Software Requirements Specification

Version 1.0
<<Annotated Version>>

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Web Publishing System

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Of the requirements of
CS 310 Software Engineering

<<Any comments inside double brackets such as these are *not* part of this SRS but are comments upon this SRS example to help the reader understand the point being made.

Refer to the SRS Template for details on the purpose and rules for each section of this document.

This work is based upon the submissions of the Spring 2004 CS 310. The students who submitted these team projects were Thomas Clay, Dustin Denney, Erjon Dervishaj, Tiffanie Dew, Blake Guice, Jonathan Medders, Marla Medders, Tammie Odom, Amro Shorbatli, Joseph Smith, Jay Snellen, Chase Tinney, and Stefanie Watts. >>

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1.0. Introduction

1.1. Purpose

The purpose of this document is to present a detailed description of the Web Publishing System. 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 and will be proposed to the Regional Historical Society for its approval.

1.2. Scope of Project

This software system will be a Web Publishing System for a local editor of a regional historical society. 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.

1.3. Glossary

Term	Definition
Active Article	The document that is tracked by the system; it is a narrative that is planned to be posted to the public website.
Author	Person submitting an article to be reviewed. In case of multiple authors, this term refers to the *principal author*, with whom all communication is made.
Database	Collection of all the information monitored by this system.
Editor	Person who receives articles, sends articles for review, and makes final judgments for publications.
Field	A cell within a form.
Historical Society Database	The existing membership database (also HS database).
Member	A member of the Historical Society listed in the HS database.
Reader	Anyone visiting the site to read articles.
Review	A written recommendation about the appropriateness of an article for publication; may include suggestions for improvement.
Reviewer	A person that examines an article and has the ability to recommend approval of the article for publication or to request that changes be made in the article.
Software Requirements Specification	A document that completely describes all of the functions of a proposed system and the constraints under which it must operate. For example, this document.
Stakeholder	Any person with an interest in the project who is not a developer.
User	Reviewer or Author.

1.4. References

IEEE. *IEEE Std 830-1998 IEEE Recommended Practice for Software Requirements Specifications.* IEEE Computer Society, 1998.

1.5. Overview of Document

The next chapter, the Overall Description section, of this document gives an overview of the functionality of the product. It describes the informal requirements and is used to establish a context for the technical requirements specification in the next chapter.

The third chapter, Requirements Specification section, of this document is written primarily for the developers and describes in technical terms the details of the functionality of the product.

Both sections of the document describe the same software product in its entirety, but are intended for different audiences and thus use different language.

