



# **Project and Thesis Management System – ProjectITM**

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A project report has been submitted in partial fulfillment of the requirement for the degree of Bachelor of Science in Information Technology & Management

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## Approval

This project titled on “**ProjectITM**”, submitted by “**Nusrat Zaman, 201-51-021**”, to the Department of Information Technology & Management, Daffodil International University has been accepted as satisfactory for the partial fulfillment of the requirements for the degree of Bachelor of Science in Information Technology & Management, and approval as to its style and contents.

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## **PROJECT DECLARATION**

The project “Nusrat Zaman” is conducted under the supervision of Nusrat Jahan, Assistant Professor and Head of the Department of Information Technology & Management at Daffodil International University. I affirm that this project is my original work for the B.Sc. in Information Technology degree and Management and that neither the entirely nor any part has been submitted for another degree in this or any other institution.

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## **ACKNOWLEDGEMENT**

I am profoundly grateful to Allah for giving me the opportunity and determination to complete this project successfully. I want to thank my supervisor, Nusrat Jahan, for providing careful guidance through the project development, from the initial phases of selecting the project scope to the successful completion of the project.

## **ABSTRACT**

Project and Thesis Management System, ProjectITM is a web-based application which is designed and developed to handle final year projects and theses within department environments. This system addresses the challenges of managing multiple student projects by providing a centralized platform. This system will help supervisor to maintain student lists and project list. Supervisor and student can create, view, update, and/or delete any project or any details throughout the system.

# **CHAPTER 01**

## **INTRODUCTION**

### **1.1 Project Overview**

‘ProjectITM’ is a final year project and thesis management platform. This system is created to simplify the management of final-year projects and theses for students, supervisors, and admin. This platform offers a centralized solution for the management of project/thesis workflows.

### **1.2 Project Purpose**

ProjectITM is a comprehensive platform designed to bridge the gap between students and supervisors in department environments. The primary objective of ‘ProjectITM’ is to provide a single source for the students and supervisors to efficiently work through projects and resources. By delivering features like project creation, student assignment, semester-wise project list and details, student management, this system aims to make final year project/thesis management easier, efficient and more productive.

#### **1.2.1 Background**

The management of student projects is essential to academic programs, particularly in final-year courses when students must complete intensive research or practical projects. ProjectITM is developed to solve issues like maintaining a well-organized list of students and projects/theses per semester, tracking the progress of projects, and providing structured and timely feedback to students.

#### **1.2.2 Benefits & Beneficiaries**

##### **Benefits**

1. Role-based authentication and authorization (Admin, Supervisor, and Student).
2. Supervisors can quickly search for preferred semester, specific project/thesis, and student.
3. Students can update project milestones for feedback and check supervisor details.
4. If any information is inaccurate, the admin has the authority to accept or reject a student registration request.
5. An appropriate mail and notification system for users.

## **Beneficiaries**

1. Supervisor
2. Student
3. Department

### **1.2.3 Goals**

The goals of ProjectITM is very simple.

1. Project/Thesis completion within 6 months (based on start and end date).
2. Maintain project/thesis list and student list per semester and per supervisor.
3. Seamless cooperation with feedback.

