation for submission.
- Break down longer lines within `Form.Item` and other lengthy expressions to improve readability.
- Consider refactoring the usage of multiple `PDFUploader` components into a single, more generic component that can be reused with different properties.
- Ensure robust error handling in asynchronous operations to manage exceptions more effectively.
- Document function parameters and expected data structures to enhance clarity and maintainability, particularly for functions handling external interactions or complex data.

GPT Code Review Reviewer Editor FormModal

File: src/front_end/sila-frontend/src/pages/Editor/FormModal/index.js

GPT Feedback

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Evaluation of Provided Code:

1. Documentation Defects:

• a. Naming:

- Names like `handleOk`, `handleReviewerChange`, and `removeReviewer` are clear and descriptive of their functions. `selectedReviewerIds` aptly describes the state it manages. Overall, the naming convention is solid.

• b. Comment:

- The code lacks comments, which could enhance understanding, especially explaining the logic behind reviewer selection and the roles of various handlers.

2. Visual Representation Defects:

• a. Bracket Usage:

- Brackets are used correctly throughout the component.

• b. Indentation:

The code uses standard indentation, though some lines are very long.

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- Some lines, particularly those involving JSX properties, are somewhat long but remain readable. Careful formatting helps maintain clarity.

3. Structure Defects:

• a. Dead Code:

- There is no evident dead code in the snippet.

• b. Duplication:

- The functionality for selecting reviewers and displaying them could be more streamlined or abstracted to reduce the complexity within the component.

4. New Functionality:

• a. Use Standard Method:

- The component uses React and Ant Design components in a standard way. The use of `useState` for managing state and `Form` for handling submissions aligns with common practices.

5. Resource Defects:

• a. Variable Initialization:

- All variables and states are initialized appropriately, ensuring no uninitialized states that could lead to bugs.

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- React's handling of state and component recycling should adequately manage memory without leaks, given proper use of hooks and component unmounting.

6. Check Defects:

• a. Check User Input:

- The form validates the content field, requiring input before submission. However, further validations for email formats or reviewer selections could enhance robustness.

7. Interface Defects:

• a. Parameter:

- Parameters for functions like `onOk` and `onCancel` are used correctly, but it might benefit from documentation detailing their expected signatures and behaviors.

8. Logic Defects:

• a. Compute:

- Logic for handling state updates and submissions is correct, though the component might handle exceptions or errors in input more explicitly.

• b. Performance:

- The performance is likely adequate for most use cases, though the rendering efficiency could be impacted by frequent state updates in large reviewer lists.

Summary of Recommended Changes:



- Add comments to the code to explain the purpose of functions and the logic, especially where complex interactions like reviewer management occur.
- Consider abstracting the reviewer selection and list display into a separate component or using more sophisticated state management techniques to simplify the `FormModal`.
- Implement more robust validation for reviewer emails or selection patterns to ensure data integrity and user experience.
- Document the expected function parameters and behaviors for `onOk` and `onCancel` to aid in maintenance and future development.

- Enhance error handling and feedback mechanisms for operations like form submission to improve reliability and user experience.



Evaluation of Provided Code:

1. Documentation Defects:

◦ a. Naming:

- Names like `handleOk`, `handleReviewerChange`, and `removeReviewer` are clear and descriptive of their functions.
`selectedReviewerIds` aptly describes the state it manages. Overall, the naming convention is solid.

◦ b. Comment:

- The code lacks comments, which could enhance understanding, especially explaining the logic behind reviewer selection and the roles of various handlers.

✓ Accept, we will add comments to our code.

2. Visual Representation Defects:

◦ a. Bracket Usage:

- Brackets are used correctly throughout the component.

◦ b. Indentation:

- Indentation is consistent and aids in the readability of the code.

◦ c. Long Line:

- Some lines, particularly those involving JSX properties, are somewhat long but remain readable. Careful formatting helps maintain clarity.

3. Structure Defects:

◦ a. Dead Code:

- There is no evident dead code in the snippet.

◦ b. Duplication:

- The functionality for selecting reviewers and displaying them could be more streamlined or abstracted to reduce the complexity within the component.

✓ Accept, we will adjust the code, and make it clearer.

4. New Functionality:

◦ a. Use Standard Method:

- The component uses React and Ant Design components in a standard way. The use of `useState` for managing state and `Form` for handling submissions aligns with common practices.

5. Resource Defects:

◦ a. Variable Initialization:

- All variables and states are initialized appropriately, ensuring no uninitialized states that could lead to bugs.

◦ b. Memory Management:

- React's handling of state and component lifecycle should adequately manage memory without leaks, given proper use of hooks and component unmounting.

6. Check Defects:

◦ a. Check User Input:

- The form validates the content field, requiring input before submission. However, further validations for email formats or reviewer selections could enhance robustness.

✓ Accept, we will add the email verification and enhance reviewer selections.

7. Interface Defects:

- **a. Parameter:**

- Parameters for functions like `onok` and `oncancel` are used correctly, but it might benefit from documentation detailing their expected signatures and behaviors.

8. Logic Defects:

- **a. Compute:**

- The logic for handling state updates and submissions is correct, though the component might handle exceptions or errors in input more explicitly.

- **b. Performance:**

- The performance is likely adequate for most use cases, though the rendering efficiency could be impacted by frequent state updates in large reviewer lists.

Summary of Recommended Changes:

- Add comments to the code to explain the purpose of functions and the logic, especially where complex interactions like reviewer management occur.
- Consider abstracting the reviewer selection and list display into a separate component or using more sophisticated state management techniques to simplify the `FormModal`.
- Implement more robust validation for reviewer emails or selection patterns to ensure data integrity and user experience.
- Document the expected function parameters and behaviours for `onok` and `onCancel` to aid in maintenance and future development.
- Enhance error handling and feedback mechanisms for operations like form submission to improve reliability and user experience.

GPT Code Review ManuscriptsController

File: src/back_end/SiLA-Backend/SiLA-Backend/Controllers/ManuscriptsController.cs

GPT feedback

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Evaluation of Provided Code:

1. Documentation Defects:

• a. Naming:

- The names used in the code ('UploadFile', 'Submit', 'GetAuthzDashboard') are descriptive and clearly indicate their functionalities. Variables like '_submissionService' and '_amazonS3' also appropriately describe their purposes.

• b. Comments:

- There are no comments in the code snippet. Adding comments would help improve the understanding of the architecture and logic, particularly around the handling of AWS S3 operations and the role-specific authorizations.

2. Visual Representation Defects:

• a. Bracket Usage:

- Brackets are used correctly and consistently throughout the code.

• b. Indentation:

- The code uses consistent indentation, which helps in maintaining readability.

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Breaking these into multiple lines could improve readability.

3. Structure Defects:

• a. Dead Code:

- There appears to be no dead code in the provided snippet.