2.0. Overall Description

2.1 System Environment

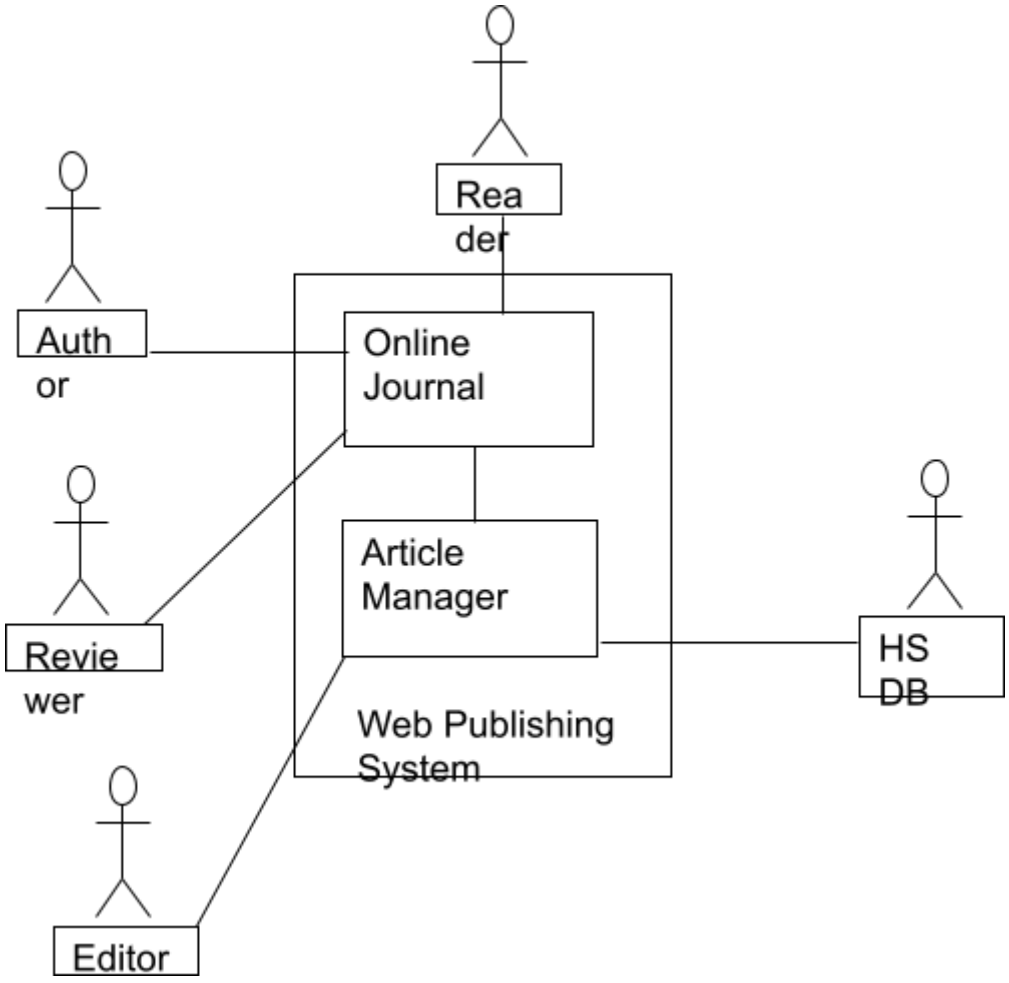


Figure 1 - System Environment

The Web Publishing System has four active actors and one cooperating system. The Author, Reader, or Reviewer accesses the Online Journal through the Internet. Any Author or Reviewer communication with the system is through email. The Editor accesses the entire system directly. There is a link to the (existing) Historical Society.

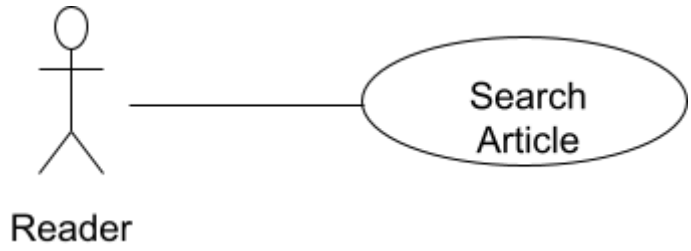
<< The division of the Web Publishing System into two component parts, the Online Journal and the Article Manager, is an example of using domain classes to make an explanation clearer. >>

2.2 Functional Requirements Specification

This section outlines the use cases for each of the active readers separately. The reader, the author and the reviewer have only one use case apiece while the editor is main actor in this system.

2.2.1 Reader Use Case

Use case: **Search Article**
Diagram:



Brief Description
The Reader accesses the Online Journal Website, searches for an article and downloads it to his/her machine.

Initial Step-By-Step Description
Before this use case can be initiated, the Reader has already accessed the Online Journal Website.

1. The Reader chooses to search by author name, category, or keyword.
2. The system displays the choices to the Reader.
3. The Reader selects the article desired.
4. The system presents the abstract of the article to the reader.
5. The Reader chooses to download the article.
6. The system provides the requested article.

Xref: Section 3.2.1, Search Article

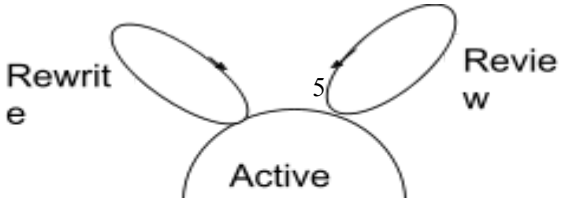


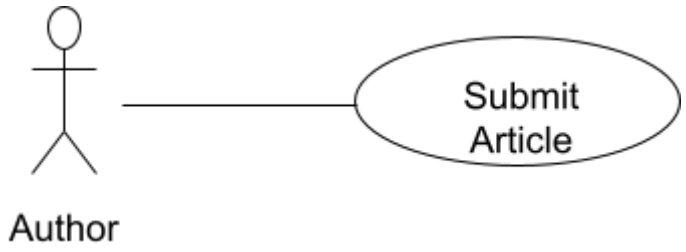
Figure 2 - Article Submission Process

The *Article Submission Process* state-transition diagram summarizes the use cases listed below. An Author submits an article for consideration. The Editor enters it into the system and assigns it to and sends it to at least three reviewers. The Reviewers return their comments, which are used by the Editor to make a decision on the article. Either the article is accepted as written, declined, or the Author is asked to make some changes based on the reviews. If it is accepted, possibly after a revision , the Editor sends a copyright form to the Author. When that form is returned, the article is published to the Online Journal. Not shown in the above is the removal of a declined article from the system.

2.2.2 Author Use Case

In case of multiple authors, this term refers to the *principal author*, with whom all communication is made.

Use case: Submit Article
Diagram:



Brief Description
The author either submits an original article or resubmits an edited article.

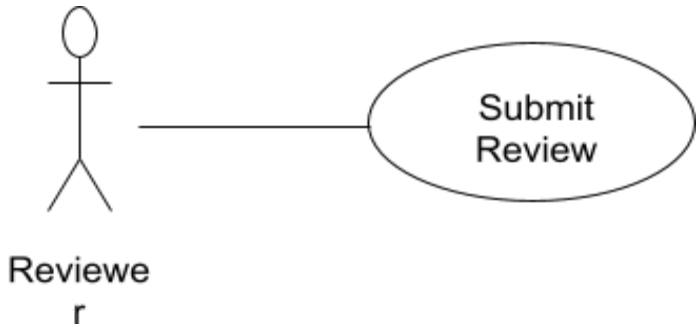
Initial Step-By-Step Description
Before this use case can be initiated, the Author has already connected to the Online Journal Website.

1. The Author chooses the *Email Editor* button.
2. The System uses the *sendto* HTML tag to bring up the user's email system.
3. The Author fills in the Subject line and attaches the files as directed and emails them.
4. The System generates and sends an email acknowledgement.