### **1.3 Stakeholders**

- Supervisor
- Student
- Administrator
- Department

## **1.4 Proposed System Model**



1.5 Project Schedule

3.1 Gantt Chart

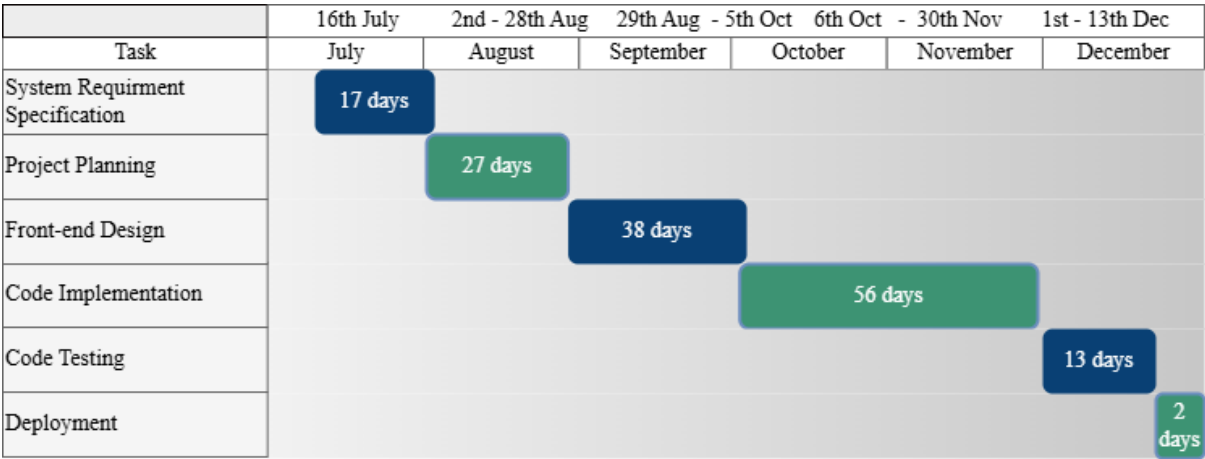


Table: 1.5.1 Gantt chart

3.2 Release Plan/Milestone

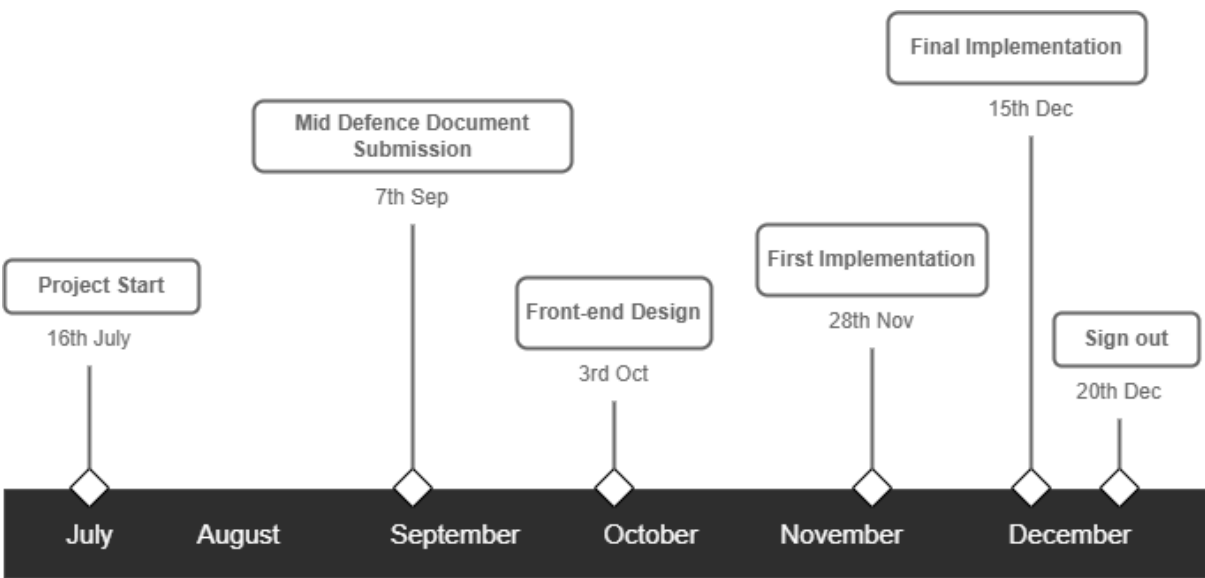


Fig: 1.5.2 Release plan/milestone

## **CHAPTER 2**

### **SOFTWARE REQUIREMENT SPECIFICATION**

#### **2.1 Functional Requirements**

- FR-1:** Students can register or create an account using their university email.
- FR-2:** Supervisors can login to the system using their login credentials provided by admin.
- FR-3:** Students can login only after admin approval.
- FR-4:** Admin can login with system-provided credentials.
- FR-5:** Supervisors can create new thesis/project entries in the system specifying name, title, description/objectives, project status, expected duration (start date and end date) and assign a specific student by selecting their email address/ student ID.
- FR-6:** Supervisors can view semester-wise project and thesis lists.
- FR-7:** Supervisors can edit the details of any project or thesis.
- FR-8:** Supervisors can view specific project/thesis details from the project list.
- FR-9:** Supervisors can update the status of any project/thesis ('Not Started', 'In Progress', and 'Completed').
- FR-10:** Supervisors can search for specific project/thesis by email, id, project/thesis title and name.
- FR-11:** Supervisors can filter based on project type (Thesis and Project) and status (Not Started, In Progress, and Completed) in project list or searched projects/theses.
- FR-12:** Supervisors can provide necessary comments/feedback on project progress or documents.
- FR-13:** Supervisors can delete projects/theses when needed or completed.
- FR-14:** Supervisors can view the total students, total thesis students, and total project students per semester.
- FR-15:** Supervisors and Students can export the details of a project/thesis into a pdf format.
- FR-16:** Students can view their assigned thesis/project in their workspaces.
- FR-17:** Students can upload/attach files, images, documents, and links in their project details page.