• b. Duplication:

- The code does not show significant duplication. Each method has a clear, distinct responsibility.

4. New Functionality:

• a. Use Standard Method:

- The use of standard libraries and frameworks like ASP.NET Core, Amazon S3 SDK, and dependency injection indicates a standardized approach. The code adheres to modern practices in software development.

5. Resource Defects:

• a. Variable Initialization:

- All variables are appropriately initialized. Constructor dependency injection is used effectively for service and configuration management.

• b. Memory Management:

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6. Check Defects:

• a. Check User Input:

- The validation for null or empty file in 'UploadFile' and the check for a successful response in 'Submit' demonstrate good practices in user input validation.

7. Interface Defects:

• a. Parameter:

- The parameters in API methods appear correct. However, documenting the expected types and constraints for these parameters would enhance interface clarity.

8. Logic Defects:

• a. Compute:

- The logic seems appropriate for the intended functionalities. Each method handles its specific task based on the success or failure of operations.

• b. Performance:

- The code could potentially improve in performance by handling exceptions more granularly, especially in network or AWS S3 operations, to avoid unnecessary retries or operations.

Summary of Recommended Changes:



- Add detailed comments throughout the code to explain the function of each component and method, especially for complex operations like file handling and error management.
- Consider breaking long lines, particularly those constructing error messages and URLs, to enhance code readability and maintainability.
- Implement more detailed error handling in AWS S3 operations to differentiate between types of exceptions for more precise user feedback.

- Include documentation for API parameters, potentially through XML comments or an API documentation tool, to clarify the expected inputs and behaviors for other developers and API consumers.



Evaluation of Provided Code:

1. Documentation Defects:

o a. Naming:

- The names used in the code (`UploadFile`, `Submit`, `GetAuthorDashboard`) are descriptive and clearly indicate their functionalities. Variables like `_submissionService` and `_amazonS3` also appropriately describe their purposes.

o b. Comments:

- There are no comments in the code snippet. Adding comments would help improve the understanding of the architecture and logic, particularly around the handling of AWS S3 operations and the role-specific authorizations.

Accept. We have added some comments on critical code snippet.

2. Visual Representation Defects:

o a. Bracket Usage:

- Brackets are used correctly and consistently throughout the code.

o b. Indentation:

- The code uses consistent indentation, which helps in maintaining readability.

o c. Long Line:

- There are a few long lines, especially in error messages and URL constructions. Breaking these into multiple lines could improve readability.

Accept.

3. Structure Defects:

o a. Dead Code:

- There appears to be no dead code in the provided snippet.

o b. Duplication:

- The code does not show significant duplication. Each method has a clear, distinct responsibility.

4. New Functionality:

o a. Use Standard Method:

- The use of standard libraries and frameworks like [ASP.NET Core | Open-source web framework for .NET](#) Core, Amazon S3 SDK, and dependency injection indicates a standardized approach. The code adheres to modern practices in software development.

5. Resource Defects:

o a. Variable Initialization:

- All variables are appropriately initialized. Constructor dependency injection is used effectively for service and configuration management.

o b. Memory Management:

- The use of `using` statements with AWS S3's `TransferUtility` suggests proper management of unmanaged resources, ensuring there are no memory leaks.

Accept.

6. Check Defects:

- **a. Check User Input:**

- The validation for null or empty file in `UploadFile` and the check for a successful response in `Submit` demonstrate good practices in user input validation.

7. Interface Defects:

- **a. Parameter:**

- The parameters in API methods appear correct. However, documenting the expected types and constraints for these parameters would enhance interface clarity.

 Accept. Will do more documentation on API methods parameters.

8. Logic Defects:

- **a. Compute:**

- The logic seems appropriate for the intended functionalities. Each method handles its specific task based on the success or failure of operations.

- **b. Performance:**

- The code could potentially improve in performance by handling exceptions more granularly, especially in network or AWS S3 operations, to avoid unnecessary retries or operations.

 Reject. Consider our time constrain, we should put more effort on something more valuable.

Summary of Recommended Changes:

- Add detailed comments throughout the code to explain the function of each component and method, especially for complex operations like file handling and error management.
- Consider breaking long lines, particularly those constructing error messages and URLs, to enhance code readability and maintainability.
- Implement more detailed error handling in AWS S3 operations to differentiate between types of exceptions for more precise user feedback.
- Include documentation for API parameters, potentially through XML comments or an API documentation tool, to clarify the expected inputs and behaviors for other developers and API consumers.

GPT Code Review SubmissionService

File: src/back_end/SiLA-Backend/SiLA-Backend/Services/SubmissionService.cs

GPT Feedback

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Evaluation of Provided Code:

1. Documentation Defects:

a. Naming:

- The naming convention used for methods (`SubmitAsync`, `GetAuthorDashBoardAsync`), classes, and variables is generally clear and descriptive, indicating their functions effectively.

b. Comment:

- The provided code snippet lacks comments. Adding explanatory comments, especially for complex operations like transactions and error handling, would improve code maintainability and understanding.

2. Visual Representation Defects:

a. Bracket Usage:

- Brackets are used correctly and consistently in the code snippet.

b. Indentation:

- The indentation is consistent and appropriate, aiding in the readability of the code.

c. Long Line:

These into multiple lines could improve readability.

3. Structure Defects:

a. Dead Code:

- No dead code is evident in the provided snippet. Each line and variable serve a purpose.

b. Duplication:

- The method structure seems optimized without unnecessary duplication. However, each database operation is followed by `SaveChangesAsync()`, which might be more efficiently handled with a single call after all changes if they are meant to be a part of the same logical transaction.

4. New Functionality:

a. Use Standard Method:

- The use of standard methods and patterns like EF Core for database operations, ASP.NET Identity for user management, and transactions for integrity is evident, which is good practice.

5. Resource Defects:

a. Variable Initialization:

- All variables and services are properly initialized through dependency injection, reflecting good practices in resource management.

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preventing memory leaks.

6. Check Defects:

a. Check User Input:

- User input seems to be validated at some level, as seen with the user check in `GetAuthorDashBoardAsync`. However, additional validations, especially on the `model` data in `SubmitAsync`, might be necessary to ensure data integrity before processing.

7. Interface Defects:

a. Parameter:

- The parameters used in method calls appear correct, but the absence of interface documentation may obscure the expected types and values, which could be improved with XML comments or similar documentation techniques.

8. Logic Defects:

a. Compute:

- The logic for submitting data and fetching dashboard data appears sound, but detailed error handling and transaction management could be more robust.

b. Performance:

- The performance could potentially be impacted by multiple `SaveChangesAsync()` calls within a transaction. Consolidating these into a single call might improve performance.

Summary of Recommended Changes:

- Enhance the commenting throughout the code to explain complex sections better.