Xref: Section 3.2.2, Communicate

2.2.3 Reviewer Use Case

Use case: Submit Review
Diagram:



Brief Description
The reviewer submits a review of an article.

Initial Step-By-Step Description
Before this use case can be initiated, the Reviewer has already connected to the Online Journal Website.

1. The Reviewer chooses the *Email Editor* button.
2. The System uses the *sendto* HTML tag to bring up the user's email system.
3. The Reviewer fills in the Subject line and attaches the file as directed and emails it.
4. The System generates and sends an email acknowledgement.

Xref: Section 3.2.2, Communicate

2.2.4 Editor Use Cases

The Editor has the following sets of use cases:

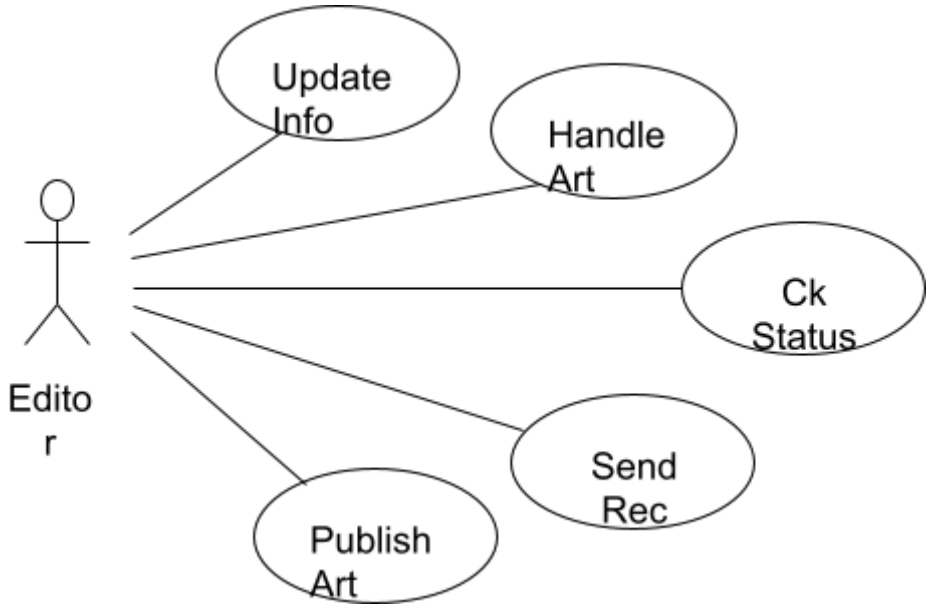
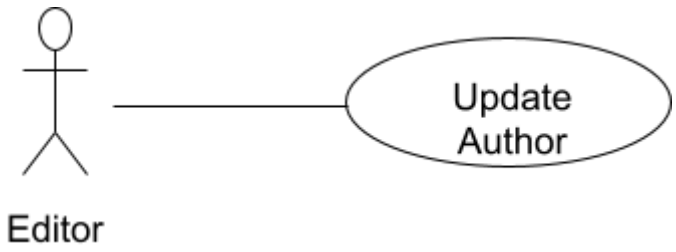


Figure 3 - Editor Use Cases

Update Information use cases

Use case: Update Author

Diagram:



Brief Description

The Editor enters a new Author or updates information about a current Author.

Initial Step-By-Step Description

Before this use case can be initiated, the Editor has already accessed the main page of the Article Manager.

1. The Editor selects to *Add/Update Author*.
2. The system presents a choice of adding or updating.
3. The Editor chooses to add or to update.
4. If the Editor is updating an Author, the system presents a list of authors to choose from and presents a grid filling in with the information; else the system presents a blank grid.

5. The Editor fills in the information and submits the form.
6. The system verifies the information and returns the Editor to the Article Manager main page.

Xref: Section 3.2.3, Add Author; Section 3.2.5 Update Person

Use case: Update Reviewer
Diagram:

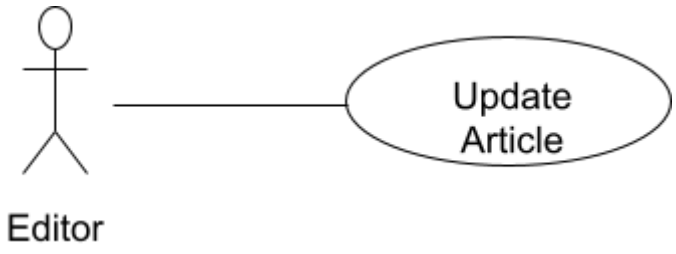
Brief Description
The Editor enters a new Reviewer or updates information about a current Reviewer.

Initial Step-By-Step Description
Before this use case can be initiated, the Editor has already accessed the main page of the Article Manager.

1. The Editor selects to *Add/Update Reviewer*.
2. The system presents a choice of adding or updating.
3. The Editor chooses to add or to update.
4. The system links to the Historical Society Database.
5. If the Editor is updating a Reviewer, the system and presents a grid with the information about the Reviewer; else the system presents list of members for the editor to select a Reviewer and presents a grid for the person selected.
6. The Editor fills in the information and submits the form.
7. The system verifies the information and returns the Editor to the Article Manager main page.

Xref: Section 3.2.4, Add Reviewer; Section 3.2.5, Update Person

Use case: Update Article
Diagram:



Brief Description
The Editor enters information about an existing article.