**FR-18:** Students can update and track the progress of the project/thesis and mark it as completed when finished.

**FR-19:** Students can respond to supervisor comments or feedback.

**FR-20:** Admin can pre-register supervisors' accounts by entering their First name, Last name, Email, Designation and a Password.

**FR-21:** Admin can view a list of all supervisors.

**FR-22:** Admin can update supervisors' details if needed and delete accounts if necessary.

**FR-23:** Admin will receive students' details from registration form as 'Pending Student'.

**FR-24:** Admin can check and update the student status to 'Approved' or 'Declined'.

**FR-25:** Admin can view student details, update student details and delete any account if needed.

**FR-26:** Supervisor, Student, and Admin will each have a dashboard with profile, role-specific features, and logout options. They can view and update their profile.

## 2.2 Non-Functional Requirements

1. System must send an email to supervisors with login credentials. It should also send email to students when their registration request will be approved and project creation process will be completed.
2. System must have a password recovery option.
3. System should validate each input field with proper messages.
4. User passwords must be converted to hashed passwords before sending from backend to database for storing.
5. Application must verify the identity of users accessing the system and define access controls to restrict actions based on user roles and permissions.
6. The system should adapt responsiveness for mobile devices and tablets to provide a seamless experience across different screen sizes and resolutions.

## 2.3 Data Requirements

1. **Registration:** Email field must contain '@diu.edu.bd' for validating university email and student id must include '-51-'. The password and confirm password must be same. Student must get the list of supervisors to select.
2. **Login:** Email and password must be required for authentication. A pre-registered email will be needed to recover password in forget password page.
3. **Project:** Supervisor must get their registered student.
4. **Student Request:** Admin must receive the student registration request entries.

## 2.4 Performance Requirements

### 2.4.1 Speed and Latency Requirements

- Every page should take less than 3 seconds for loading pages content.
- Backend/Database query response time must be less than 2 seconds.
- Exporting project details to PDF should be completed within 5 seconds.

### 2.4.2 Precision or Accuracy Requirements

- Role-based all the project and thesis details should be stored and retrieved with 100% accuracy.

- Notifications and Emails should be sent to the appropriate user with accurate and up-to-date information.
- System should return 100% relevant results based on search and filter functions.

### **2.4.3 Capacity Requirements**

- Image file must be less than 1 MB and pdf file should not exceed 2 MB.
- System should support 500 users without performance issues.
- The infrastructure of the system should be able to handle growing users.

## **2.5 Dependability Requirements**

### **2.5.1 Reliability Requirements**

- Features like supervisor details creation, project/thesis creation, notifications should function without failures.
- Data should be accurately saved, retrieved, and displayed.

### **2.5.2 Availability Requirements**

- Student details must be available for supervisors.
- Supervisors list should be available in the registration form to select one.
- System must function 24/7 with minimal downtime.

### **2.5.3 Robustness or Fault-Tolerance Requirements**

- Supervisors can delete any project/thesis after creating.
- Admin can approve or decline any student's registration request.
- The system should provide meaningful error messages and recover to handle unexpected inputs or user errors.

### **2.5.4 Safety-Critical Requirements**

- System must ensure that passwords are never stored in plain text.
- System should prevent unauthorized access to confidential information.
- Admin can delete any user if needed.

## **2.6 Maintainability and Supportability Requirements**

### **2.6.1 Maintenance Requirements**

- Admin and developers will be responsible for maintaining the system.
- System code must be written following best practices and system should use Git and GitHub for tracking the changes.

### **2.6.2 Supportability Requirements**

- System will provide a detailed guideline for each user role.
- System must support devices like Android, iPhone, Windows, Mac, Linux etc.

### **2.6.3 Adaptability Requirements**

- System must be adaptable and responsive across multiple devices – mobile, tablets, laptop and desktop.
- System should maintain several users at the same time.

### **2.6.4 Scalability or Extensibility Requirements**

- System must be scalable for exceeding users and projects.
- User should be able to recover their password using their email.

## **2.7 Security Requirements**

### **2.7.1 Access Requirements**

- Only admin can create supervisor credentials.
- Only supervisor can create project/thesis entries.
- Supervisor and Student can view the project details page.
- Admin can manage any user for entire system.
- Supervisors can manage their provided students.

