Detailed Requirements Model using Use Cases

for

SAMS2024

Version 2.0 approved
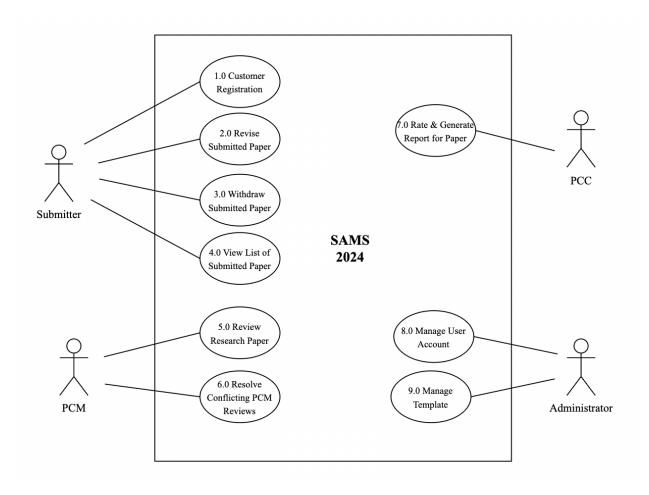
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USE CASE DIAGRAM

Use case diagram for SAMS 2024 showing actors Submitter, PCM, PCC, and Administrator with use cases: 1.0 Customer Registration, 2.0 Revise Submitted Paper, 3.0 Withdraw Submitted Paper, 4.0 View List of Submitted Paper, 5.0 Review Research Paper, 6.0 Resolve Conflicting PCM Reviews, 7.0 Rate & Generate Report for Paper, 8.0 Manage User Account, 9.0 Manage Template.

USE CASE LIST

Primary Actor	Use Cases
Submitter	1.0 Submit Research Paper
Submitter	2.0 Revise Submitted Paper
Submitter	3.0 Withdraw Submitted Paper
Submitter	4.0 View List of Submitted Papers
PCM	5.0 Review Research Paper
PCM	6.0 Resolve Conflicting PCM Reviews
PCC	7.0 Rate & Generate Report for Paper
Administrator	8.0 Manage User Account
Administrator	9.0 Manage Template
User	10.0 User Login

Use Case ID:	1.0		
Use Case Name:	Submit Research Paper		
Created By:	Swetha (ss5743)	Last Updated By:	Swetha (ss5743)
Date Created:	27 September, 2023	Date Last Updated:	25 October, 2023

Actors:	Submitter
Description:	A Submitter can submit their research paper to SAMS2024
Trigger:	The Submitter wants to submit their research paper
Preconditions:	· Submitter is registered in the SAMS2024 system · Submitter is aware of how to use SAMS2024 system
Postconditions:	The research paper is submitted successfully.
Normal Flow:	**1.1 Submitter submits research paper** 1.1.1 The system displays the login page 1.1.2 Follows Use Case 10.0 (User Login) 1.1.3 The system verifies the login information and provides access to the Submitter's dashboard. 1.1.4 The Submitter selects the option to submit a new paper. 1.1.5 The system displays the paper submission form. 1.1.6.The Submitter fills out the paper information template and uploads the research paper. 1.1.7 The system checks for document format, completeness, and compliance with guidelines. 1.1.8 The system shows successful submission 1.1.9 The system sends a notification to the PCC about the successful submission.
Alternative Flows:	**1.2 Submission deadline has passed** 1.2.7 The system detects the expired deadline. 1.2.8 The system notifies the Submitter that the deadline has passed, and they cannot submit their paper. 1.2.9 The system does not save the submission. **1.3 Paper verification fails** 1.3.7 If the verification fails (e.g, incorrect format or incomplete submission), the system displays an error message and requests corrections. 1.3.8 The Submitter makes necessary corrections and resubmits the paper for verification. 1.3.9 Use Case follows step 1.1.7
Exceptions:	If technical issues occur during the submission process (e.g., server errors or network problems)
Priority:	High

Use Case ID:	2.0		
Use Case Name:	Revise Submitted Paper		
Created By:	Swetha (ss5743)	Last Updated By:	Swetha (ss5743)
Date Created:	27 September, 2023	Date Last Updated:	25 October, 2023