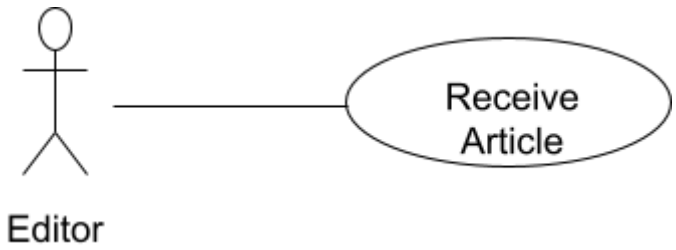
Initial Step-By-Step Description
Before this use case can be initiated, the Editor has already accessed the main page of the Article Manager.

1. The Editor selects to *Update Article*.
2. The system presents s list of active articles.
3. The system presents the information about the chosen article.
4. The Editor updates and submits the form.
5. The system verifies the information and returns the Editor to the Article Manager main page.

Xref: Section 3.2.6, Update Article Status

Handle Article use cases

Use case: Receive Article
Diagram:



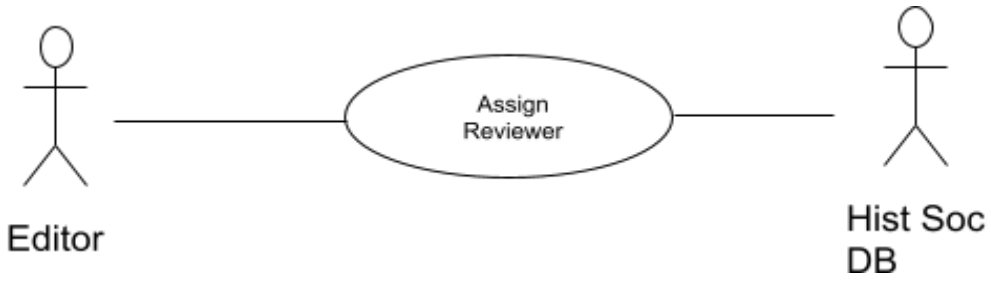
Brief Description
The Editor enters a new or revised article into the system.

Initial Step-By-Step Description
Before this use case can be initiated, the Editor has already accessed the main page of the Article Manager and has a file containing the article available.

1. The Editor selects to *Receive Article*.
2. The system presents a choice of entering a new article or updating an existing article.
3. The Editor chooses to add or to update.
4. If the Editor is updating an article, the system presents a list of articles to choose from and presents a grid for filling with the information; else the system presents a blank grid.
5. The Editor fills in the information and submits the form.
6. The system verifies the information and returns the Editor to the Article Manager main page.

Xref: Section 3.2.7, Enter Communication

Use case: Assign Reviewer
This use case extends the *Update Article* use case.
Diagram:



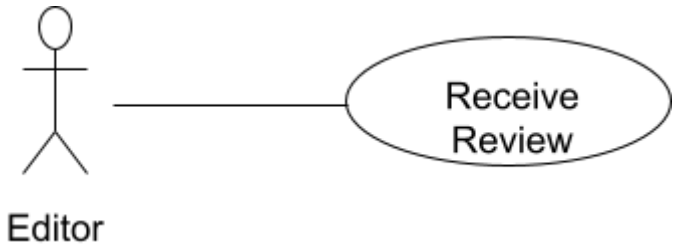
Brief Description
The Editor assigns one or more reviewers to an article.

Initial Step-By-Step Description
Before this use case can be initiated, the Editor has already accessed the article using the *Update Article* use case.

1. The Editor selects to *Assign Reviewer*.
2. The system presents a list of Reviewers with their status (see data description is section 3.3 below).
3. The Editor selects a Reviewer.
4. The system verifies that the person is still an active member using the Historical Society Database.
5. The Editor repeats steps 3 and 4 until sufficient reviewers are assigned.
6. The system emails the Reviewers, attaching the article and requesting that they do the review.
7. The system returns the Editor to the *Update Article* use case.

Xref: Section 3.2.8, Assign Reviewer

Use case: Receive Review
This use case extends the *Update Article* use case.
Diagram:



Brief Description
The Editor enters a review into the system.

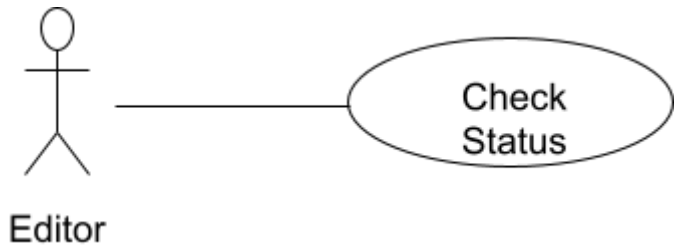
Initial Step-By-Step Description
Before this use case can be initiated, the Editor has already accessed the article using the *Update Article* use case.

1. The Editor selects to *Receive Review*.
2. The system presents a grid for filling with the information.
3. The Editor fills in the information and submits the form.
4. The system verifies the information and returns the Editor to the Article Manager main page.

Xref: Section 3.2.7, Enter Communication

Check Status use case:

Use case: Check Status
Diagram:



Brief Description
The Editor checks the status of all active articles.