### **2.7.2 Integrity Requirements**

- System must ensure data integrity by validating input fields.

### **2.7.3 Privacy Requirements**

- One user can not view another user's information and dashboard without authorization based on their role.

## **2.8 Usability and Human-Interaction Requirements**

### **2.8.1 Ease of Use Requirements**

- Dashboards for all user roles should display key features and data.
- The user interface should be simple, clear, and consistent across all pages.

### **2.8.2 Personalized and Internationalization Requirements**

- Users can customize their profile information.

### **2.8.3 Understandability and Politeness Requirements**

- The system should use clear, concise messages for easy understanding.
- System should provide proper feedback to ensure the outcome of users' actions in real time.

### **2.8.4 Accessibility Requirements**

- Supervisor and user can check project completion percentage.
- Every feature will be specified for specified users.

### **2.8.5 User Documentation Requirements**

- User will have separate manual for use.
- User can give feedback to the system.

### **2.8.6 Training Requirements**

- A workshop will be provided to the final year students.

## **2.9 Look and Feel Requirements**

### **2.9.1 Appearance Requirements**

- The system should consistently use margins, padding, and alignment for a polished and professional appearance.

### **2.9.2 Style Requirements**

- Colors are selected from department logo.
- Fonts should be clean and easy to read.
- Style should be decent and standard.

## **2.10 Operational and Environmental Requirements**

### **2.10.1 Expected Physical Environment**

- Users should be able to access the system remotely from any location.
- Supported operating systems should include Linux, Windows, MacOS and modern web browsers (Chrome, Firefox, Safari, Opera and Edge).

### **2.10.2 Requirements for interfacing with Adjacent Systems**

- Desktop and Laptop will look good for the system.
- API authentication and data exchange should comply with RESTful standards.

### **2.10.3 Projectization Requirements**

- A testing phase will be conducted with selected users to identify and resolve bugs.
- Proper readme file should be included.

### **2.10.4 Release Requirements**

- Initial release should include all core features.
- System should collect user feedback and include release notes.



## 2.11 Functional Requirements Mapping

<b>F.R.ID</b>	<b>Functionality</b>
FR-1	Registration
FR-20	
FR-2	Login
FR-3	
FR-4	
FR-5	Create Project or Thesis
FR-6	View Project and Thesis
FR-8	
FR-16	
FR-7	Modify Project/Thesis
FR-9	Update Project/Thesis Status
FR-10	Search and Filter Project/Thesis
FR-11	
FR-12	Feedback and comment on project progress
FR-19	
FR-13	Delete project/thesis
FR-14	View student details
FR-15	Export project/thesis details
FR-17	Upload files and update project details
FR-18	Track progress
FR-21	Manage students and supervisors
FR-22	
FR-23	
FR-24	
FR-25	
FR-26	Dashboard