Actors:	Submitter
Description:	A Submitter can edit a paper they've previously submitted. SAMS2024 does not support direct document editing, but it allows Submitters to upload revised versions of papers.
Trigger:	The Submitter wants to edit their submitted research paper
Preconditions:	· Submitter is registered in the SAMS2024 system · Submitter is aware of how to use SAMS2024 system · Submitter has submitted a research paper
Postconditions:	The edited version of the research paper is saved successfully and is available for review
Normal Flow:	**2.1 Submitter revises/re-uploads a submitted paper** 2.1.1 The system displays the login page. 2.1.2 Follows Use Case 10.0 (User Login) 2.1.3 The system verifies the login information and provides access to the Submitter's dashboard. 2.1.4 The Submitter requests the system (clicks on the option to) to view their list of submitted research papers. 2.1.5 The system displays a list of the Submitter's submitted papers. 2.1.6 The Submitter selects the option to revise the selected research paper. 2.1.7 The system requests to upload the updated version of the paper 2.1.8 The Submitter uploads the revised research paper and updates the paper information template. 2.1.9 The system checks for document format, completeness, and compliance with guidelines. 2.1.10 The system sends a notification to the PCC on successful version update. 2.1.11 The system confirms to the Submitter that the new version has been accepted.
Alternative Flows:	**2.2 Submission deadline has passed** 2.2.9 The system detects the expired deadline. 2.2.10 The system notifies the Submitter that the deadline has passed, and they cannot re-submit their paper. 2.2.11 The system does not save the updated submission. **2.3 Paper verification fails**

	2.3.10 If the verification fails (e.g, incorrect format or incomplete submission), the system displays an error message and requests corrections. 2.3.11 The Submitter makes necessary corrections and resubmits the paper for verification. 2.3.12 Use Case follows step 2.1.9
Exceptions:	If technical issues occur during the submission process (e.g., server errors or network problems)
Priority:	High
*Supplemental Information:	Frequency of Use: A paper can be submitted multiple times in a given submission period.

Use Case ID:	3.0		
Use Case Name:	Withdraw Submitted Paper		
Created By:	Swetha (ss5743)	Last Updated By:	Swetha (ss5743)
Date Created:	27 September, 2023	Date Last Updated:	25 October, 2023

Actors:	Submitter
Description:	A Submitter can withdraw a research paper that they have previously submitted, but this action is only possible before the submission deadline.
Trigger:	The Submitter wants to withdraw their paper submission
Preconditions:	· Submitter is registered in the SAMS2024 system · Submitter is aware of how to use SAMS2024 system · Submitter has submitted a research paper
Postconditions:	The research paper is marked as withdrawn and is no longer considered for review.
Normal Flow:	**3.1 The Submitter withdraws a paper** 3.1.1 The system displays the login page. 3.1.2 Follows Use Case 10.0 (User Login) 3.1.3 The system verifies the login information and provides access to the Submitter's dashboard. 3.1.4 The Submitter requests the system (clicks on the option to) to view their list of submitted research papers.. 3.1.5 The system displays a list of the Submitter's submitted papers. 3.1.6 The Submitter selects the desired research paper to be withdrawn from review consideration. 3.1.7 The Submitter requests the system to withdraw a paper. 3.1.8 The system displays a confirmation for the Submitter to initiate the withdrawal process. 3.1.9 The Submitter selects the option to confirm 3.1.10 The system updates the status of the selected paper as

	"Withdrawn."
	3.1.11 The system informs the PCC about the withdrawal.
	3.1.12 The system notifies the Submitter that the paper has been successfully withdrawn.
Alternate Flows	**3.2 Submission deadline has passed** 3.2.1 The system notifies the Submitter that the deadline has passed, and they cannot withdraw their paper. 3.2.2 The system does not process the withdrawal request.
Exception	This is the Withdraw use case, and withdrawal is only possible after choosing to withdraw and before the submission deadline.
Priority:	High

Use Case ID:	4.0		
Use Case Name:	View List of Submitted Papers		
Created By:	Swetha (ss5743)	Last Updated By:	Swetha (ss5743)
Date Created:	27 September, 2023	Date Last Updated:	25 October, 2023