- Improve line breaking in long statements to enhance readability.
- Consider consolidating database operations within transactions to reduce the number of calls to `SaveChangesAsync()`.
- Include more rigorous input validation in `SubmitAsync` to ensure all incoming data is correct and safe to process.
- Document API interfaces more thoroughly to ensure clarity about parameter requirements and method functionalities.

Evaluation of Provided Code:

1. Documentation Defects:

• a. Naming:

- The naming convention used for methods (`SubmitAsync` , `GetAuthorDashBoardAsync`), classes, and variables is generally clear and descriptive, indicating their functions effectively.

• b. Comment:

- The provided code snippet lacks comments. Adding explanatory comments, especially for complex operations like transactions and error handling, would improve code maintainability and understanding.

2. Visual Representation Defects:

◦ a. Bracket Usage:

- Brackets are used correctly and consistently in the code snippet.

◦ b. Indentation:

- The indentation is consistent and appropriate, aiding in the readability of the code.

◦ c. Long Line:

- Some lines, particularly error messages and LINQ queries, are quite long. Breaking these into multiple lines could improve readability.

Accept. Broke them into multiple lines.

3. Structure Defects:

◦ a. Dead Code:

- No dead code is evident in the provided snippet. Each line and variable serve a purpose.

◦ b. Duplication:

- The method structure seems optimized without unnecessary duplication. However, each database operation is followed by `SaveChangesAsync()` , which might be more efficiently handled with a single call after all changes if they are meant to be a part of the same logical transaction.

Accept. We have removed unnecessary database operations.

4. New Functionality:

◦ a. Use Standard Method:

- The use of standard methods and patterns like EF Core for database operations, [ASP.NET Core | Open-source web framework for .NET](#) Identity for user management, and transactions for integrity is evident, which is good practice.

5. Resource Defects:

◦ a. Variable Initialization:

- All variables and services are properly initialized through dependency injection, reflecting good practices in resource management.

◦ b. Memory Management:

- The use of `using` for transactions ensures that resources are properly disposed of, preventing memory leaks.

6. Check Defects:

◦ a. Check User Input:

- User input seems to be validated at some level, as seen with the user check in `GetAuthorDashBoardAsync`. However, additional validations, especially on the `model` data in `SubmitAsync`, might be necessary to ensure data integrity before processing.

 Accept. Will add data integrity check before processing.

7. Interface Defects:

◦ a. Parameter:

- The parameters used in method calls appear correct, but the absence of interface documentation may obscure the expected types and values, which could be improved with XML comments or similar documentation techniques.

 Accept. Will do more XML comments documentation on API endpoints.

8. Logic Defects:

◦ a. Compute:

- The logic for submitting data and fetching dashboard data appears sound, but detailed error handling and transaction management could be more robust.

◦ b. Performance:

- The performance could potentially be impacted by multiple `SaveChangesAsync()` calls within a transaction. Consolidating these into a single call might improve performance.

 Accept.

Summary of Recommended Changes:

- Enhance the commenting throughout the code to explain complex sections better.
- Improve line breaking in long statements to enhance readability.
- Consider consolidating database operations within transactions to reduce the number of calls to `SaveChangesAsync()`.
- Include more rigorous input validation in `SubmitAsync` to ensure all incoming data is correct and safe to process.
- Document API interfaces more thoroughly to ensure clarity about parameter requirements and method functionalities.

Sprint

In this section, it explains the progress of the SiLA project.

1. Sprint 1 (Design)
2. Sprint 2 (Development)
3. Sprint 3 (Development)

Sprint 1

Sprint Goal:

The sprint goal for Sprint 1 is to establish a solid foundation for the project by focusing on comprehensive documentation, analysis of requirements, setting up the development environment, and initial planning for subsequent sprints.

Sprint Duration:

4 Mar - 22 Mar

What has been done in the Sprint?

1. Held the first group meeting with teammates to get to know each other and familiarize with the project.
2. Setup project documentation in Confluence, including project overview, background, goals, DO-BE-FEEL list, and GOAL MODEL.
3. Created personas based on research and analysis, documented on a Miro Board.
4. Set up and structured JIRA for task management.
5. Updated the README file with project information.
6. Confirmed the analysis of requirements and ensured consistency with the project scope.
7. Established user stories and organized backlog items in JIRA.
8. Drafted a preliminary plan for Sprints 2 and 3, discussing requirements, technologies, and infrastructure.
9. Scheduled meetings and ensured all meetings are recorded in Confluence.
10. Created a GitHub repository with structured directories, documentation, and a baseline tag for Sprint 1.

Sprint 1 Planning

Objective:

Establish a solid foundation for the project by focusing on comprehensive documentation, analysis of requirements, setting up the development environment, and initial planning for subsequent sprints.

- **Get to know team members:** Hold the first group meeting with teammates, get to know each other, and get familiar with the project (read the project document and sprint guidelines) together. **Assigned to:** @Yizhi Liao
- **Setup Project Documentation in Confluence:** Background description, client goals, motivation
 - Have a page that includes the project overview, background, and goals. **Assigned to:** @Donghong Zhuang
 - Create a DO-BE-FEEL list and GOAL MODEL. **Assigned to:** @jiajiny
 - Find Personas that are based on the research done by the development team and the discussion with industry partners. **Assigned to:** @Yuxuan Zeng
 - Analyze those into a Miro Board. **Assigned to:** @Jiayu Yang
- **Development Environment**
 - Set up and structure JIRA for task management. **Assigned to:** @Chuyuan Xu
 - Schedule Jira Training Session. **Assigned to:** @Yizhi Liao
 - Update the README file with project information. **Assigned to:** @Donghong Zhuang
- **Analysis of requirements (User Stories or Use Cases)**
 - Confirm that the analysis of requirements has been performed on most of the existing requirements and mark them as reviewed.
Assigned to: Everyone
 - Ensure that the new set of requirements is consistent with the project scope, fully covers the new capabilities required by the client, and is well-documented/structured/organized on Confluence. **Assigned to: Everyone**
 - Clarify that requirements can be documented in the form of user stories or use cases, supplementary specifications of design/implementation/deployment requirements. Also, make it explicit what is out of scope to define the scope boundary more clearly. **Assigned to: Everyone**
 - Design prototypes in the Figma. **Assigned to: Everyone**
 - Set up user stories. In the Confluence Space and Jira. **Assigned to: Everyone**
- **Planning for Next Sprints**
 - Draft a preliminary plan for Sprints 2 and 3, discussing requirements, technologies, and infrastructure. **Assigned to:** @jiajiny
 - Estimate and prioritize requirements, organizing backlog items in JIRA. **Assigned to:** @Yuxuan Zeng
- **Meetings**
 - Schedule meetings(Mentor, Client, and Weekly stand up). **Assigned to:** @Jiayu Yang
 - Ensure all meetings are recorded in Confluence. **Assigned to:** @Yizhi Liao
- **Set Up GitHub Space:**
 - Create a GitHub repository, which contains two folders(docs and src) and a README file. **Assigned to:** @Yizhi Liao
 - Update the repository regularly, including the README file. **Assigned to:** @Yizhi Liao

