

1) Introduction:

1.1. Purpose

The purpose of this document is to present a detailed description of the TechnoBlog. It will explain the purpose and features of the system, the interfaces of the system, what the system will do, the constraints under which it must operate and how the system will react to external stimuli. This document is intended for both the stakeholders and the developers of the system.

1.2. Scope of Project

This software system will be a Web Publishing System for DAIICT. This system will be designed to maximize the editor's productivity by providing tools to assist in automating the article review and publishing process, which would otherwise have to be performed manually. By maximizing the editor's work efficiency and production the system will meet the editor's needs while remaining easy to understand and use.

More specifically, this system is designed to allow an editor to manage and communicate with a group of reviewers and authors to publish articles to a public website. The software will facilitate communication between authors, reviewers, and the editor via E-Mail. Preformatted reply forms are used in every stage of the articles' progress through the system to provide a uniform review process; the location of these forms is configurable via the application's maintenance options. The system also contains a relational database containing a list of Authors, Reviewers, and Articles.

2) Use Cases:

2.1 Reader Use Case: Search Article

- **User Story:** As a reader, I want to search for articles by author name, category, or keyword so that I can find relevant content for my research.

2.2 Author Use Case: Submit Article

- **User Story:** As an author, I want to submit my article to the editor via email so that it can be reviewed and potentially published in the Online Journal.

2.3 Reviewer Use Case: Submit Review

- **User Story:** As a reviewer, I want to submit my review of an article via email to the editor so that the publication process can move forward.

2.4 Editor Use Cases:

2.4.1 Update Information:

- **User Story:** As an editor, I want to update author information in the system so that the author database remains accurate and up-to-date.
- **User Story:** As an editor, I want to update reviewer information to ensure that the reviewer pool is current and relevant.

2.4.2 Handle Article:

- **User Story:** As an editor, I want to receive articles submitted by authors so that they can be reviewed and processed for publication.

- **User Story:** As an editor, I want to assign reviewers to articles to ensure comprehensive review coverage and timely feedback.

2.4.3 Check Status:

- **User Story:** As an editor, I want to check the status of all active articles to monitor progress and identify any bottlenecks in the publication process.

2.4.4 Send Recommendation:

- **User Story:** As an editor, I want to send responses to authors regarding the status of their submissions to maintain clear communication and transparency.
- **User Story:** As an editor, I want to send copyright forms to authors whose articles have been accepted for publication to secure the necessary permissions.

2.4.5 Publish Article:

- **User Story:** As an editor, I want to publish accepted articles to the Online Journal to make them accessible to readers.

2.4.6 Remove Article:

- **User Story:** As an editor, I want to remove articles from the active category if they are no longer relevant or do not meet publication criteria.

3) System requirements:

3.1 Functional requirements :

- Search Article:
 - The system shall allow readers to search for articles based on author name, category, or keyword.
 - Readers shall be able to view the abstract of an article before downloading it.
- Communicate:
 - Authors shall be able to communicate with the editor by submitting articles via email, ensuring seamless article submission.
 - Reviewers shall have the ability to submit their reviews of articles through the system's email interface, facilitating the review process.
- Add/Update Author:
 - The editor shall be able to add new authors or update existing author information, ensuring accurate author management.
- Add/Update Reviewer:
 - The editor shall have the capability to add new reviewers or update existing reviewer information, maintaining an up-to-date reviewer database.
- Update Article Status:
 - The editor shall be able to update the status of articles, indicating whether they are pending review, accepted, declined, or in need of revision, providing transparency in the article management process.
- Enter Communication:
 - The system shall allow the editor to enter communication related to article submissions, reviews, and decisions, ensuring clear and documented correspondence.

- Assign Reviewer:
 - The editor shall have the ability to assign one or more reviewers to an article, ensuring thorough and timely review of submissions.
- Check Status:
 - The editor shall be able to check the status of all active articles, providing oversight and tracking of the publication process.
- Send Communication:
 - The editor shall be able to send responses to authors, copyright forms, and other communications via email, facilitating efficient correspondence.
- Publish Article:
 - The editor shall have the capability to publish accepted articles to the Online Journal, making them accessible to readers.
- Remove Article:
 - The editor shall be able to remove articles from the active category as needed, maintaining a clean and organized article database.