Initial Step-By-Step Description
Before this use case can be initiated, the Editor has already accessed the main page of the Article Manager.

1. The Editor selects to *Check Status*.
2. The system returns a scrollable list of all active articles with their status (see data description in section 3.3 below).
3. The system returns the Editor to the Article Manager main page.

Xref: Section 3.2.9, Check Status

Send Recommendation use cases:

Use case: Send Response
This use case extends the *Update Article* use case.

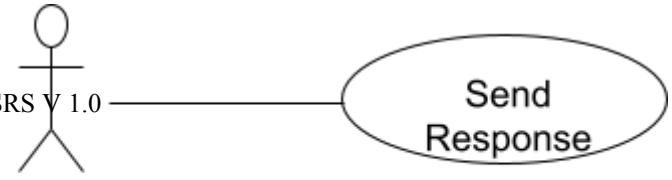


Diagram:

Brief Description
The Editor sends a response to an Author.

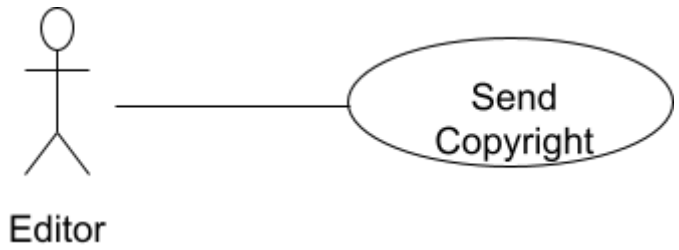
Initial Step-By-Step Description
Before this use case can be initiated, the Editor has already accessed the article using the *Update Article* use case.

1. The Editor selects to *Send Response*.
2. The system calls the email system and puts the Author's email address in the Recipient line and the name of the article on the subject line.
3. The Editor fills out the email text and sends the message.
4. The system returns the Editor to the Article Manager main page.

Xref: Section 3.210, Send Communication

Use case: Send Copyright
This use case extends the *Update Article* use case.

Diagram:



Brief Description
The Editor sends a copyright form to an Author.

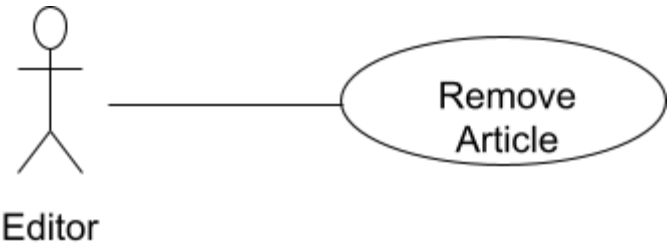
Initial Step-By-Step Description
Before this use case can be initiated, the Editor has already accessed the article using the *Update Article* use case.

1. The Editor selects to *Send Copyright*.
2. The system calls the email system and puts the Author's email address in the Recipient line, the name of the article on the subject line, and attaches the copyright form.
3. The Editor fills out the email text and sends the message.
4. The system returns the Editor to the Article Manager main page.

Xref: Section 3.2.10, Send Communication

Use case: Remove Article
This use case extends the *Update Article* use case.

Diagram:



Brief Description
The Editor removes an article from the active category.

Initial Step-By-Step Description
Before this use case can be initiated, the Editor has already accessed the article using the *Update Article* use case.

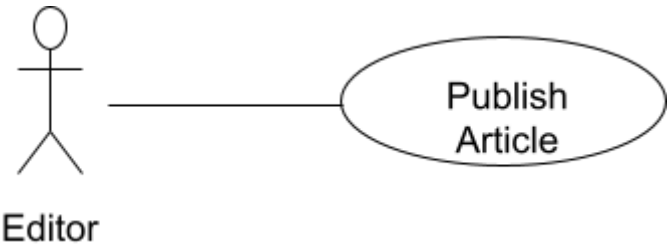
1. The Editor selects to remove an article from the active database.
2. The system provides a list of articles with the status of each.
3. The Editor selects an article for removal.
4. The system removes the article from the active article database and returns the Editor to the Article Manager main page.

Xref: Section 3.2.12, Remove Article

Publish Article use case:

Use case: Publish Article
This use case extends the *Update Article* use case.

Diagram:



Brief Description
The Editor transfers an accepted article to the Online Journal.

Initial Step-By-Step Description
Before this use case can be initiated, the Editor has already accessed the article using the *Update Article* use case.

1. The Editor selects to *Publish Article*.
2. The system transfers the article to the Online Journal and updates the search information there.
3. The system removes the article from the active article database and returns the Editor to the Article Manager home page.

Xref: Section 3.2.11, Publish Article

<< Since three of the actors only have one use case each, the summary diagram only involves the Editor. Adapt the rules to the needs of the document rather than adapt the document to fit the rules. >>

2.3 User Characteristics

The Reader is expected to be Internet literate and be able to use a search engine. The main screen of the Online Journal Website will have the search function and a link to "Author/Reviewer Information."

The Author and Reviewer are expected to be Internet literate and to be able to use email with attachments.

The Editor is expected to be Windows literate and to be able to use button, pull-down menus, and similar tools.

The detailed look of these pages is discussed in section 3.2 below.