- Generate a release tag before the end of sprint 1. **Assigned to:** [@Yizhi Liao](#)

Deliverables

- Completed and reviewed project documentation (overview, background, goals, DO-BE-FEEL list, GOAL MODEL, personas)
- Documented analysis of requirements with user stories generated and refined
- Fully organized Confluence space and structured Trello/JIRA for project management
- A clear plan for Sprints 2 and 3 with estimated and prioritized requirements
- Updated GitHub repository with a structured directory, necessary documentation, and a baseline tag for Sprint 1

Sprint 1 Retrospective

Participants:

- Jiayu Yang
- Donghong Zhuang
- Jiajin Yang
- Yizhi Liao
- Yuxuan Zeng
- Chuyuan Xu

Related Meetings:

StandUp Meeting 10/03/2024

StandUp Meeting 13/03/2024

StandUp Meeting 20/03/2024

| What worked well | What didn't go well | What should we try doing next |
|---|---|---|
| The team effectively collaborated on tasks | Some tasks took longer than expected | Improve task estimation |
| Clear plan for subsequent sprints drafted | Some difficulty in estimating and prioritizing requirements | Improving estimation and prioritization processes |
| Regular scheduling of meetings and recording of minutes | Limited familiarity with some tools and technologies | Providing training sessions for tool usage |
| All planned meetings occurred as scheduled | Miscommunication regarding task responsibilities leading to slight delays | Enhance communication channels |
| The team achieved 100% attendance at all scheduled meetings | | |

Sprint 1 Review

Project Documentation and Confluence Setup

- **Everyone** took part in establishing project documentation on Confluence, including an overview of the project, background, and goals, ensuring that all team members could access and understand the core information of the project.
- A DO-BE-FEEL list and goal model were developed to clarify the vision and objectives of the project.
- Personas that match the project requirements were identified based on research conducted by the development team and discussions with industry partners. These were organized into a Miro Board, providing a human-centric perspective for subsequent design and development efforts.

Project Management and Jira Usage

- [@Donghong Zhuang](#) also took charge of setting up and structuring Jira for task management, and scheduled a Jira training session to ensure that team members could effectively utilize this tool.
- [@Yizhi Liao](#) updated the README file to provide project information in the project's GitHub repository, ensuring that all visitors could quickly understand the basics of the project.

Requirement Analysis and User Stories

- All team members jointly confirmed the analysis of existing requirements and marked them as reviewed, ensuring the completeness and accuracy of the requirement analysis.
- We also ensured that a new set of requirements was consistent with the project scope and was detailed, documented, and organized on Confluence, explicitly defining the project scope boundary and the requirements for design/implementation/deployment through user stories and use cases.

Planning and Meetings

- A preliminary plan for Sprints 2 and 3 was drafted, discussing requirements, technologies, and infrastructure.
- Meetings with mentors, clients, and the team were scheduled regularly, ensuring all meetings were recorded on Confluence.

GitHub Repository Setup

- [@Yizhi Liao](#) was responsible for creating a GitHub repository containing docs and src folders along with a README file and regularly updating the repository, including generating a release tag before the end of Sprint 1.

Sprint 1 Complete

The screenshot shows the Jira software project dashboard for the 'SILa-Wombat' project. The top navigation bar includes 'Your work', 'Projects', 'Filters', 'Dashboards', 'Teams', 'Plans', 'Assets', 'Apps', and 'Create'. A search bar and various icons are also present.

The left sidebar lists reports: 'Back to project', 'Burnup report' (which is highlighted), 'Sprint burndown chart', 'Velocity report', 'Cumulative flow diagram', 'Cycle time report', and 'Deployment frequency report'. A note at the bottom states 'You're in a team-managed project' with a 'Learn more' link.

The main board area displays three columns of tasks:

- Thu, Mar 21 2024, 9:18pm:** Issue completed. Task: SW-109 Organize the confluence (done by everyone). Status: 0. Progress: 0%.
- Thu, Mar 21 2024, 9:18pm:** Issue completed. Task: SW-108 Create directory and readme file in GitHub. Status: 0. Progress: 0%.
- Mon, Mar 25 2024, 7:53pm:** Sprint completed. Task: SW-109 Organize the confluence (done by everyone). Status: 0. Progress: 0%.

Below the tasks, a detailed list of sub-tasks is shown:

- SW-109 Organize the confluence (done by everyone)
- SW-108 Create directory and readme file in GitHub
- SW-86 Write home page for SILA project in confluence
- SW-88 Design the Personas for Author in confluence
- SW-89 Create the SILA Backround description, client goals, motivation
- SW-90 Design the Sprint 1 planning in confluence
- SW-91 Design the Personas for Reviewer in confluence
- SW-92 Design the Personas for Web Administrator
- SW-94 Design the DO-BE-FEEL model in confluence
- SW-95 Record Client Meeting notes 07/03/2024 on confluence
- SW-96 Design the GOAL MODEL in confluence
- SW-97 Record StartUp Meeting note 10/03/2024 on confluence
- SW-98 Design the prototype of home page in Figma
- SW-99 Design the prototype of mentor page in Figma
- SW-100 Design the prototype of sign up page in Figma
- SW-101 Record Mentor meeting minutes 06/03/2024 on confluence
- SW-102 Design the prototype of Dashboard system pages in Figma
- SW-103 Record Mentor meeting minutes 13/03/2024 on confluence
- SW-104 Design the prototype of submit page in Figma
- SW-105 Design the prototype of mentor page in Figma
- SW-106 Design the prototype of chat box page in Figma
- SW-107 Planning the user story (done by everyone)
- SW-108 Create directory and readme file in GitHub
- SW-109 Organize the confluence (done by everyone)
- SW-110 Create and Organize the Jira (done by everyone)
- SW-111 Write the README file in GitHub
- SW-112 Write the sprint 2 planning in confluence (done by everyone)
- SW-113 Write the sprint 3 planning in confluence (done by everyone)
- SW-114 Set user story table in confluence (done by everyone)
- SW-115 Design the prototype of Decision make page in Figma

Sprint 2

Sprint Goal:

The sprint goal for Sprint 2 is to establish a robust foundation for the submission and review platform by implementing essential components such as user authentication, registration, dashboard creation, and manuscript management functionalities.

Sprint Duration:

23 Mar - 26 Apr

What will be done in the Sprint?

1. Implement database schema for the account system (SW-123).
2. Design and implement the database schema for manuscripts (SW-124).
3. Develop a login page with authentication for different user types (SW-2).
4. Create a registration page for authors (SW-5).
5. Develop a dashboard page for authors to start new submissions (SW-30).
6. Design and implement a home page accessible to all users (SW-16).
7. Implement a review page for reviewers (SW-14).
8. Develop a decision-making page for editors (SW-135).