## CHAPTER 03

### SYSTEM ANALYSIS

#### 3.1 Use Case Diagram

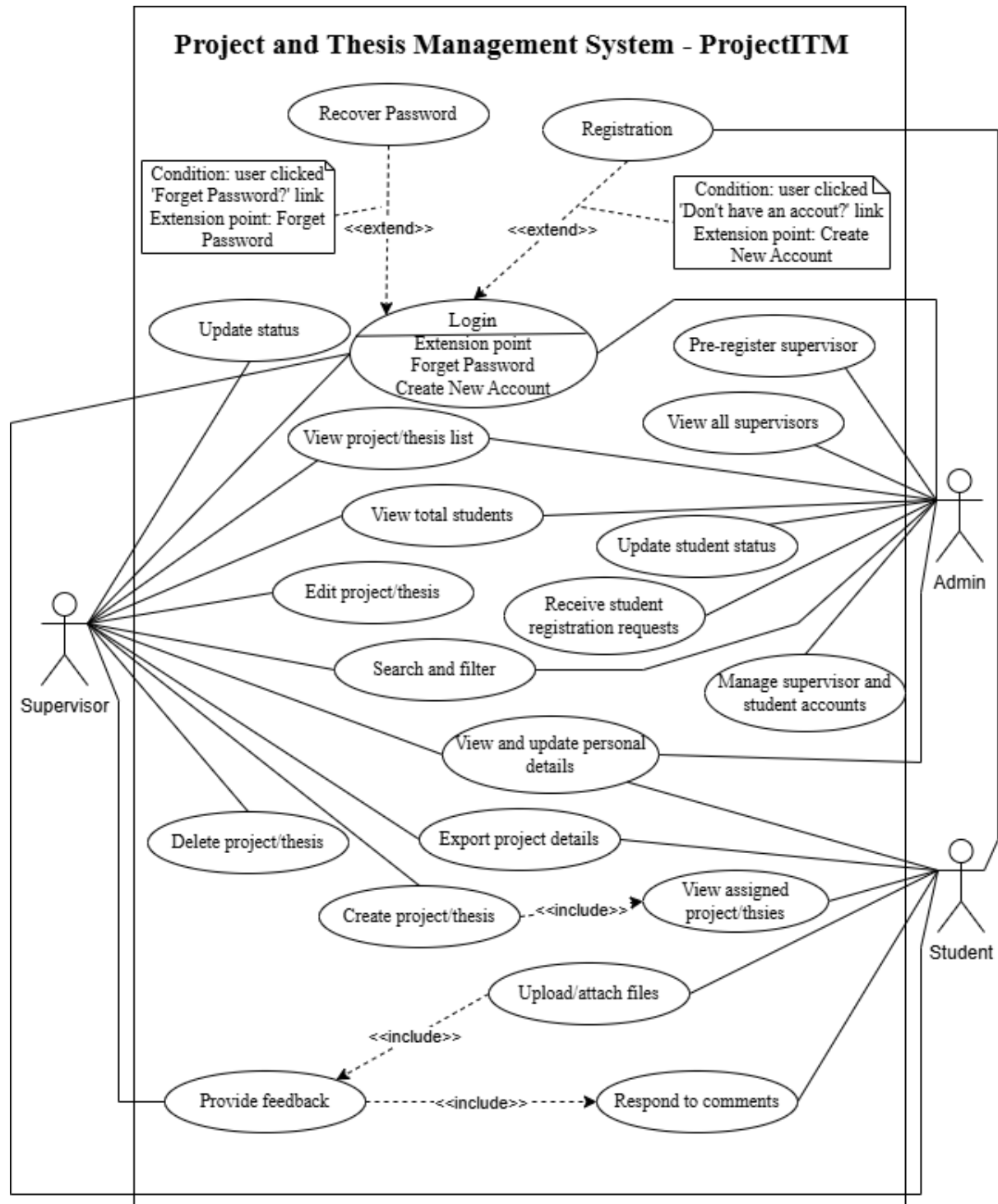


Fig: 3.1 ProjectITM Use Case Diagram

### 3.2 Identifying Use Case

- UC-1: Register/Create Account (Student)
- UC-2: Login (Supervisor, Student, Admin)
- UC-3: Recover Password (Supervisor, Student)
- UC-4: Create Project/Thesis (Supervisor)
- UC-5: View Project and Thesis List (Supervisor, Admin)
- UC-6: Edit Project/Thesis details from Project List (Supervisor)
- UC-7: Update Project/Thesis Status (Supervisor)
- UC-8: Search and filter specific project/thesis (Supervisor, Admin)
- UC-9: Provide feedback (Supervisor)
- UC-10: View total students (Supervisor, Admin)
- UC-11: Delete Project/Thesis (Supervisor)
- UC-12: Export project details (Supervisor, Student)
- UC-13: View assigned project/thesis (Student)
- UC-14: Upload/attach documents (Student)
- UC-15: Respond to comments/feedback (Student)
- UC-16: Pre-register supervisor (Admin)
- UC-17: View all supervisors (Admin)
- UC-18: Update and Delete supervisor and student accounts (Admin)
- UC-19: Receive student registration details (Admin)
- UC-20: Update student status (Admin)
- UC-21: View and Update personal details (Admin, Supervisor, Student)

### 3.3 Identifying Use Case Description

Use Case Id	UC-1
Use Case name	Register/Create Account
Scenario	Student wants to create an account in the system
Triggering event	If a user (student) decides to create a new account, clicks on 'Register' button and accesses the registration page.
Brief description	Student can create/register by providing personal information (First name, last name, university email, id, gender, academic semester, and batch), Academic information, and password and confirm password.
Actors	Student
Extending use case	None
Included use case	None
Stakeholders	Student, Admin
Pre-condition	The user must have a valid university email address and must not have an existing account.
Basic Path	<ol style="list-style-type: none"><li>1) Student clicks on 'Register' button on homepage or clicks on 'Get Started' button on homepage.</li><li>2) Get registration form</li><li>3) Student provides the required details.</li><li>4) User clicks 'Register' button.</li><li>5) Account is created successfully.</li></ol>
Alternative path	None
Exceptional path	None
Post-condition	System sends a message 'Wait for admin approval' and redirects the user to the homepage. Admin is notified of new registration requests.

