PROJECT MANAGEMENT SYSTEM FOR FINAL YEAR STUDENTS

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Supervised by: Dr. Onaiza Maqbool

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Masooma Muhammadi	Team member	_____
Safeena Akhter	Team member	_____

Stakeholder

X _____

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Change History:

VERSION	DATE	AUTHOR	CHANGES MADE
4.0	3/21/2025	Haleema Sadia	Initial Draft
4.1	3/22/2025	Haleema Sadia	Add Member 2 and Member 3 tasks.
4.2	3/23/2025	Safeena Akhter	Use case Diagram: additional use case was added .
4.3	3/23/2025	Haleema Sadia, Safeena Akhter Masooma Muhammadi	Data Dictionary: data elements were added.

Preface:

This document outlines the project SRS for the development of a Project Management System for the Department of Computer Science at Quaid-i-Azam University.

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Specific Requirement:

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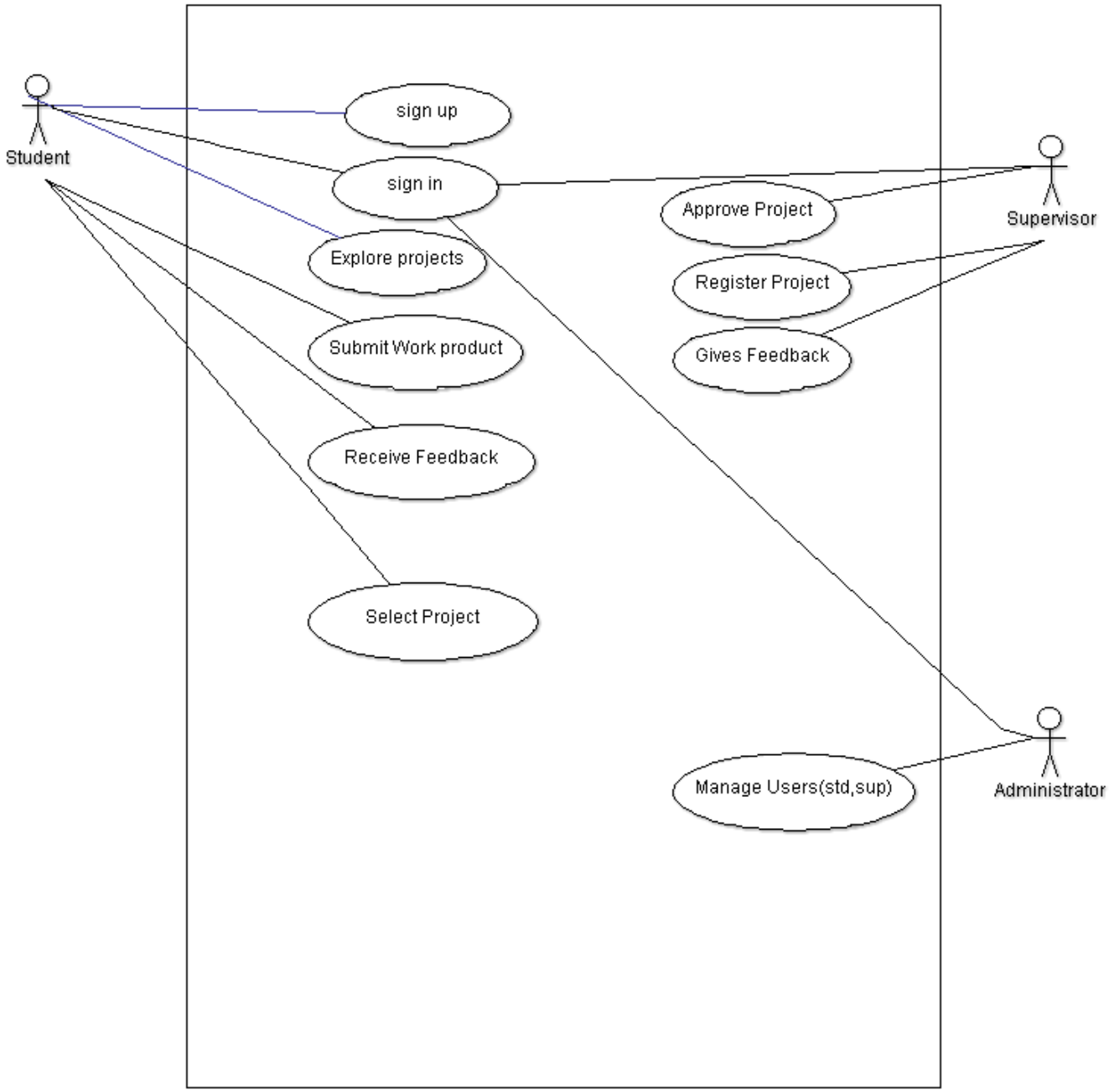


Use Case Diagram:

Use Case Description:

BY: SAFEENA AKHTER

Use Case: Submit Work Product

Primary Actor:

- Student

Pre-Conditions:

- The student must be logged into the system.
- The student must have an assigned project with submission access.

Post-Conditions:

- The system stores the submitted file without uploading errors and makes it accessible to the supervisor for review.