Sprint 2 Planning

User story and Sprint backlog

| User story ID | User story | Story Point | Size Estimation | MoSCoW Priority | Sub-task | Acceptance Criteria | Assignment to |
|---------------|---|-------------|-----------------|-----------------|--|--|---------------|
| SW-16 | Home page for All Users: As a user, I want a home page that intuitively guides me to the platform's main features, such as signing up, logging in, searching for documents, and discovering popular content, so that it can ensure a positive first impression and ease of use. | 10 | Medium | Will Not Have | SW-60: Design the home page layout incorporating essential elements SW-61: Develop the functionality for the search bar SW-62: Create a dynamic section that displays popular content SW-64: Integrate sign-up and login buttons with clear calls to action, directing users to the respective forms or pages. | The home page layout is clear and easy to understand. And the functionality is complete. All the buttons on search bar could navigate us to correct page. Also, the design is clear and easy to understand. The popular content could be displayed correctly to the user. And make sure the user can access those contents. The button is easy to find on the home page. Once click the button, the user should enter the login or sign-up page correctly. | @Chuyuan Xu |
| SW-123 | Database for Account system: As an administrator, I want to create a robust database schema for the account system, so that we can securely store and efficiently manage user information, roles, permissions, and sensitive data, supporting the dynamic needs of our platform as it grows. | 14 | Large | Must have | SW-125: Design a comprehensive database schema catering to users, roles, permissions, sensitive information. SW-126: Implement relationships between tables to efficiently manage user information, role assignments, permissions, sensitive information. SW-127: Develop secure storage procedures for sensitive information like passwords using best practices for hashing and salting. SW-128: Create scripts for routine database operations (e.g., adding or updating users, changing | Database schema includes separate tables for users, roles, permissions, and sensitive information with all relationships clearly defined all database tables are correctly linked via foreign keys, and queries joining these tables execute efficiently without anomalies Passwords and other sensitive information such as manuscript files are securely stored using advanced hashing and salting techniques Adding, updating users, and changing roles execute successfully without errors and these changes should | @Yuxuan Zeng |

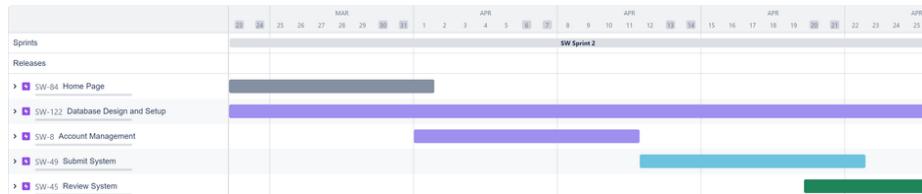
| | | | | | | | |
|--------|---|----|-------|-----------|--|---|---|
| | | | | | roles) to streamline account management. | be reflected in the database | |
| SW-124 | <p>Database for Manuscripts:</p> <p>As a platform administrator, I need to create a database schema that efficiently organises, stores, and retrieves manuscripts, along with their submission details, review statuses, and associated metadata, so that authors can submit their work, reviewers can assess submissions, and editors can make informed decisions.</p> | 20 | Large | Must have | <p>SW-129: Design tables for storing manuscripts, including fields for manuscript ID, title, abstract, submission date, author ID, status (e.g., submitted, under review, accepted, rejected), and any other relevant information.</p> <p>SW-130: Create related tables to handle metadata such as keywords, topics, author affiliations, and submission files (linking to stored files if not kept directly in the database).</p> <p>SW-131: Implement tables for reviews and reviewer assignments, capturing review ID, manuscript ID, reviewer ID, review date, comments, recommendations, and any confidentiality flags.</p> <p>SW-132: Define relationships between authors, manuscripts, and reviews to enable efficient data retrieval and updates, ensuring integrity constraints and referential actions are appropriately applied.</p> <p>SW-133: Ensure the design supports queries for manuscript tracking, reviewer assignments, and editorial decision-making, with considerations for performance optimization and future scalability.</p> | <p>Create a <code>Manuscripts</code> table with columns for manuscript ID, title, abstract, submission date, author ID, and status. Ensure columns are non-nullables where necessary and correctly typed. Link <code>author_id</code> to an <code>Authors</code> table via foreign key.</p> <p>Establish tables for keywords, topics, author affiliations, and submission files, each with a primary key and a <code>manuscript_id</code> foreign key for linking back to the <code>Manuscripts</code> table.</p> <p>Implement a <code>Reviews</code> table with fields for review ID, manuscript ID, reviewer ID, review date, comments, recommendations, and a confidentiality flag. Set up foreign keys for <code>manuscript_id</code> and <code>reviewer_id</code> to ensure proper referencing.</p> <p>Ensure all foreign keys in the database correctly reference the primary keys of their related tables, with appropriate cascade actions for update and delete operations.</p> <p>Confirm the database supports efficient and accurate queries for manuscript tracking, reviewer assignments, and editorial decision-making, and can handle future scalability.</p> | <p>@Yuxuan Zeng</p> <p>@Yuxuan Zeng</p> <p>@Yuxuan Zeng</p> <p>@jiajiny</p> <p>@jiajiny</p> |

| | | | | | | | |
|-------|--|----|--------|-----------|--|---|------------------|
| SW-2 | <p>Login page for different user types:</p> <p>As a user (author, reviewer, editor), I want to log in to the system as my specific user group, so that I can access different kinds of functions of the website tailored to my role.</p> | 6 | Medium | Must have | SW-34: Implement elements that allow users to select their role (author, reviewer, editor) before logging in. | The user must be able to select a role when log into the system. | @Yizhi Liao |
| | | | | | SW-42: Implement a simple form for email/username and password. | The user should be able to input a username and password when log into the system. | @Yizhi Liao |
| | | | | | SW-43: Design a login page that is welcoming and intuitive. | The login page must be visually appealing, user-friendly and provide clear guidance for users to easily access their account. | @Yizhi Liao |
| SW-5 | <p>Register Page for Author:</p> <p>As a potential author, I want a straightforward registration process, so that I can create an account and start submitting manuscripts.</p> | 6 | Medium | Must have | SW-22: An input field allows the user to enter their email. | The field should allow user to enter the email and check the email is in correct format. | @Donghong Zhuang |
| | | | | | SW-23: A detailed information page with multiple input fields to collect user information. | Multiple input fields on the page correctly ask user's information. | @Donghong Zhuang |
| | | | | | SW-24: Add a Sign-Up button. | Once the sign-up button, the sign-up information will be sent back to the back-end, and an account for the author will be successfully created. | @Donghong Zhuang |
| SW-30 | <p>Dashboard page for Author to Start New Submission:</p> <p>As an author, I want to submit the manuscripts to the journal in an efficient manner, so that I can publish my article via the system.</p> | 10 | Medium | Must have | SW-56: The input fields include manuscript title and type. | Both manuscript title and type are present on the user interface, are properly labelled, non-empty requirements are applied. | @Jiayu Yang |
| | | | | | SW-70: An "Add" button to add the author information of a specific manuscript | It should add another row where author information can be entered. The maximum number of authors is 8. | @Jiayu Yang |
| | | | | | SW-68: The user can drag the file and drop it into the "Drop files area", which will then automatically prepare the file for the upload progress. | The system automatically initiates the preparation process for the upload progress and then returns a progress message. | @Jiayu Yang |
| | | | | | SW-71: This button will then submit all the information to the system. | The submit button, when clicked, all the information is stored in JSON format and submits all the entered information to the backend system. | @Jiayu Yang |
| | | | | | SW-85: The submission system should be scalable to accommodate | The submission system must demonstrate scalability by efficiently handling a simulated load of up to 10 times the current average | @Jiayu Yang |