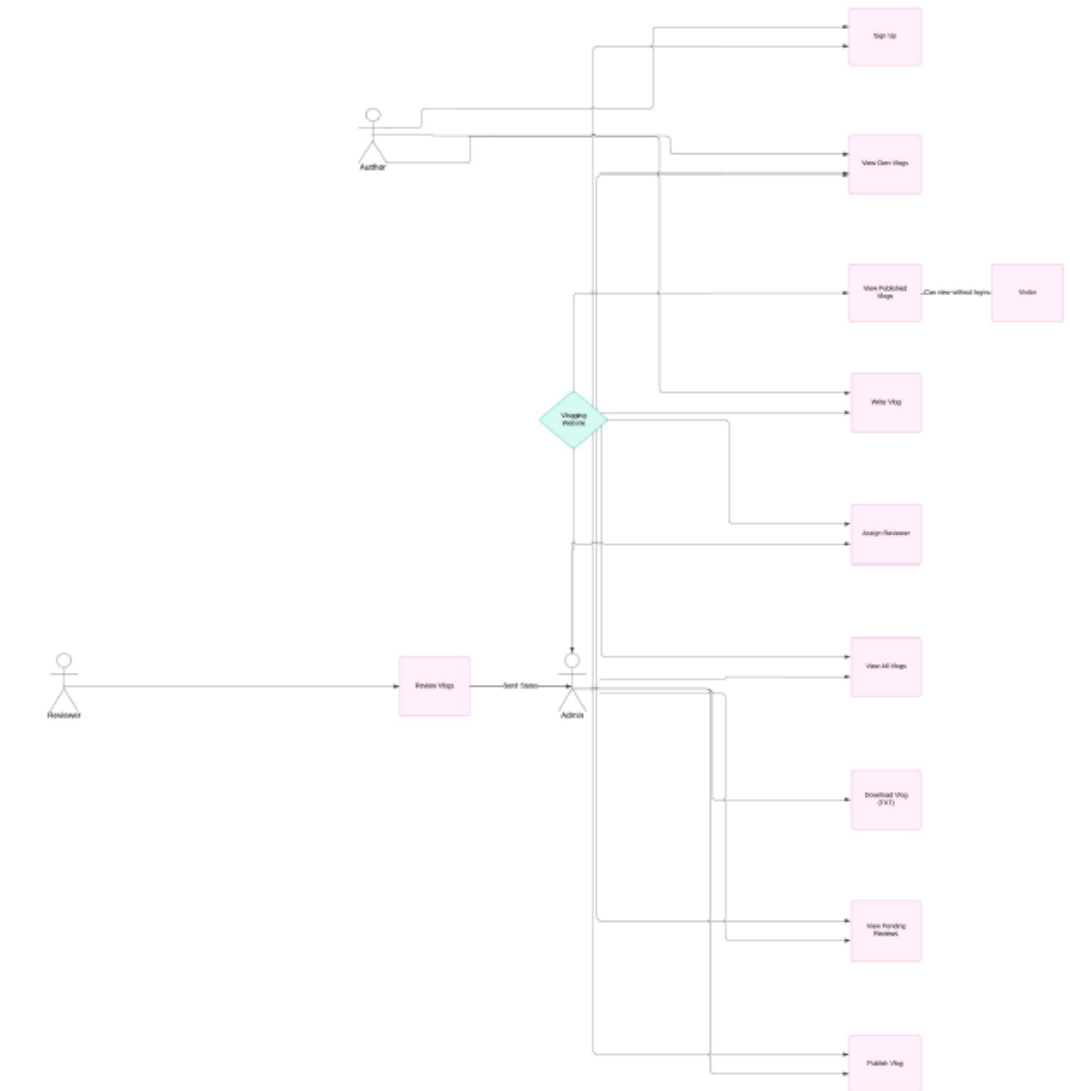
3.2 Non-functional requirement :

- The system shall integrate with an external database to verify reviewer membership, ensuring effective article review.
- The communication between the system and the external database shall be secured using encryption protocols to protect sensitive data.