Actors:	Submitter
Description:	A Submitter can view a list of all the research papers they have submitted on the system
Trigger:	Submitter requests to view their submitted papers
Preconditions:	· Submitter is registered in the SAMS2024 system · Submitter is aware of how to use SAMS2024 system
Postconditions:	The system displays a list of the submitted research papers by the Submitter
Normal Flow:	**4.1. Submitter views their submitted papers** 4.1.1 The system displays the login page. 4.1.2 Follows Use Case 10.0 (User Login) 4.1.3 The system verifies the login information and provides access to the Submitter's dashboard. 4.1.4 The Submitter requests the system (clicks on the option to) to view their list of submitted research papers. 4.1.5 The system shows a comprehensive list of all the research papers previously submitted by the Submitter.
Alternative Flows:	**4.2 No submitted research papers.** 4.2.5 The system recognizes that the Submitter has not submitted any research papers. 4.2.6 The system displays an empty list, indicating that no papers have been submitted by the Submitter.
Priority:	High

Use Case ID:	5.0		
Use Case Name:	Review Research Paper		
Created By:	Rohini (rv8542)	Last Updated By:	Rohini (rv8542)
Date Created:	26 September, 2023	Date Last Updated:	24 October, 2023

Actors:	PCM, PCC
Description:	The PCM reviews a submitted paper that is assigned to them, and submits their review for it
Trigger:	PCM is notified by PCC that there are papers available for review
Preconditions:	· At least one paper is available for review · Review Template is available in the system · PCM is not provided with the choice to choose to review a paper they authored/submitted
Postconditions:	PCC is notified about review submission
Normal Flow:	**5.1 PCM Submits Review** 5.1.1 The PCM logs in following Use Case 10.0 (User Login) 5.1.2 The PCM is notified from the system on the availability of papers to review 5.1.3 The PCM clicks on available papers and the system displays the list of available papers to review 5.1.4 The PCM chooses the papers they would like to review based on the paper's research topic and domain 5.1.5 The system notifies the PCC on the PCM's review preferences 5.1.6 The PCC assigns a paper to the PCM (based on preference) with a deadline to submit their review. 5.1.7 The system notifies the PCM on the expected review submission 5.1.8 The PCM requests the review template from the system to consolidate their review 5.1.9 The system provides the PCM with a review template 5.1.10 The PCM drafts and submits their review
Alternative Flows:	**5.2 Review deadline has passed** 5.2.9 The system reminds the PCM to review their assigned paper if the deadline has passed and **5.3 Conflicts in submitted review** Follows Use Case: 6.0
Exceptions:	The PCM does not choose any papers to review since the review preferences of the papers doesn't match their profile
*Includes:	N/A
Priority:	High

Use Case ID:	6.0		
Use Case Name:	Resolve Conflicting PCM Reviews		
Created By:	Rohini (rv8542)	Last Updated By:	Rohini (rv8542)
Date Created:	26 September, 2023	Date Last Updated:	26 October, 2023

Actors:	PCM, PCC
Description:	The PCM resolves the conflicting reviews submitted for their assigned paper through re-evaluation.
Trigger:	PCM is notified by PCC that there are conflicting reviews
Preconditions:	· The PCC decides the reviews present conflicting views · PCM has access to read other reviews submitted on their assigned paper
Postconditions:	Conflicting reviews on the paper are resolved
Normal Flow:	**6.1 PCM resolves conflicting reviews** 6.1.1 The system displays the login page. 6.1.2 Follows Use Case 10.0 (User Login) 6.1.3 The PCM is able to view and click the notification from PCC about conflicting review on a research paper 6.1.4 The system displays the research papers with all the reviews submitted for it 6.1.5 The PCM reads and accesses the other reviews submitted for the research paper 6.1.6 The PCMs discuss their views and opinions with each other to re-evaluate their reviews. 6.1.7 The PCM edits and submits the modified review for the paper. 6.1.8 The PCC is notified about the modification in review
Alternative Flows:	N/A
Exceptions:	The PCMs disagree with each other and do not come to a unanimous review/opinion
*Includes:	N/A
Priority:	High