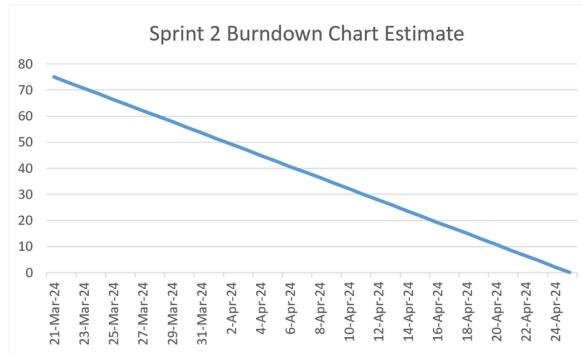
| | | | | | | | | |
|--------|---|---|--------|-----------|--|--|--|--|
| | | | | | | increasing submissions. | number of daily submissions without significant performance degradation. | |
| SW-14 | Review page for Reviewer: As a reviewer for SiLA, I want to be able to securely log in to the online submission and review platform so that I can access manuscripts assigned to me for review. I wish I can see all the relevant comments to this article and submit my own comment. I also want to contact with the editors conveniently when I need it. | 8 | Medium | Must have | SW-21: There is a download selection for the reader to download the article. SW-29: There is a label that displays whether the article is double blind mode or not. If it is, then it shows the double-blind mode, otherwise it will show the author's name. SW-33: The page has a field to show all the comments related to this article. SW-31: Reviewers can submit reviews to the article. SW-37: There is a editors list for the reviewers can communicate with. For each editor, there is a chat button for each editor to let the reviewer directly jump into the communication system with that editor. | The reviewer should be able to download the article. The paper will be displayed to reviewer in the correct format. All the comments related to this article are correctly shown and well organized on the page. Once click the submit, the reviewer's comment will be saved to the backend, and the editor and author should able to see the comment. This section should allow the reviewer to contact editors. | @jiajiny @jiajiny @jiajiny @jiajiny @jiajiny | |
| SW-135 | Decision making page for Editor: As an editor, I want to decide whether to accept an article or not, so that I can guarantee the quality of the project. | 5 | Medium | Must Have | SW-136: Reuse the comment history function, add a comment function, double-blind mode and download article function which are implemented in SW-14. SW-137: A reviewers list, which contains a chat button for each reviewer to let the editor communicate with them directly. The chat button will jump to the chat box function. | 1. The system must incorporate the ability to reuse and display comment history 2. The system must include functionalities to add comments, enable a double-blind mode for user interactions, and allow users to download articles. 1. The system must provide a list of reviewers, each accompanied by a chat button that enables direct communication between the editor and the reviewer. 2. The chat button should redirect the | @Jiayu Yang @Jiayu Yang | |

| | | | | |
|--|---|---|-------------|--|
| | | | | user to a chat box function, facilitating immediate and intuitive interaction. |
| | SW-138: There are three selections for the editor to decide for an article which are accept, reject or revise. | The system must provide the editor with three clear and functional options for article decisions: "Accept", "Reject", and "Revise". | @Jiayu Yang | |

Sprint 2 Milestones



Sprint 2 Burndown Chart



Sprint 2 Retrospective

Participants:

- Jiayu Yang
- Donghong Zhuang
- Jiajin Yang
- Yizhi Liao
- Yuxuan Zeng
- Chuyuan Xu

Related Meetings:

StandUp Meeting 27/03/2024

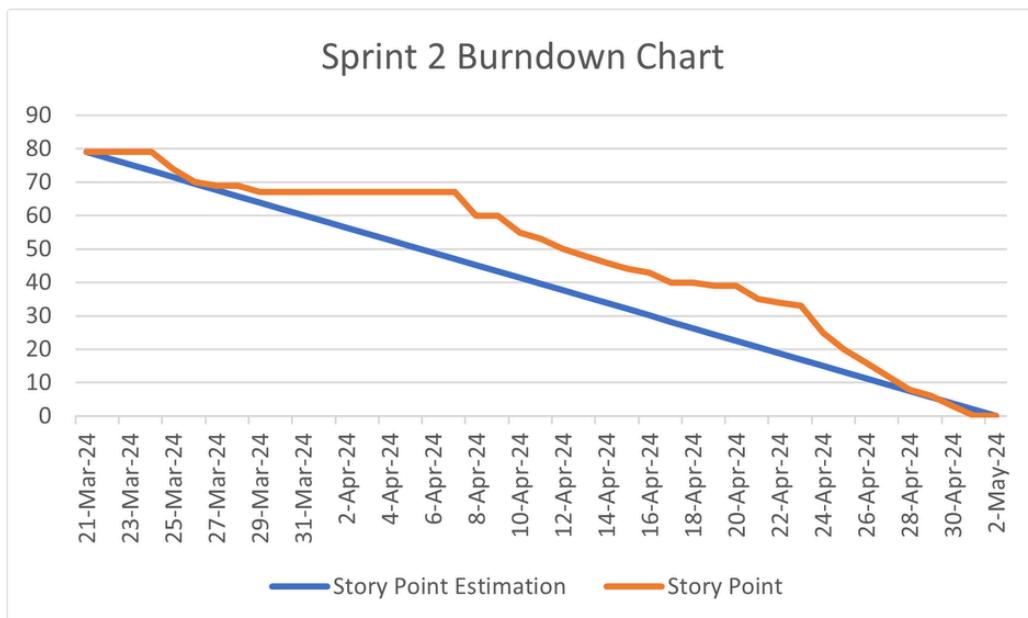
StandUp Meeting 10/04/2024

StandUp Meeting 17/04/2024

StandUp Meeting 24/04/2024

StandUp Meeting 01/05/2024

Sprint 2 Burndown Chart :



What worked well

What didn't go well

What should we try doing next

| | | |
|--|--|--|
| The team collaborated effectively, showing strong teamwork in completing tasks. | Testing phases for some features might not have been as thorough as necessary, leading to bugs or issues not being caught early. | Implement refined estimation strategies to better predict task durations. |
| Weekly meetings were held on schedule | Task prioritization was occasionally problematic, especially when unexpected issues arose. | Develop clearer criteria for task prioritization to handle disruptions more effectively. |
| The team consistently achieved the objectives set for each meeting, maintaining high efficiency. | Some parts of the codes lack of comments. | Add more comments which improve the readability. |
| Adjustments to the project were made promptly based on weekly feedback from the mentor. | The structure of code is not very clear. | Modify the structure of the code file to better find the code. |
| The project's progress kept pace with the timeline, avoiding any significant delays. | | |

Sprint 3

Sprint Goal:

The goal for Sprint 2 is to develop advanced features such as the dashboard for authors, reviewers, and editors, implement a chat box functionality, and enable automatic email notifications.