2.4 Non-Functional Requirements

The Online Journal will be on a server with high speed Internet capability. The physical machine to be used will be determined by the Historical Society. The software developed here assumes the use of a tool such as Tomcat for connection between the Web pages and the database. The speed of the Reader's connection will depend on the hardware used rather than characteristics of this system.

The Article Manager will run on the editor's PC and will contain an Access database. Access is already installed on this computer and is a Windows operating system.

3.0. Requirements Specification

3.1 External Interface Requirements

The only link to an external system is the link to the Historical Society (HS) Database to verify the membership of a Reviewer. The Editor believes that a society member is much more likely to be an effective reviewer and has imposed a membership requirement for a Reviewer. The HS Database fields of interest to the Web Publishing Systems are member's name, membership (ID) number, and email address (an optional field for the HS Database).

The *Assign Reviewer* use case sends the Reviewer ID to the HS Database and a Boolean is returned denoting membership status. The *Update Reviewer* use case requests a list of member names, membership numbers and (optional) email addresses when adding a new Reviewer. It returns a Boolean for membership status when updating a Reviewer.

3.2 Functional Requirements

The Logical Structure of the Data is contained in Section 3.3.1.

3.2.1 Search Article

Use Case Name	Search Article
XRef	Section 2.2.1, Search Article SDD, Section 7.1
Trigger	The Reader assesses the Online Journal Website
Precondition	The Web is displayed with grids for searching
Basic Path	1. The Reader chooses how to search the Web site. The choices are by Author, by Category, and by Keyword. 2. If the search is by Author, the system creates and presents an alphabetical list of all authors in the database. In the case of an article with multiple authors, each is contained in the list. 3. The Reader selects an author. 4. The system creates and presents a list of all articles by that author in the database.

	5. The Reader selects an article. 6. The system displays the Abstract for the article. 7. The Reader selects to download the article or to return to the article list or to the previous list.
Alternative Paths	In step 2, if the Reader selects to search by category, the system creates and presents a list of all categories in the database. 3. The Reader selects a category. 4. The system creates and presents a list of all articles in that category in the database. Return to step 5. In step 2, if the Reader selects to search by keyword, the system presents a dialog box to enter the keyword or phrase. 3. The Reader enters a keyword or phrase. 4. The system searches the Abstracts for all articles with that keyword or phrase and creates and presents a list of all such articles in the database. Return to step 5.
Postcondition	The selected article is downloaded to the client machine.
Exception Paths	The Reader may abandon the search at any time.
Other	The categories list is generated from the information provided when article are published and not predefined in the Online Journal database.

3.2.2 Communicate

Use Case Name	Communicate
XRef	Section 2.2.2, Submit Article; Section 2.2.3, Submit Review SDD, Section 7.2
Trigger	The user selects a *mailto* link.
Precondition	The user is on the *Communicate* page linked from the Online Journal Main Page.
Basic Path	This use case uses the *mailto* HTML tag. This invokes the client email facility.
Alternative Paths	If the user prefers to use his or her own email directly, sufficient information will be contained on the Web page to do so.
Postcondition	The message is sent.
Exception Paths	The attempt may be abandoned at any time.
Other	None

3.2.3 Add Author

Use Case Name	Add Author
XRef	Section 2.2.4, Update Author SDD, Section 7.3
Trigger	The Editor selects to add a new author to the database.
Precondition	The Editor has accessed the Article Manager main screen.

Basic Path	1. The system presents a blank grid to enter the author information. 2. The Editor enters the information and submits the form. 3. The system checks that the name and email address fields are not blank and updates the database.
Alternative Paths	If in step 2, either field is blank, the Editor is instructed to add an entry. No validation for correctness is made.
Postcondition	The Author has been added to the database.
Exception Paths	The Editor may abandon the operation at any time.
Other	The author information includes the name mailing address and email address.

3.2.4 Add Reviewer

Use Case Name	Add Reviewer
XRef	Section 2.2.4, Update Reviewer SDD, Section 7.4
Trigger	The Editor selects to add a new reviewer to the database.
Precondition	The Editor has accessed the Article Manager main screen.
Basic Path	1. The system accesses the Historical Society (HS) database and presents an alphabetical list of the society members. 2. The Editor selects a person. 3. The system transfers the member information from the HS database to the Article Manager (AM) database. If there is no email address in the HS database, the editor is prompted for an entry in that field. 4. The information is entered into the AM database.
Alternative Paths	In step 3, if there is no entry for the email address in the HS database or on this grid, the Editor will be reprompted for an entry. No validation for correctness is made.
Postcondition	The Reviewer has been added to the database.
Exception Paths	The Editor may abandon the operation at any time.
Other	The Reviewer information includes name, membership number, mailing address, categories of interest, and email address.

3.2.5 Update Person

Use Case Name	Update Person
XRef	Sec 2.2.4 Update Author; Sec 2.2.4 Update Reviewer SDD, Section 7.5
Trigger	The Editor selects to update an author or reviewer and the person is already in the database.
Precondition	The Editor has accessed the Article Manager main screen.
Basic Path	1. The Editor selects Author or Reviewer. 2. The system creates and presents an alphabetical list of people in the category.