Use Case ID:	7.0		
Use Case Name:	Rate & Generate Report for Paper		
Created By:	Soudagar (srl1622)	Last Updated By:	Soudagar (srl1622)
Date Created:	27th September, 2023	Date Last Updated:	24th October, 2023

Actors:	Submitter, PCC, PCM
Description:	The PCC rates the paper based on the collected reviews and generates a report for the submitted paper.
Trigger:	PCC receives notification when the submitter submits their paper
Preconditions:	· At least one paper is submitted by the submitter. · Review template is available.
Postconditions:	Paper has a rating and PCC has generated a report
Normal Flow:	7.1.1 The PCC receives a notification on submission of a research paper by a Submitter 7.1.2 The PCC notifies all PCMs about availability of papers to review 7.1.3 PCM selects the review preferences and PCC goes over all PCM paper selections, and assigns three PCMs to the paper

	7.1.4 PCMs submits the review and the PCC goes over the submitted reviews 7.1.5 The PCC submits a rating for the paper based on reviews given by PCM on the scale of 1-5. Paper can be accepted with modifications or rejected. 7.1.6 The PCC generates a report describing reviews received and rating.
Alternative Flows:	**Conflicts in PCM reviews** 7.2.5 The PCC notices conflicting reviews and notifies the PCMs to re-evaluate and modify their reviews Go to step 7.14
Priority:	High

Use Case ID:	8.0		
Use Case Name:	Manage User Account		
Created By:	Stacy (sms7705)	Last Updated By:	Stacy (sms7705)
Date Created:	26 September, 2023	Date Last Updated:	24 October, 2023

Actors:	Administrator
Description:	Administer has the ability to change account details of existing user accounts.
Trigger:	A request is made for an account to be modified
Preconditions:	A user has logged into SAM2024 with the Administrator role
Postconditions:	Details for an existing account on SAM2024 have been modified
Normal Flow:	**8.1 Admin Makes modifications to an account** 8.1.1 Administrator selects an account to be modified 8.1.2 Administrator submits modifications to selected account 8.1.3 Administrator is notified account is modified
Alternative Flows:	**8.2 Add A User Account** 8.2.1. Administrator selects add user account 8.2.2 Administrator submits new account details 8.2.3 Administrator is notified account has been added to SAM2024 **8.3 Delete A User Account** 8.3.1 Start at UC 7.1.1 8.3.2. Administrator deletes account 8.3.3 Administrator is notified account is deleted **8.4 Account does not exist** 8.4.1 Start at UC 7.1.1 8.4.2 Administrator notified account does not exist
Exceptions:	
*Includes:	N/A
Priority:	High
*Supplemental Information:	Details could include account role, login credentials. Administrators can handle requests from User accounts or from external sources that require account additions/deletion modifications.

Use Case ID:	9.0		
Use Case Name:	Manage Template		
Created By:	Stacy (sms7705)	Last Updated By:	Stacy (sms7705)
Date Created:	26 September, 2023	Date Last Updated:	24 October, 2023

Actors:	Administrator
Description:	Admin configures details for a template.
Trigger:	A request is made for a template
Preconditions:	A user has logged into SAMS2024 with the Administrator role
Postconditions:	A template is configured for a review
Normal Flow:	**9.1 Add New Template for Notification** 9.1.1 Administrator selects add new template. 9.1.2 Administrator then submits details for the template. 9.1.3 Administrator is notified that the template is added.
Alternative Flows:	**9.2 Template for Notification for A Review/Paper** 9.2.1 See UC 9.1.1 9.3 **Template Already Exists** 9.3.1 Administrator selects an existing template 9.3.2 Administrator submits modifications for the template 9.3.3 Administrator is notified template modifications applied
Priority:	High
*Supplemental Information:	**Details for Notification:** Needs to be refined by stakeholder/design team, likely a string with details such as actions that have been completed/applied in the system, notifications prompting a user to act, notifications regarding deadlines within the system. **Details for Review:** Needs to be refined by the stakeholder/design team, likely a form with fields necessary in submitting or reviewing a paper.