Sprint Duration:

27 Apr - 24 May

What will be done in the Sprint?

1. Develop the dashboard interface for authors, reviewers, and editors.
2. Implement functionality to display manuscript statuses on the dashboard.
3. Design and integrate the chat box feature for communication between users.
4. Set up automated email notifications for manuscript submissions, reviews, and editorial decisions.
5. Conduct testing and debugging to ensure the proper functioning of the developed features.
6. Document the implemented functionalities and update project documentation as necessary.
7. Conduct user acceptance testing (UAT) to gather feedback and make necessary adjustments.
8. Prepare for deployment and release planning for the completed features.

Sprint 3 Planning

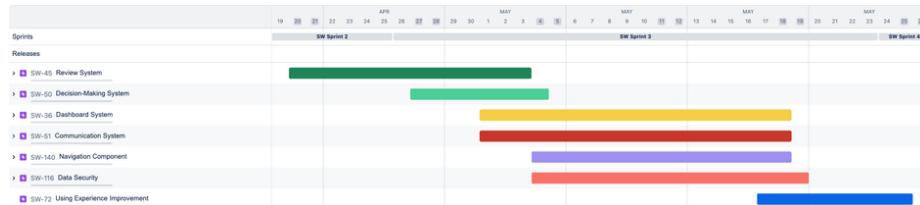
User story and Sprint Backlog

| User story ID | User story | Story Point | Size Estimation | MoSCoW Priority | Sub Task | Acceptance Criteria | Assign to |
|---------------|--|-------------|-----------------|-----------------|---|---|-----------|
| SW-26 | <p>Dashboard - Reviewer - Review and Score:</p> <p>As a Reviewer, I want to have a centralized dashboard that not only allows me to track the status of manuscripts through various stages of the review process (including those in the following stages: submitted, under review, revisions required, and accepted) but also acts as a to-do list showing my assigned tasks. This will enable me to have a comprehensive overview of my responsibilities and the progress of manuscripts, so that I can prioritize my work efficiently, and enhance communication with other team members.</p> | 12 | Large | Must have | SW-57 Implement Reviewer Dashboard Layout | The reviewer dashboard layout should clearly list the articles of those assigned to the current reviewer. | |
| | | | | | SW-44 Track Manuscript Status | When the status of an article changes, the reviewer dashboard must display the latest article status. | |
| | | | | | SW-46 Enable Reviewer Access to Manuscript Reviewing Page | The reviewer should be able to leave comments to the article in the editing page. | |
| SW-28 | <p>Dashboard - Reviewer - History:</p> <p>As a Reviewer I require a functionality to display all manuscripts that have undergone editing. This feature will enable team members to easily access and review the edited manuscripts, facilitating collaboration and ensuring that all edited content is readily available for further processing or review.</p> | 8 | Medium | Must have | SW-58 Implement Review Dashboard Layout | | |
| | | | | | SW-48 Display Edited All The Edited Manuscripts | | |
| SW-17 | <p>Dashboard page for Author:</p> <p>As an author, I want a user-friendly page that displays the information, so that I can edit and change my personal information.</p> | 8 | Medium | Should have | SW-52 A page shows the user's detailed information | The Profile page is connected to the back-end database and displays the user's information correctly. | |
| | | | | | SW-53 A button that click to modify user's information | Once click the button, the author should be able to modify their information. | |
| | | | | | SW-54 A page to modify user's personal information | All the information sections except the Email will become input field which allows user to change their personal information. | |
| | | | | | SW-55 A button to save the change | Once the button is clicked, all the changed information is | |

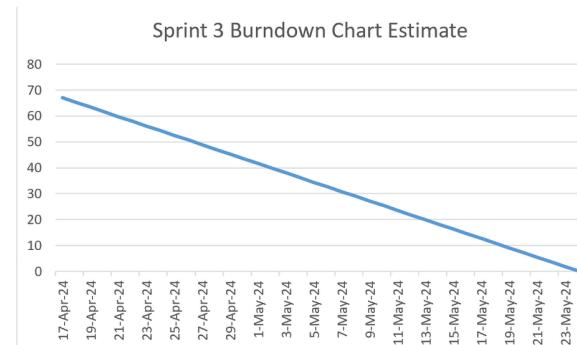
| | | | | | | | |
|---------------|---|----|--------|-------------|---|--|--|
| | | | | | | saved and sent to the back-end database. | |
| | | | | | SW-139 A page shows all the manuscripts submitted by the current author | This page shows a list of manuscripts that the author submitted which includes an article title, deadline, and editor's decision. | |
| SW-18 | Dashboard page for Editor: As an editor, I want a dedicated section to record the number of those decisions (accept, revise, reject) so that my decisions are clearly communicated to the authors. | 8 | Medium | Must have | SW-38 A Dashboard Metrics for Editor's Decision-Making | Include relevant metrics such as submission status, reviewer feedback, acceptance rates, publication timelines and display dashboard for each status. | |
| | | | | | SW-41 Display Manuscript Details in Editor's Dashboard | Ensure the displayed manuscript details are up-to-date and accurately reflect the current state of each submission. The display layout should be clear, organized, and easily navigable for editors. | |
| SW-118 | Automatic confirmation emails for successful submission: As an author, I want to receive the confirmation email from the SiLA, so that I can ensure I submit the article successfully. | 5 | Medium | Should have | SW-119 Create Email Content Template | The Email Content is well formed and in a formal tone. | |
| | | | | | SW-120 Integrate Email Sending Function into Submission Process | | |
| SW-67 | Chat Functionality for Reviewer-Editor Communication: As a reviewer or editor, I want to be able to engage in text-based communication within a dedicated pop-up chat window on the platform, so that I can discuss manuscripts, share feedback, and clarify queries directly and efficiently. | 10 | Medium | Should have | SW-75 Design a user-friendly chat interface that can be accessed as a pop-up window on the platform | | |
| | | | | | SW-77 Develop backend services to handle real-time messaging, including storing and retrieving chat histories. | | |
| | | | | | SW-78 Implement frontend functionality for displaying recent chats and chat history within the pop-up window. | | |
| SW-141 | Role-Based Dynamic Navigation for logged-in users: As a logged-in user, I want the navigation system to dynamically adjust based on | 8 | Medium | Should have | SW-142 Design a dynamic navigation menu that adapts based on the user's role | Author, Editor and Reviewer each have their own navigation bar based on their role | |