Table: 3.3.1 use case description "Registration"

Use Case Id	UC-2
Use Case name	Login
Scenario	Registered user can securely access to the system
Triggering event	When a user wants to access their account, they click on ‘Log in’ button and get the login page.
Brief description	User can login by providing their valid credentials like email and password. This allows them to access their account.
Actors	Student, Supervisor, Admin
Extending use case	UC-1: Registration UC-3: Recover Password
Included use case	UC-18: Pre-register Supervisors UC-21: Receive student registration details UC-22: Update student status
Stakeholders	Student, Admin, Supervisor
Pre-condition	The user must have a registered account to the system.
Basic Path	<ol style="list-style-type: none"> <li>1) User clicks on ‘Log in’ button.</li> <li>2) Get login page</li> <li>3) User enters email and password</li> <li>4) User clicks ‘Login’ button.</li> <li>5) System validates the user’s credentials.</li> <li>6) The user is logged in when the credentials are valid.</li> </ol>
Alternative path	None
Exceptional path	None
Post-condition	User is successfully logged in and is redirected to the dashboard page.

Table: 3.3.2 use case description ‘Log in’

Use Case Id	UC-3
Use Case name	Recover Password
Scenario	When a user forgets their password, they can recover their account through email.
Triggering event	User clicks on 'Forgot Password' link on login page.
Brief description	Registered user can recover their password by providing their registered email address. System will send a password reset link to the user's email, which they can use to set a new password. They will get the password recover page by clicking the link.
Actors	Student, Supervisor
Extending use case	None
Included use case	None
Stakeholders	Student, Admin, Supervisor
Pre-condition	User must have an account to the system and remember the pre-registered email address
Basic Path	<ol style="list-style-type: none"> <li>1) User clicks on 'Forgot Password?' link on login page.</li> <li>2) Get the Reset Password page.</li> <li>3) User enters the registered email.</li> <li>4) User clicks 'Recover Password' button.</li> <li>5)</li> </ol>
Alternative path	None
Exceptional path	None
Post-condition	The user successfully resets their password and can log in.

Table: 3.3.3 use case description 'Recover Password'

Use Case Id	UC-4
Use Case name	Create Project/Thesis
Scenario	Supervisor initiates a new project or thesis.
Triggering event	Supervisor clicks on 'Create' button under project section.
Brief description	Supervisor can create a new project or thesis within the system specifying name, title, description, start date, end date, and assigned student.
Actors	Supervisor
Extending use case	UC-5: View project and thesis list
Included use case	None
Stakeholders	Student, Admin, Supervisor
Pre-condition	Supervisor must be logged in and has necessary permission to create.
Basic Path	<ol style="list-style-type: none"> <li>1) Supervisor clicks 'Create' button under project section.</li> <li>2) Supervisor navigates to 'create project' page.</li> <li>3) Supervisor selects project type – Project or Thesis.</li> <li>4) Supervisor enters project/thesis details, sets expected duration for completion, and assigned student.</li> <li>5) Supervisor click 'Create Project/Thesis' button.</li> <li>6) System generates the project.</li> </ol>
Alternative path	None
Exceptional path	None
Post-condition	The new project is available for assigned student. Supervisor and admin can view the project/thesis.

Table: 3.3.4 use case description 'Create Project/Thesis'

Use Case Id	UC-5
Use Case name	View project and thesis list
Scenario	User wants to view project/thesis list per semester.
Triggering event	When user wants to check the list, they select that semester.
Brief description	Supervisor and admin can view semester wise project and thesis counts.
Actors	Supervisor, Admin
Extending use case	None
Included use case	UC-8: Search and filter specific project/thesis
Stakeholders	Admin, Supervisor
Pre-condition	Supervisor must be logged in and has access to project/thesis list.
Basic Path	<ol style="list-style-type: none"> <li>1) Supervisor clicks 'All' button under project section.</li> <li>2) Supervisor navigates to 'Project and Thesis List based on Semester' page.</li> <li>3) System displays semester-wise list of cards.</li> <li>4) Supervisor clicks on a specific semester card.</li> <li>5) System retrieves projects and theses lists for that selected semester.</li> </ol>
Alternative path	None
Exceptional path	None
Post-condition	Supervisor successfully views the list for selected semester.