Input:

- File Upload (PDF, DOCX,ZIP)

Output:

- Confirmation message for successful submission.

Main Success Scenario:

1. The student navigates to "Submit Work" in the system.
2. The student selects their assigned project.
3. The student uploads the required file(Work product).
4. The system verifies the file format to ensure it is an allowed format (PDF, DOCX, ZIP).
5. The system stores the submission in the database.
6. The student receives a confirmation message stating that the work product document has been submitted and stored in the system.

Alternative Scenarios:

1. **Invalid File Format:**

- The system detects an unsupported file format.
- The system displays an error message: “Invalid file format. Please upload a PDF, DOCX or ZIP.”
- The student is prompted to re-upload a valid file.

2. **Internet Failure During Upload:**
    - The system detects an interrupted connection.
    - The system saves the upload progress.
    - Once the internet is restored, the system prompts the student to resume the upload instead of restarting.

Use Case: Explore Projects

Primary Actor:

- Student

Stakeholders and Interests:

- **Student:** Wants to explore available projects and understand their details before registration.

Pre-Conditions:

- The user must be logged in to access the project list.
- At least one project must be available in the system.

Post-Conditions:

- The system **retrieves and displays** the list of projects with key details, including **title, description, assigned supervisor, and status.**
- The Student can access and read project details without any errors.

Input:

- None (The system automatically fetches available projects).

Output:

- A list of **available projects** with essential details displayed on the screen.

Main Success Scenario:

1. The student navigates to the **"Projects"** section in the system.

2. The system retrieves and displays all available projects with details (title, description, assigned supervisor, and current status).
3. The student selects a project to view more details.

Alternative Scenarios:

1. **No Available Projects:**
    - The system detects that no projects are available for viewing.
    - The system displays a message: ″Currently, no projects are available. Please check back later."
2. **Permission Issue:**
    - The student attempts to view projects but lacks permission as it already taken by another student.
    - System displays: "**Access Denied: This project has already been registered by another student. Please choose a different available project.**"
3. **System Failure:**
    - A temporary issue prevents projects from loading.
    - The system displays an error: *"Unable to retrieve projects. Please try again later."*

Use Case: Give Feedback

Primary Actor:

- Supervisor

Stakeholders and Interests:

- **Supervisor:** Wants to review student submissions and provide constructive feedback.
- **Student:** Needs feedback to improve their work and meet project requirements.

Pre-Conditions:

- The supervisor must be logged into the system.
- The student must have **submitted** a work product.

Post-Conditions:

- The system confirms that feedback has been stored and immediately notifies the student to check the feedback of their relevant work product.

Input:

- Text feedback

- Optional file attachment (PDF, DOCX)

Output:

- Confirmation message stating: **"Your feedback has been recorded and is now visible to the student."**
- The system notifies the student via email or dashboard alert.

Main Success Scenario:

1. The supervisor navigates the "Work Submissions" section.
2. The system displays a list of student-submitted work products.
3. The supervisor selects a submission to review.
4. The supervisor enters feedback in the provided text field.
5. (Optional) The supervisor uploads an attachment for additional feedback.
6. The supervisor submits the feedback.
7. The system stores the feedback and notifies the student.

Alternative Scenarios:

1. **No Submissions Available:**
    - The system displays a message: **"No work products available for feedback."**
    - The supervisor is redirected to the dashboard.
2. **System Failure During Submission:**
    - The system fails to store feedback due to an error.
    - The supervisor receives a message: **"Feedback submission failed. Please try again later."**
3. **Internet Connection Failure:**
    - The system detects a network issue during feedback submission.
    - The system temporarily saves the feedback draft.
    - Once the internet is restored, the system prompts the supervisor to **"Resume Submission"** instead of restarting.

Use Case Description

BY:HALEEMA SADIA:

UC: Register Project

Primary Actor:

- Supervisor

Pre-conditions:

- The supervisor must be logged into the system.
  The project registration period must be open.

Post-conditions:

- The project is registered in the system.
- The project is now available for student selection.

Input:

- Project Title
- Project Description
- Required Skills
- Supervisor Name

Output:

- Project stored in the database.
- Confirmation message displayed to the supervisor.

Main Success Scenario:

1. The supervisor logs into the system and navigates to the "Register Project" section.
2. The system displays the project registration form.
3. The supervisor enters project details (title, description, required skills).
4. The supervisor submits the project registration form.
5. The system validates the data and checks for duplicate project titles.

6. The system stores the project in the database.
7. The system confirms successful registration.

Alternative Scenarios:

Missing Fields:

- If the supervisor does not complete all required fields, the system prompts them to enter missing details.

Duplicate Project Name:

- If the project name already exists, the system asks the supervisor to provide a different name.

System Failure:

- If the system crashes, project details are saved as a draft for later submission.

UC: Approve Project

Primary Actor:

- Supervisor

Pre-conditions:

- The supervisor must be logged into the system.
- The project must be in "Pending Approval" status.

Post-conditions:

- The project is either approved, rejected, or marked for modifications.
- The student receives a notification of the decision.