	3. The Editor selects a person to update. 4. The system presents the database information in grid form for modification. 5. The Editor updates the information and submits the form. 6. The system checks that required fields are not blank.
Alternative Paths	In step 5, if any required field is blank, the Editor is instructed to add an entry. No validation for correctness is made.
Postcondition	The database has been updated.
Exception Paths	If the person is not already in the database, the use case is abandoned. In addition, the Editor may abandon the operation at any time.
Other	This use case is not used when one of the other use cases is more appropriate, such as to add an article or a reviewer for an article.

3.2.6 Update Article Status

Use Case Name	Update Article Status
XRef	Section 2.2.4, Update Article SDD, Section 7.6
Trigger	The Editor selects to update the status of an article in the database.
Precondition	The Editor has accessed the Article Manager main screen and the article is already in the database.
Basic Path	1. The system creates and presents an alphabetical list of all active articles. 2. The Editor selects the article to update. 3. The system presents the information about the article in grid format. 4. The Editor updates the information and resubmits the form.
Alternative Paths	In step 4, the use case *Enter Communication* may be invoked.
Postcondition	The database has been updated.
Exception Paths	If the article is not already in the database, the use case is abandoned. In addition, the Editor may abandon the operation at any time.
Other	This use case can be used to add categories for an article, to correct typographical errors, or to remove a reviewer who has missed a deadline for returning a review. It may also be used to allow access to the named use case to enter an updated article or a review for an article.

3.2.7 Enter Communication

Use Case Name	Enter Communication
XRef	Section 2.2.4, Receive Article; Section 2.2.4, Receive Review SDD, Section 7.7
Trigger	The Editor selects to add a document to the system.

Precondition	The Editor has accessed the Article Manager main screen and has the file of the item to be entered available.
Basic Path	1. The Editor selects the article using the *3.2.6, Update Article Status* use case. 2. The Editor attaches the file to the grid presented and updates the respective information about the article. 3. When the Editor updates the article status to indicate that a review is returned, the respective entry in the Reviewer table is updated.
Alternative Paths	None
Postcondition	The article entry is updated in the database.
Exception Paths	The Editor may abandon the operation at any time.
Other	This use case extends *3.2.6, Update Article Status*

3.2.8 Assign Reviewer

Use Case Name	Assign Reviewer
XRef	Section 2.2.4, Assign Reviewer SDD, Section 7.8
Trigger	The Editor selects to assign a reviewer to an article.
Precondition	The Editor has accessed the Article Manager main screen and the article is already in the database. .
Basic Path	1. The Editor selects the article using the *3.2.6, Update Article Status* use case. 2. The system presents an alphabetical list of reviewers with their information. 3. The Editor selects a reviewer for the article. 4. The system updates the article database entry and emails the reviewer with the standard message and attaches the text of the article without author information. 5. The Editor has the option of repeating this use case from step 2.
Alternative Paths	None.
Postcondition	At least one reviewer has been added to the article information and the appropriate communication has been sent.
Exception Paths	The Editor may abandon the operation at any time.
Other	This use case extends *3.2.6, Update Article Status.* The Editor, prior to implementation of this use case, will provide the message text.

3.2.9 Check Status

Use Case Name	Check Status
XRef	Section 2.2.4, Check Status SDD, Section 7.9
Trigger	The Editor has selected to check status of all active articles.
Precondition	The Editor has accessed the Article Manager main screen.

Basic Path	1. The system creates and presents a list of all active articles organized by their status. 2. The Editor may request to see the full information about an article.
Alternative Paths	None.
Postcondition	The requested information has been displayed.
Exception Paths	The Editor may abandon the operation at any time.
Other	The editor may provide an enhanced list of status later. At present, the following categories must be provided: 1. Received but no further action taken 2. Reviewers have been assigned but not all reviews are returned (include dates that reviewers were assigned and order by this criterion). 3. Reviews returned but no further action taken. 4. Recommendations for revision sent to Author but no response as of yet. 5. Author has revised article but no action has been taken. 6. Article has been accepted and copyright form has been sent. 7. Copyright form has been returned but article is not yet published. A published article is automatically removed from the active article list.

3.2.10 Send Communication

Use Case Name	Send Communication
XRef	Section 2.2.4, Send Response; Section 2.2.4, Send Copyright SDD, Section 7.10
Trigger	The editor selects to send a communication to an author.
Precondition	The Editor has accessed the Article Manager main screen.
Basic Path	1. The system presents an alphabetical list of authors. 2. The Editor selects an author. 3. The system invokes the Editor's email system entering the author's email address into the *To:* entry. 4. The Editor uses the email facility.
Alternative Paths	None.
Postcondition	The communication has been sent.
Exception Paths	The Editor may abandon the operation at any time.
Other	The standard copyright form will be available in the Editor's directory for attaching to the email message, if desired.

3.2.11 Publish Article

Use Case Name	Publish Article
XRef	Section 2.2.4, Publish Article SDD, Section 7.11

Trigger	The Editor selects to transfer an approved article to the Online Journal.
Precondition	The Editor has accessed the Article Manager main screen.
Basic Path	1. The system creates and presents an alphabetical list of the active articles that are flagged as having their copyright form returned. 2. The Editor selects an article to publish. 3. The system accesses the Online Database and transfers the article and its accompanying information to the Online Journal database. 4. The article is removed from the active article database.
Alternative Paths	None.
Postcondition	The article is properly transferred.
Exception Paths	The Editor may abandon the operation at any time.
Other	Find out from the Editor to see if the article information should be archived somewhere.