Table: 3.3.5 use case description 'View project and thesis list'



Use Case Id	UC-6
Use Case name	Edit project/thesis details from project list
Scenario	Supervisor needs to edit any details about an existing project/thesis.
Triggering event	Supervisor clicks on 'Edit' button on project list page.
Brief description	Supervisor can modify the project briefing by altering the input fields for project/thesis.
Actors	Supervisor
Extending use case	None
Included use case	UC-5: View project and thesis list
Stakeholders	Supervisor, Student
Pre-condition	Supervisor must be logged in and has access to project/thesis list.
Basic Path	<ol style="list-style-type: none"> <li>1) Supervisor clicks 'All' button under project section.</li> <li>2) Supervisor navigates to 'Project and Thesis List based on Semester' page.</li> <li>3) System displays semester-wise list of cards.</li> <li>4) Supervisor clicks on a specific semester card.</li> <li>5) System retrieves projects and theses lists for that selected semester.</li> <li>6) Supervisor clicks 'Edit' button.</li> <li>7) System displays a popup with necessary input fields for project/thesis modification.</li> <li>8) Supervisor changes the required fields.</li> <li>9) Supervisor clicks 'Save Changes' button.</li> <li>10) System updates the project/thesis details.</li> </ol>
Alternative path	None
Exceptional path	None
Post-condition	Supervisor successfully updates project/thesis details.

Table: 3.3.6 use case description 'Edit project/thesis details from project list'

Use Case Id	UC-7
Use Case name	Update project/thesis status
Scenario	Supervisor needs to update the status of project/thesis.
Triggering event	Supervisor tends to change the project/thesis status based on student activity.
Brief description	When students starts or completes their project or thesis, supervisor initiates to change the current status.
Actors	Supervisor
Extending use case	None
Included use case	UC-5: View project and thesis list
Stakeholders	Supervisor, Student
Pre-condition	Supervisor must be logged in and has permission to change status.
Basic Path	<ol style="list-style-type: none"> <li>1) Supervisor clicks 'All' button under project section.</li> <li>2) Supervisor navigates to 'Project and Thesis List based on Semester' page.</li> <li>3) System displays semester-wise list of cards.</li> <li>4) Supervisor clicks on a specific semester card.</li> <li>5) System retrieves projects and theses lists for that selected semester.</li> <li>6) Supervisor clicks on current status.</li> <li>7) System displays all options for status.</li> <li>8) Supervisor selects the new status.</li> <li>9) System updates the status of project or thesis.</li> </ol>
Alternative path	None
Exceptional path	None
Post-condition	The status of project or thesis is updated successfully.

Table: 3.3.7 use case description 'Update project/thesis status'

Use Case Id	UC-8
Use Case name	Search and filter specific project/thesis
Scenario	Supervisor wants to find specific project or thesis.
Triggering event	When a specific project or thesis or specific projects/theses list is needed, supervisor selects search and filter options.
Brief description	Supervisor can search by project name, title, student id, and student email. Supervisor can filter upon searched result. Supervisor can filter project/thesis based on project type – Project and Thesis and based on status – All status, Not started, In progress, Completed.
Actors	Supervisor
Extending use case	None
Included use case	UC-5: View project and thesis list
Stakeholders	Supervisor
Pre-condition	Supervisor must be logged in and has proper permission.
Basic Path	<ol style="list-style-type: none"> <li>1) Supervisor clicks ‘All’ button under project section.</li> <li>2) Supervisor navigates to ‘Project and Thesis List based on Semester’ page.</li> <li>3) System displays semester-wise list of cards.</li> <li>4) Supervisor clicks on a specific semester card.</li> <li>5) System retrieves projects and theses lists for that selected semester.</li> <li><b>6) Search:</b> <ul style="list-style-type: none"> <li>• Supervisor clicks on search input.</li> <li>• Supervisor enters the search term.</li> <li>• System displays matched result.</li> </ul> </li> <li><b>7) Filter:</b> <ul style="list-style-type: none"> <li>• Supervisor applies necessary filters.</li> <li>• System updates the list based on the applied filters.</li> </ul> </li> </ol>

	<b>8) Search and Filter:</b> <ul style="list-style-type: none"> <li>• Supervisor enters search terms.</li> <li>• System retrieves the searched lists.</li> <li>• Supervisor selects one or more filters.</li> <li>• System updates the searched lists based on applied filters.</li> </ul>
Alternative path	None
Exceptional path	None
Post-condition	Matching projects or theses are displayed successfully.