Input:

- Project details
- Student justification
- Supervisor's decision (Approve, Reject, Request Modifications)

Output:

- Updated project status
- Student receives approval/rejection notification

Main Success Scenario:

- The supervisor logs into the system and navigates to the "Pending Project Approvals" section.
- The system displays a list of students who have registered projects.
- The supervisor selects a project to review.
- The system displays the student's details, selected project, and justification.
- The supervisor evaluates the student's capability and project suitability.
- The supervisor selects one of the following options:

  Approve: If the student is suitable for the project.

  Reject: If the project is not suitable for the student.

  Request Modifications: If the student needs to refine their justification.

- The system updates the project status accordingly.
- The system notifies the student of the supervisor's decision.

Alternative Scenarios:

Student Not Qualified:

- If the student lacks the required skills, the supervisor rejects the request with feedback.

Project Already Assigned:

- If another student has already been approved for the same project, the supervisor must reassign the student.

System Failure: If the system crashes, the supervisor's progress is saved.

UC: Receive Feedback

Primary Actor:

- Student

Pre-Conditions:

- The student is logged into the system.
- The student has already submitted work product for review.
- The supervisor has provided feedback on the submitted work.

Post-Conditions:

- The student views the feedback provided by the supervisor.
- The feedback is stored in the system for future reference.

Input:

- None

Output:

- Displayed feedback text or attached review file.

Main Success Scenario:

1. The student logs into the system.
2. The student navigates to the "Feedback" section.
3. The system retrieves the feedback stored for the student.
4. The system displays the feedback provided by the supervisor
5. The student reviews the feedback and can use it for project improvements.

Alternative Scenario:

No Feedback Available

- If the supervisor has not provided feedback, then system displays: *"*Please check back later.*"*

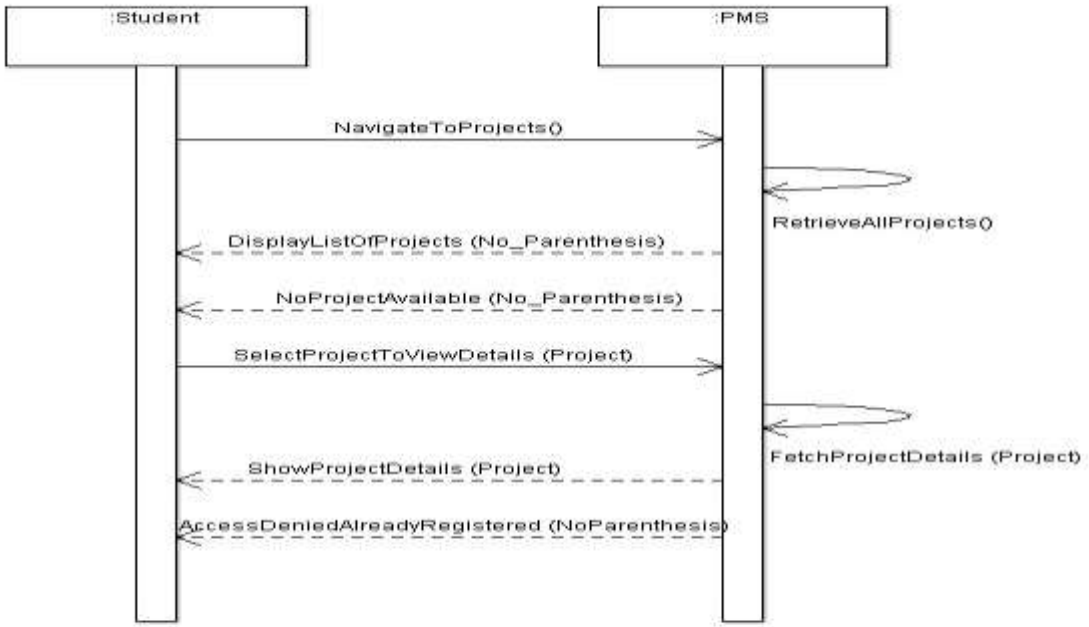
System Failure While Loading Feedback

- If the feedback fails to load, the student receives an error message: "An error occurred. Please try again later."