Use Case ID:	10.0		
Use Case Name:	User Login		
Created By:	Stacy(sms7705)	Last Updated By:	Stacy(sms7705)
Date Created:	27 September, 2023	Date Last Updated:	26 October, 2023

Actors:	User, Administrator
Description:	User logs into SAMS2024
Trigger:	N/A
Preconditions:	User needs to use SAMS2024
Postconditions:	User is now logged into the SAMS2024 System
Normal Flow:	**10.1 Credential Entry** 10.1.1 User enters credentials 10.1.2 Credentials are validated 10.1.3 User is given access to the SAMS2024 System
Alternative Flows:	**10.2 Invalid Login** 10.2.1 Start at UC 10.1.1

	10.2.2 Credentials are invalidated 10.2.3 User notified credentials are invalid 10.2.1 Return to UC. 10.2.1 **10.3 No Account** 10.3.1 User requests an account 10.3.2 Administrator creates an account for new User (UC 8.3) 10.3.3 User is notified of account creation 10.3.4 Return to 10.1.1
Exceptions:	N/A
*Includes:	N/A
Priority:	High
*Supplemental Information:	User (Any Role : Administrator, PCM, PCC, Submitter) **Credentials** will be a form of authentication decided within the design/stakeholder team, likely for the first implementation it will be a username/userid and password. The details of credentials would need further refinement.

REVISION HISTORY

Name	Date	Reason For Changes	Version
Rohini	09/26	Adding new use cases for PCM	0.1
Stacy	09/26	Adding new use case for ADMINISTRATOR	0.2
Stacy	09/27	Updated ADMINISTRATOR, added LOGIN, Added Use Case models for Normal Flow for both	0.3
Swetha	09/27	Add use cases for submitter	0.4
Soudagar	09/27	Add use cases for PCC	0.5
Rohini	09/27	Fix alignments and use case typos	0.6
Swetha, Rohini, Stacy	10/22	We removed user and requestor from our actor modeling list, these were better defined for specific responsibilities and expectations when we keep them as PCM, PCC, Administrator, Author and Submitter. This was done after analyzing feedback from stakeholders (Professor Hawker). Re-enumerate, resolve personal sections based on input.	0.7
Rohini	10/25	Created new document for detailed requirements model using use cases (removed actor modeling)	2.0
Stacy	10/25	Rework of Login and Manage Template, Manage User Account	2.0
Swetha	10/25	Updated the use cases for submitter according to the feedback provided	2.0
Rohini	10/26	Updated use cases for PCM according to feedback and added use case diagram	2.0
Stacy	10/26	Added Apendix	2.0

APPENDIX A

Credential	Requirements
Username	1. Email 2. Endings (.edu, .com)
Password	1. Alphanumeric, symbols 2. minimum 1 symbol 3. minimum 8 characters 4. minimum 2 capital letters

Paper Template	Requirements
Format	.pdf,. doc
Topic	Text/String
Abstract	Text/String/Boolean
Title	Text/String/Boolean
Introduction	Text/String/Boolean
Objectives	Text/String
Methods	Text/String
Results Findings	Text/String
Discussions of Findings	Text/String
Conclusions	Text/String
Recommendations	Text/String
Acknowledgements	Text/String
Problem Statement	Text/String
Literature Review	Text/String
Funding Footnote	Text/String

Rating Template	Requirements
Parameters	
Novelty	Ranking (1-5)
Originality	Ranking (1-5)
Methodology	Ranking (1-5)
Soundness	Ranking (1-5)
Clarity	Ranking (1-5)
Coherence	Ranking (1-5)

Significance	Ranking (1-5)
Comments	String/Text
Suggestions	String/Text
Final Rating	Ranking (1-5)
Ranking	1 - Poor
	2 - Fair
	3 - Average
	4 - Good
	5 - Exceptional

Notification Template	
Text	Text/String
Type	Warning, Error, General Info, Condition/Status

User Account Roles	
Administrator	Value (integer/enumeration) identifying role
Submitter	Value (integer/enumeration) identifying role
PCC	Value (integer/enumeration) identifying role
PCM	Value (integer/enumeration) identifying role