4) Diagrams:

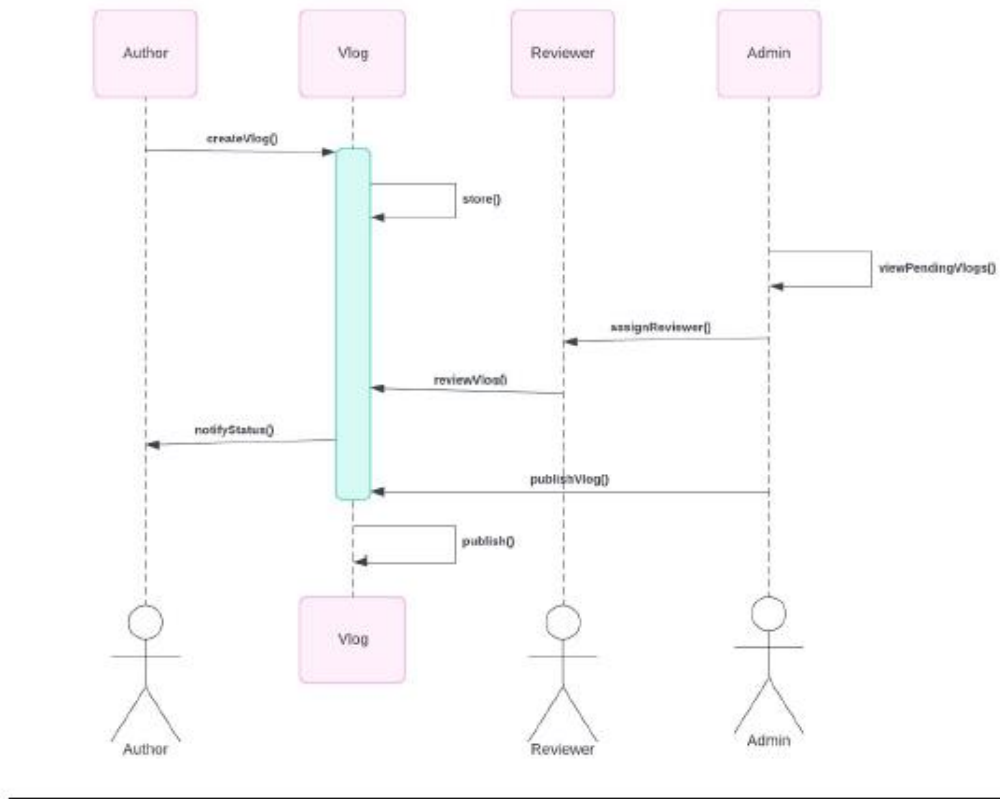
4.1 Use case diagram:

USE CASE DIAGRAM

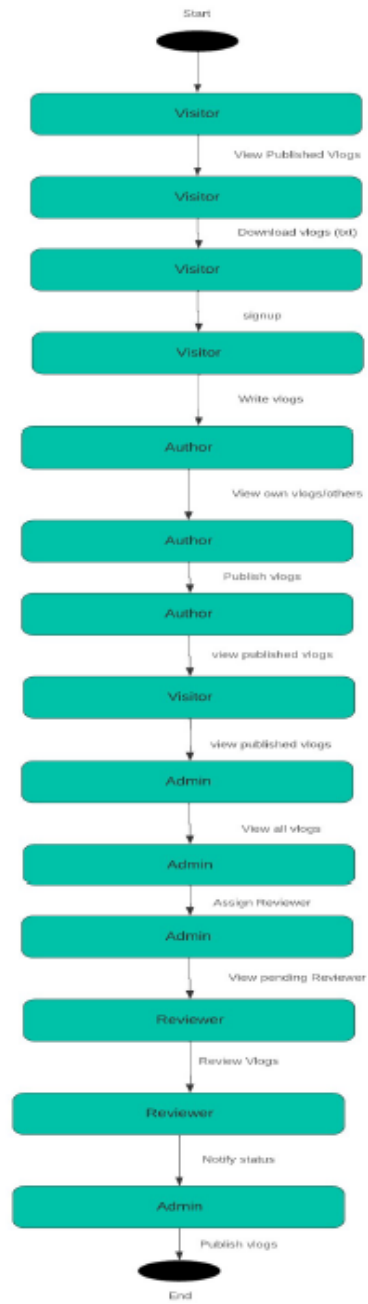


4.2 Sequence Diagram :

SEQUENCE DIAGRAM

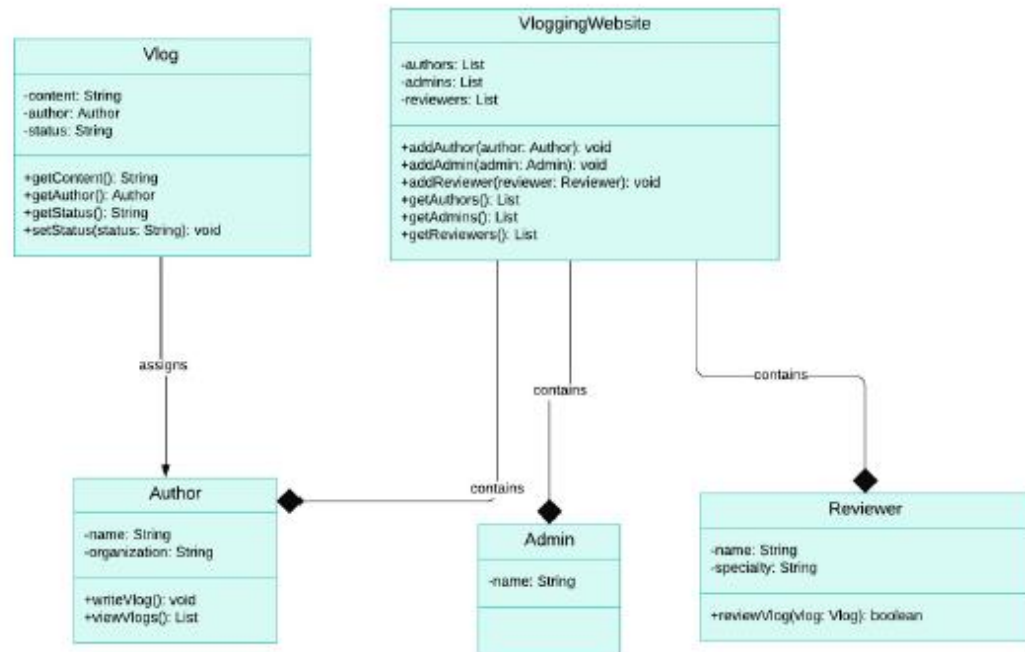


4.3 Activity Diagram :



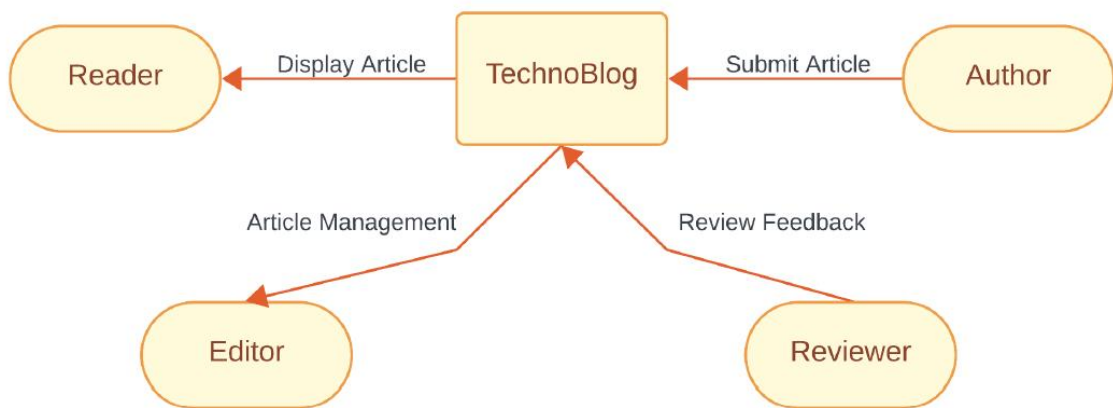
4.4 Class Diagram :

UML CLASS



4.5 Data Flow Diagram :

Level 0



Level 1