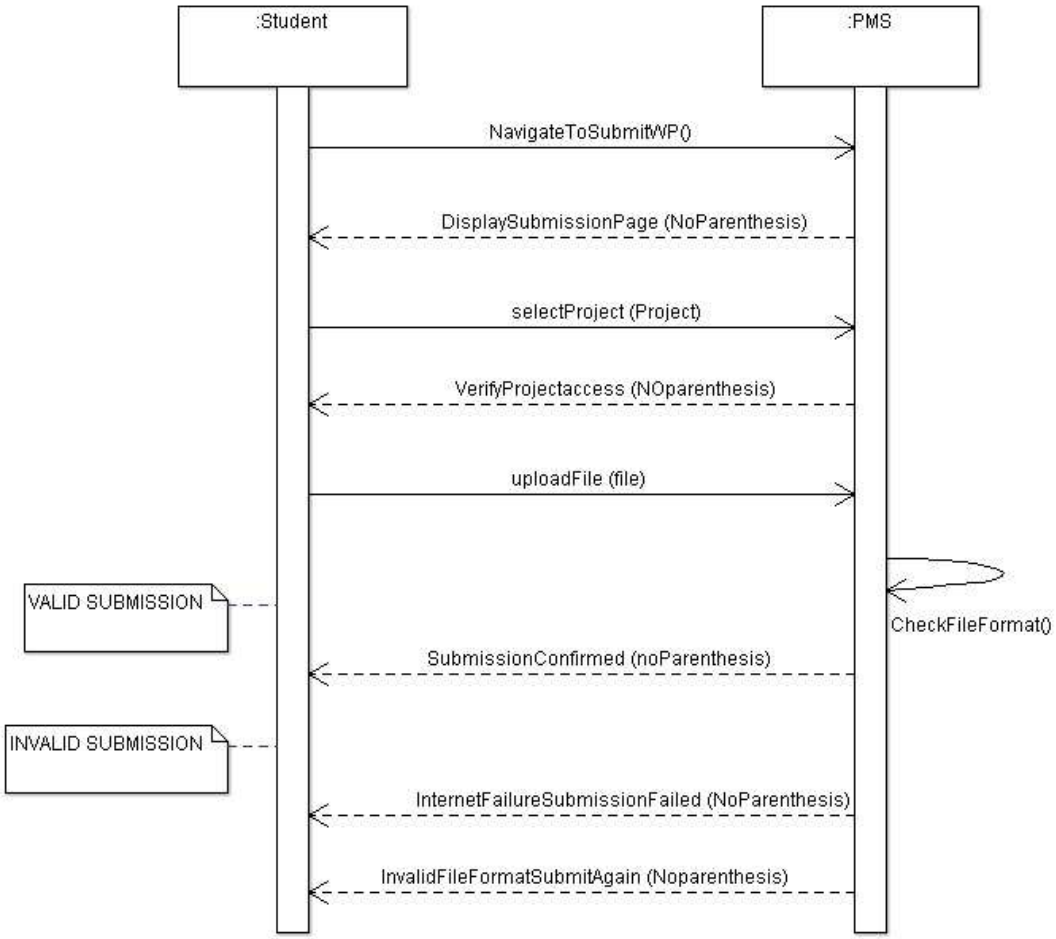
System Sequence Diagram:

BY: SAFEENA AKHTER

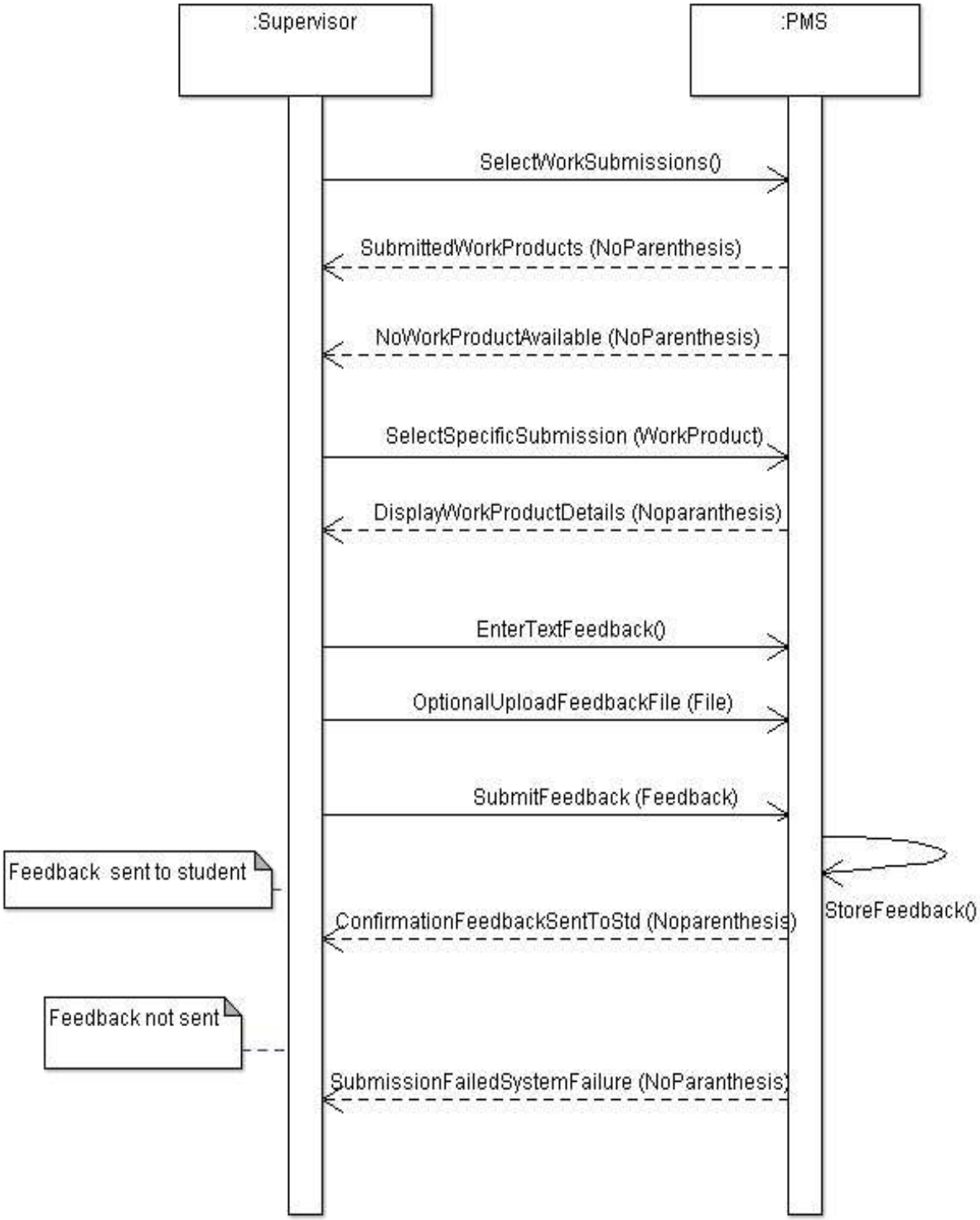
Explore Projects SSD:



Submit Work Product SSD:

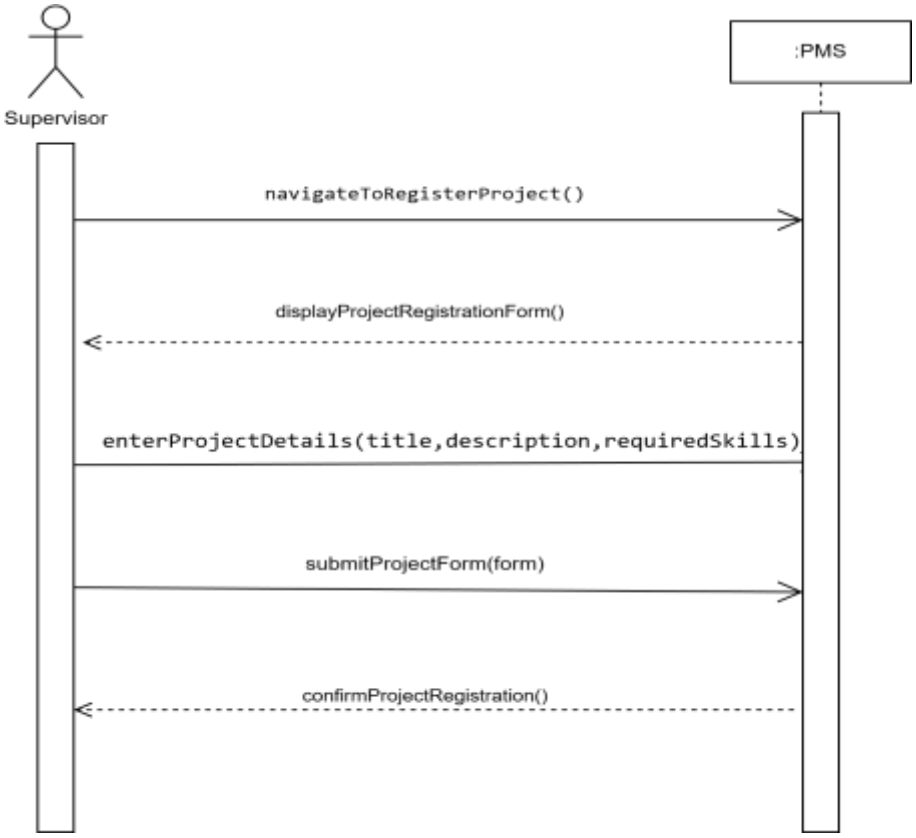


Gives Feedback SSD:

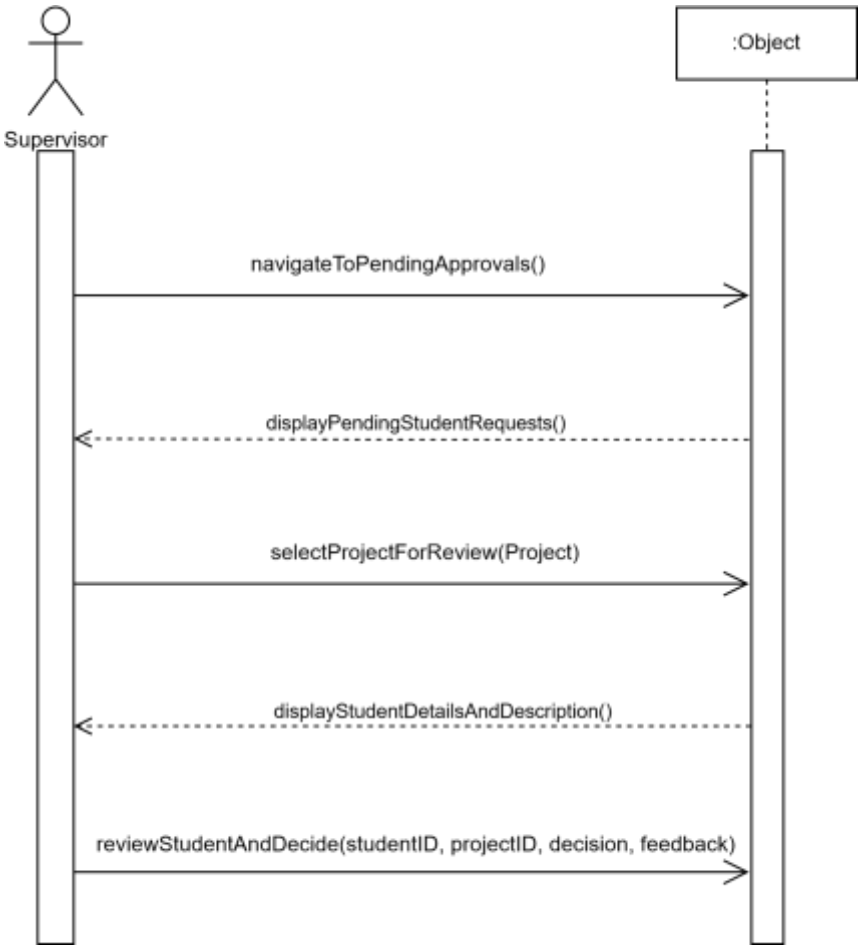


BY: HALEEMA SADIA

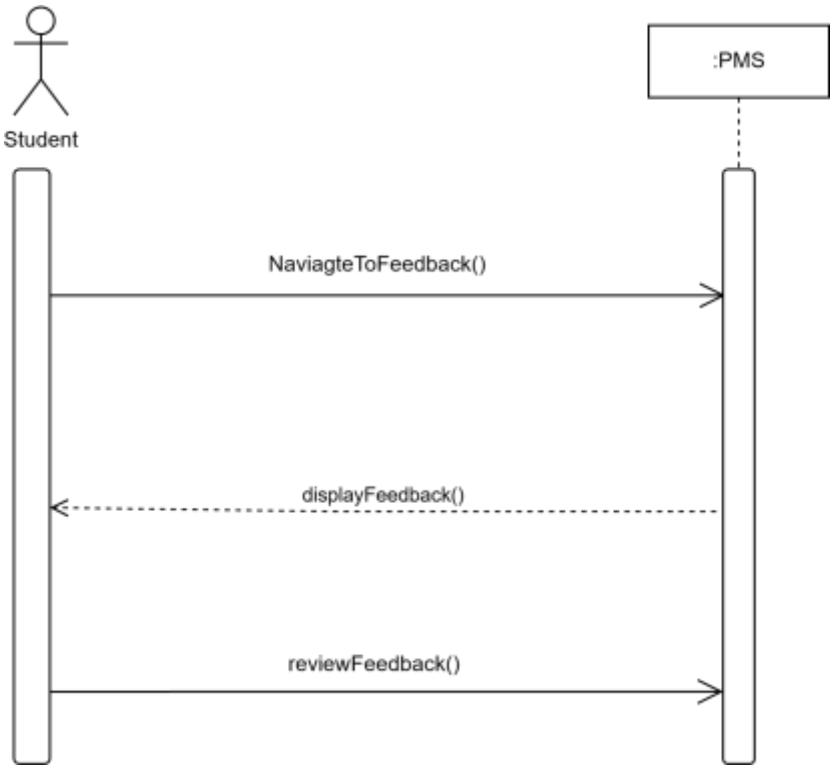
Register Project SSD:



Approve Project SSD:

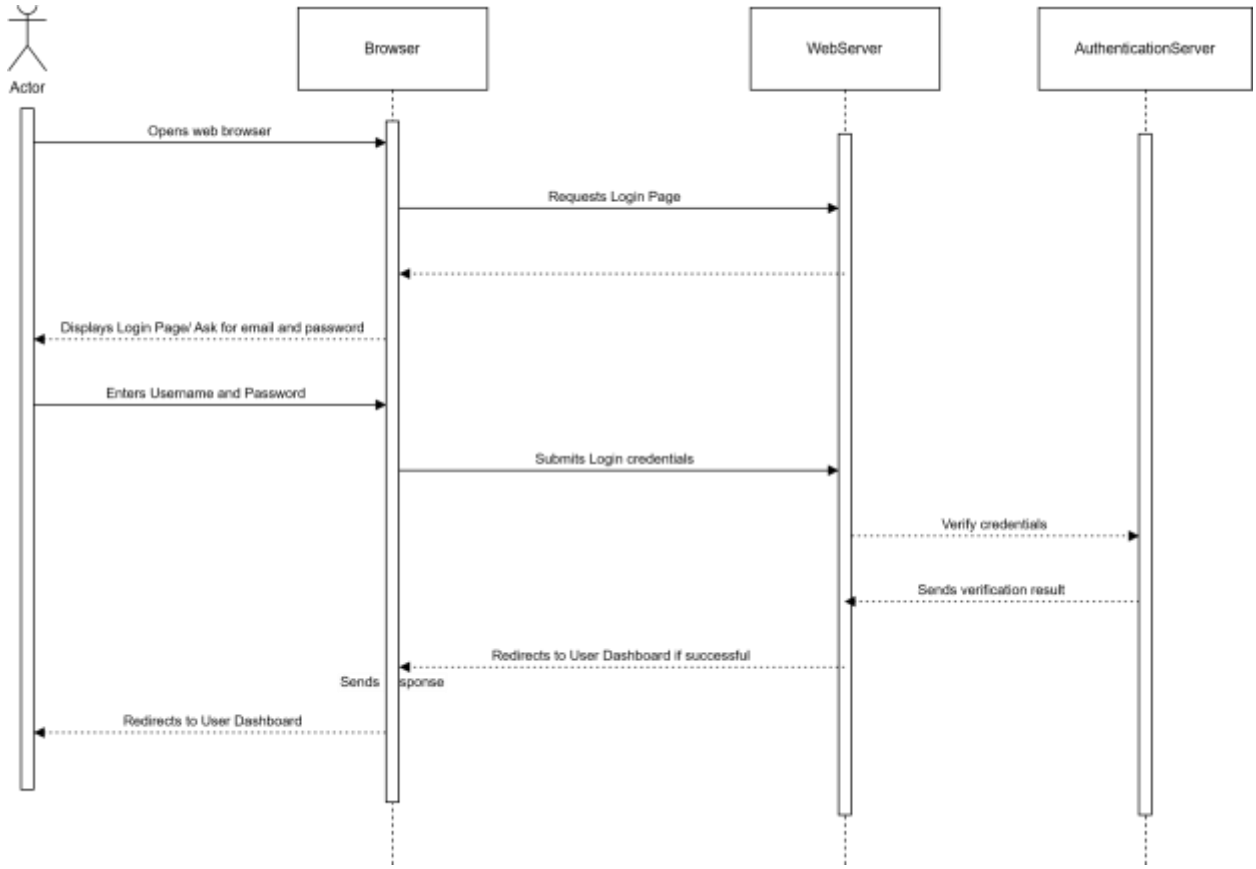


Receive Feedback SSD:

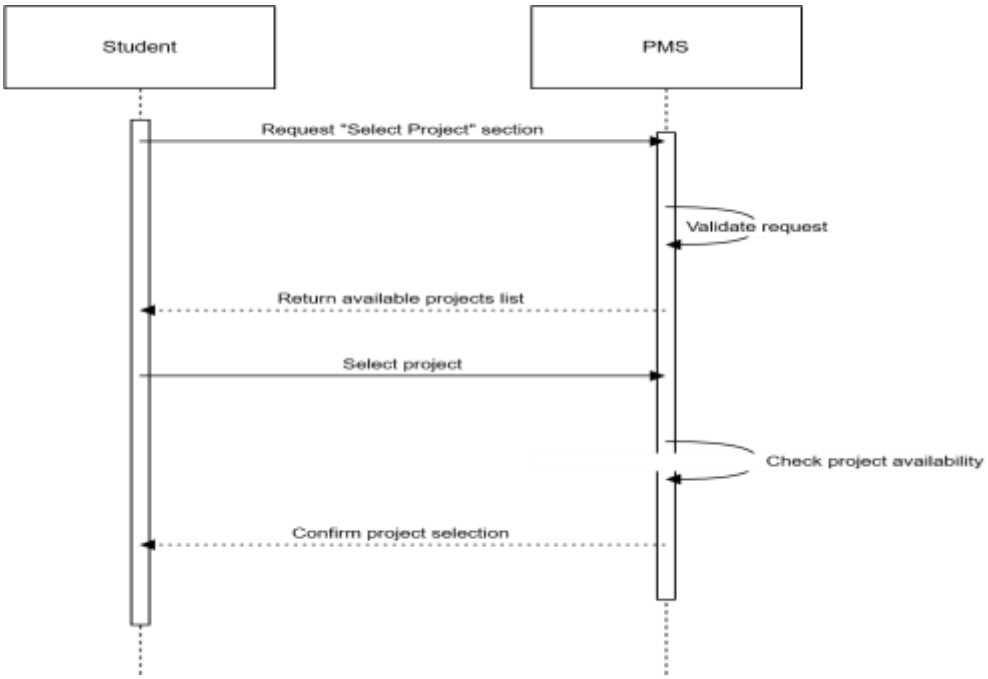

Student
:PMS
NaviagteToFeedback()
displayFeedback()
reviewFeedback()