3.2.12 Remove Article

Use Case Name	Remove Article
XRef	Section 2.2.4, Remove Article SDD, Section 7.12
Trigger	The Editor selects to remove an article from the active article database.
Precondition	The Editor has accessed the Article Manager main screen.
Basic Path	1. The system provides an alphabetized list of all active articles. 2. The editor selects an article. 3. The system displays the information about the article and requires that the Editor confirm the deletion. 4. The Editor confirms the deletion.
Alternative Paths	None.
Postcondition	The article is removed from the database.
Exception Paths	The Editor may abandon the operation at any time.
Other	Find out from the Editor to see if the article and its information information should be archived somewhere.

3.3 Detailed Non-Functional Requirements

3.3.1 Logical Structure of the Data

The logical structure of the data to be stored in the internal Article Manager database is given below.

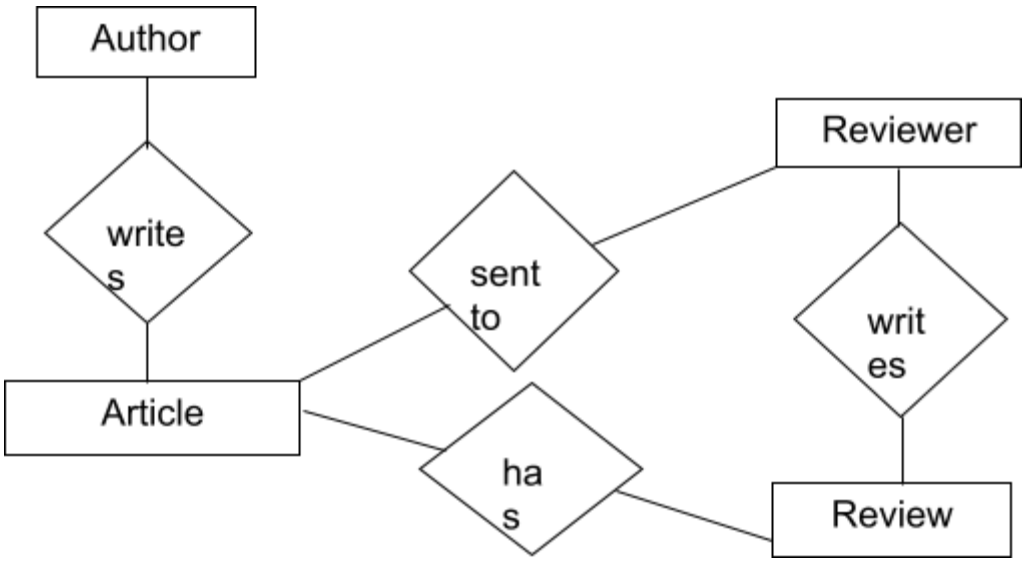


Figure 4 - Logical Structure of the Article Manager Data

The data descriptions of each of these data entities is as follows:

Author Data Entity

Data Item	Type	Description	Comment
Name	Text	Name of principle author	
Email Address	Text	Internet address	
Article	Pointer	Article entity	May be several

Reviewer Data Entity

Data Item	Type	Description	Comment
Name	Text	Name of principle author	
ID	Integer	ID number of Historical Society member	Used as key in Historical Society Database
Email Address	Text	Internet address	
Article	Pointer	Article entity of	May be several
Num Review	Integer	Review entity	Number of not returned reviews
History	Text	Comments on past performance	
Specialty	Category	Area of expertise	May be several

Review Data Entity

Data Item	Type	Description	Comment
Article	Pointer	Article entity	
Reviewer	Pointer	Reviewer entity	Single reviewer
Date Sent	Date	Date sent to reviewer	

Returned	Date	Date returned; null if not returned	
Contents	Text	Text of review	

Article Data Entity

Data Item	Type	Description	Comment
Name	Text	Name of Article	
Author	Pointer	Author entity	Name of principle author
Other Authors	Text	Other authors is any; else null	Not a pointer to an Author entity
Reviewer	Pointer	Reviewer entity	Will be several
Review	Pointer	Review entity	Set up when reviewer is set up
Contents	Text	Body of article	Contains Abstract as first paragraph.
Category	Text	Area of content	May be several
Accepted	Boolean	Article has been accepted for publication	Needs Copyright form returned
Copyright	Boolean	Copyright form has been returned	Not relevant unless Accepted is True.
Published	Boolean	Sent to Online Journal	Not relevant unless Accepted is True. Article is no longer active and does not appear in status checks.

The Logical Structure of the data to be stored in the Online Journal database on the server is as follows:

Published Article Entity

Data Item	Type	Description	Comment
Name	Text	Name of Article	
Author	Text	Name of one Author	May be several
Abstract	Text	Abstract of article	Used for keyword search
Content	Text	Body of article	
Category	Text	Area of content	May be several

3.3.2 Security

The server on which the Online Journal resides will have its own security to prevent unauthorized *write*/*delete* access. There is no restriction on *read* access. The use

of email by an Author or Reviewer is on the client systems and thus is external to the system.

The PC on which the Article Manager resides will have its own security. Only the Editor will have physical access to the machine and the program on it. There is no special protection built into this system other than to provide the editor with *write* access to the Online Journal to publish an article.

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