| | | | | | | | |
|--------------|--|---|--------|-------------|--|--|--|
| | my permissions and role (author, reviewer, editor), so that I can easily access modules specific to my tasks, including Submission, Profile, Review, Decision-Making, and Communication, enhancing my efficiency and experience on the platform. | | | | SW-143 Code the logic to display navigation options conditionally based on the logged-in user's role and permissions. | Display different navigation options and interfaces based on the logged-in user's role and permissions. | |
| | | | | | SW-144 Integrate the dynamic navigation component into the platform's UI | Integrate the dynamic navigation component into the platform's UI to reflect user role-based permissions accurately. | |
| SW-76 | Data Security and Confidentiality: As a system administrator, I need to implement robust data protection measures to ensure the confidentiality of manuscripts and reviews. This includes implementing encryption protocols, access controls, and audit trails to safeguard sensitive data from unauthorized access or disclosure. By prioritizing data security, we can instill trust in our users and uphold the integrity of the review process. | 8 | Medium | Should have | SW-81 Implement Encryption for Manuscripts and Reviews. | | |
| | | | | | SW-82 Set Up Access Controls and Permissions | | |
| | | | | | SW-83 Conduct Security Audit and Testing. | | |

Sprint 3 Milestones



Sprint 3 Burndown Chart



Cyber Security

Approach Used

- **Cross-origin resource sharing**

Cross-Origin Resource Sharing (CORS) is a protocol that enables web pages to request restricted resources from a server located on a different domain than the domain that delivered the original web page. While web pages can embed cross-origin resources like images, stylesheets, scripts, iframes, and videos without special permissions, certain "cross-domain" requests such as Ajax are blocked by the Same-Origin Policy by default. CORS provides a method for browsers and servers to communicate to ascertain if it is safe to permit the cross-origin request. This approach allows greater flexibility and functionality than same-origin requests alone, yet offers more security than allowing all cross-origin requests indiscriminately.

- **Nginx Proxy Manager**

Nginx Proxy Manager is a graphical user interface (GUI) tool that simplifies the process of managing Nginx proxy configurations for users who may not be familiar with command-line operations or Nginx's native configuration syntax. This tool is particularly useful for handling the complexities of setting up Nginx as a reverse proxy, load balancer, or for serving static websites, especially in a home or small business environment.

- **JSON Web Token(JWT)**

One of the most crucial security features of a JSON Web Token (JWT) is its signature. A JWT consists of three parts: Header, Payload, and Signature. The signature is generated using the algorithm specified in the header (such as HMAC SHA256 or RSA), which ensures that the JWT has not been altered during transmission.

JWTs usually include an expiration time (exp claim). This timestamp specifies when the token expires. Having a short validity period reduces the risk of the token being stolen and misused, because even if the token is compromised, it is only valid for a short duration.

- **AWS Identity and Access Management**

AWS Identity and Access Management (IAM) is a service provided by Amazon Web Services designed to help administrators securely control access to AWS resources. IAM allows you to manage users, security credentials such as passwords or keys, and permissions to access AWS resources.

IAM can control what actions a user or group of users can perform on AWS resources. For instance, a permission might allow a user to launch a manuscript instance but not modify it.

Cyber Security Analysis Table

Likelihood in five categories: Rare; Unlikely; Possible; Likely; and Almost Certain.

Impact in four categories: low, medium, high, very high.

| Risk ID | Description | likelihood | likelihood description | Impact | Impact Description | Solution |
|---------|----------------|------------|--|-----------|--|--|
| R1 | Account Stolen | Likely | It is very possible if the user has a weak password. | very high | The account stolen will greatly threaten user information security. The attacker can access all the information and functions of that account, and cause countless losses to the user. | In the back-end, Setting password complexity requirements. Detailly, the user must set their password that at less 6 characters which include at least one uppercase, one lowercase, one digit, and one special character. |
| R2 | SQL Injection | Likely | SQL injection is a common attack | very high | The hackers may input some SQL statements | We use .Net's Entity Framework Core tool to |

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|----|---------------------------|----------|--|-----------|--|--|
| | | | technology for the hackers to attack our website. | | and directly send to our back-end to modify our database. It may cause our data leaked or database destroyed. | avoid SQL injection attack. This tool has reliable in-build mechanisms to avoid attacks. |
| R3 | Database Password Leak | Possible | It is possible if our database suffered attacks and the hackers get the data that are stored in database. | very high | If there is no protection method for the passwords that are stored in database, once the hackers stole the data in our database, then they can directly get our accounts' passwords. | We use Salted Hash method to avoid our passwords leak. This method stores a pre-processed hash password instead of storing the password directly to the database. |
| R4 | Manuscript Stolen | Possible | User-uploaded manuscripts are one of the most important data on this website. Attackers targeting the SiLA website have a strong motivation to steal user manuscripts. | high | Manuscripts stolen from can severely impact our website's integrity and trustworthiness. This damages SiLA's reputation and affects its ability to attract both contributors and subscribers. | Using Amazon IAM (Identity and Access Management) to prevent data security. It enhances security by strictly controlling who can access manuscripts on AWS-hosted platforms |
| R5 | Self Reviewing | Unlikely | If the author steals the reviewer's token, he might be able to review his manuscript. However, it is unlikely, since it is hard to get the reviewer's token, and considering the risk of doing that most of the authors do not have the motivation for it. | low | Even if an author can review their own paper by stealing tokens from reviewers and editors, there is still a high likelihood that reviewers and editors will notice the abnormality in the review process and address it promptly. | Using JWT(JSON Web Token) Manager to generate the on-time token, and the token will refresh and update in a short period which make sure other people can not use only one token to review the manuscript. |
| R6 | Communication Attacks | Possible | It is possible to suffer attacks when the front-end communicates with the back-end. | high | When the communications suffer attacks, it may cause data leak. The hackers may use these data to threaten the security of our website. | HTTPS will be used to avoid this kind of attack. HTTPS uses TLS/SSL to encrypt data and also uses message digests to ensure that data has not been tampered with during transmission. HTTPS also includes verification of the identities of both parties in the communication. |
| R7 | Data Lost by Server Crash | Rare | Although our server is stable, there is still a | high | If the server crashed, it means that our data may lost. It has a high impact | We use data backup to prevent server crashes. That is, we will |

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| | | slight possibility of crash. | to our website if we lost our data. | automatically back up the data at regular intervals, so that when the server crashes, our data will not be lost. |
|--|--|---------------------------------|--|--|