BY: MASOOMA MUHAMMADI

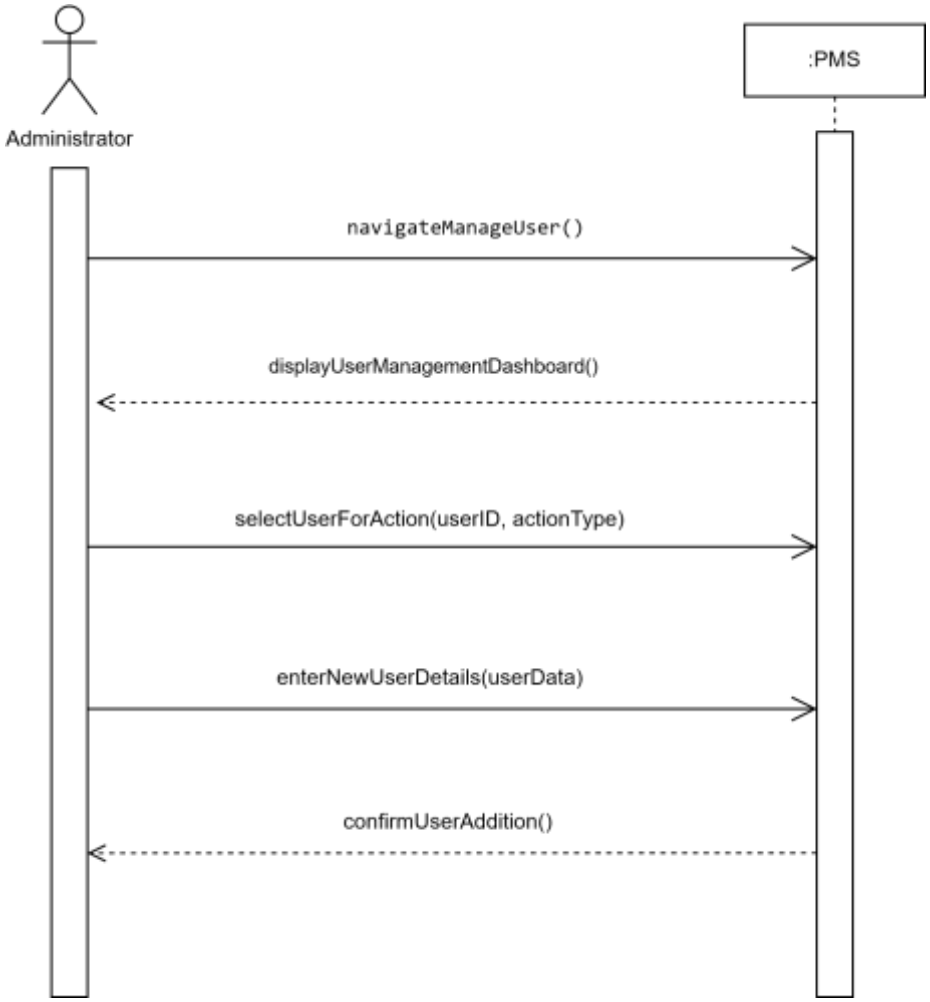
Sign In SSD:



Select Project SSD



Manage User SSD:



Data Dictionary:

Data Element name	Definition	Data Type	Length / Size	Example	Conditions (Constraints)
User First Name	First Name of the User.	string	10	Haleema	First Name should be string, and its length must be less than 10 and greater than 0
User Last Name	Last Name of the User.	string	10	Sadia	Last Name should be string, and its length must be less than 10 and greater than 0.
User Email	Email address of User.	string	30	halimsabbcy @gmail.com	Applicant Email must be in string, have @,

					.com, gmail, and must be less than or equal to 30 characters.
User Password	Password for logging in and registration.	string	12	halsad_2004	Password should be string, contain alphanumeric characters and must be greater than 0 and less than 13.
User Gender	Gender of the User.	string	7	Female	It should be in string format, and it must be of less than 8 characters.
User Contact Number	Phone number of User for contacting.	Integer	11	0335965010	Applicant contact number must be in integer format and its length must be equal to 11 integers.
User ID	Unique identifier for each user(student, supervisor, admin)	integer	11	04072312010	Must be unique and auto-incremented
User Role	Role of the user in the system(student, Supervisor, administrator)	string	10	Student	(Must be one of: 'Student', 'Supervisor', 'Admin') [CHECK constraint applied]
Project ID	Unique identifier for each project	integer	10	1000	Must be unique and auto-incremented
Project Title	Title of the project	string	50	Final Year Project Management system	Must be in string format, max 50 characters
Project Description	Brief summary of project	text	__	System for managing final year projects in which students submit many versions of work products and supervisor gives feedback	Can be null
Project Status	Current status of the project	string	15	In Progress	(Must be one of: 'Pending', 'In

					Progress', 'Completed') [CHECK constraint applied]
Project Start Date	Date when the project starts	Date	__	2025-03-01	Must be in YYYY-MM-DD format
Project End Date	Expected project completion date	Date	__	2025-05-01	Must be greater than Project Start Date
Student ID	Unique identifier for a student	integer	__	1001	Must exist as a User ID , Foreign key
Supervisor ID	Unique identifier for a supervisor	integer	__	2001	Must exist as a User id, Supervisor ID as a Foreign Key.
Submission ID	Unique identifier	Integer	10	3001	Auto-Incremented, unique
Project ID	Project related to the submission	Integer	10	1000	Must exist in Project Table
Student ID	Student who submitted work	Integer	11	04072312008	Must exist in User Table (Role='Student')
File Name	Name of the submitted file	String	100	work_v1.pdf	NOT NULL ,must be PDF, DOCX, or ZIP
Submission Date	Date of submission	Date Time	-	2025-03-10 12:30:00	Must be in YYYY-MM-DD & HH:MM:SS format
Status	Submission status	String	-	Pending	CHECK ('Pending', 'Reviewed', 'Approved')
Feedback ID	Unique identifier	Integer	10	6001	Auto-Incremented, unique
Submission ID	Submission for which feedback is given.	Integer	10	3000	Must exist in Project Table
Supervisor ID	Supervisor who provided feedback.	Integer	11	80011	Must exist in User Table (Role='Supervisor')
Feedback Text	Comments or review on the submission	Text	-	Improve Code Structure.	Can be Null, Text format
File Attachment	Optional feedback file.	VARCHAR	255	Feedback.pdf	Must be **PDF, DOCX** or NULL

Feedback Date	Date and time when feedback was given.	Date Time	-	Pending	Default: CURRENT_ TIMESTAMP