Table: 3.3.8 use case description ‘Search and filter specific project/thesis’

Use Case Id	UC-9
Use Case name	Receive Notification
Scenario	Supervisor wants to find specific project or thesis.
Triggering event	When a specific project or thesis or specific projects/theses list is needed, supervisor selects search and filter options.
Brief description	<p>Supervisor can search by project name, title, student id, and student email. Supervisor can filter upon searched result.</p> <p>Supervisor can filter project/thesis based on project type – Project and Thesis and based on status – All status, Not started, In progress, Completed.</p>
Actors	Supervisor
Extending use case	None
Included use case	UC-5: View project and thesis list
Stakeholders	Supervisor
Pre-condition	Supervisor must be logged in and has proper permission.
Basic Path	9) Supervisor clicks ‘All’ button under project section.

	<p>10) Supervisor navigates to ‘Project and Thesis List based on Semester’ page.</p> <p>11) System displays semester-wise list of cards.</p> <p>12) Supervisor clicks on a specific semester card.</p> <p>13) System retrieves projects and theses lists for that selected semester.</p> <p><b>14) Search:</b></p> <ul style="list-style-type: none"> <li>• Supervisor clicks on search input.</li> <li>• Supervisor enters the search term.</li> <li>• System displays matched result.</li> </ul> <p><b>15) Filter:</b></p> <ul style="list-style-type: none"> <li>• Supervisor applies necessary filters.</li> <li>• System updates the list based on the applied filters.</li> </ul> <p><b>16) Search and Filter:</b></p> <ul style="list-style-type: none"> <li>• Supervisor enters search terms.</li> <li>• System retrieves the searched lists.</li> <li>• Supervisor selects one or more filters.</li> <li>• System updates the searched lists based on applied filters.</li> </ul>
Alternative path	None
Exceptional path	None
Post-condition	Matching projects or theses are displayed successfully.

Table: 3.3.9 use case description ‘Receive notification’

Use Case Id	UC-10
Use Case name	Provide feedback
Scenario	Supervisor wants to provide feedback about a project or thesis.
Triggering event	When supervisor wants to give feedback, suggestions, or additional information related to project/thesis.
Brief description	Supervisor can submit feedback on project/thesis works that enables better communication between students and supervisors.
Actors	Supervisor
Extending use case	None
Included use case	UC-5: View project and thesis list UC-9: Receive Notification
Stakeholders	Supervisor, Student
Pre-condition	Supervisor must be logged in and has permission to give feedback.
Basic Path	<ol style="list-style-type: none"> <li>1) Supervisor clicks 'All' button under project section.</li> <li>2) Supervisor navigates to 'Project and Thesis List based on Semester' page.</li> <li>3) System displays semester-wise list of cards.</li> <li>4) Supervisor clicks on a specific semester card.</li> <li>5) System retrieves projects and theses lists for that selected semester.</li> <li>6) Supervisor clicks on 'View' button on specific project/thesis.</li> <li>7) System provides the details page of that particular project/thesis.</li> <li>8) Supervisor navigates to feedback section.</li> <li>9) Supervisor writes the feedback/comment.</li> <li>10) Supervisor submits the feedback.</li> <li>11) System updates and notifies the student.</li> </ol>
Alternative path	None
Exceptional path	None

Post-condition	System shows a feedback submission successful message.
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Table: 3.3.10 use case description ‘Provide feedback’

Use Case Id	UC-11
Use Case name	View total students
Scenario	Supervisor wants to provide feedback about a project or thesis.
Triggering event	When supervisor wants to give feedback, suggestions, or additional information related to project/thesis.
Brief description	Supervisor can submit feedback on project/thesis works that enables better communication between students and supervisors.
Actors	Supervisor
Extending use case	None
Included use case	UC-5: View project and thesis list UC-9: Receive Notification
Stakeholders	Supervisor, Student
Pre-condition	Supervisor must be logged in and has permission to give feedback.
Basic Path	<ol style="list-style-type: none"> <li>1) Supervisor clicks ‘All’ button under project section.</li> <li>2) Supervisor navigates to ‘Project and Thesis List based on Semester’ page.</li> <li>3) System displays semester-wise list of cards.</li> <li>4) Supervisor clicks on a specific semester card.</li> <li>5) System retrieves projects and theses lists for that selected semester.</li> <li>6) Supervisor clicks on ‘View’ button on specific project/thesis.</li> <li>7) System provides the details page of that particular project/thesis.</li> <li>8) Supervisor navigates to feedback section.</li> </ol>

	9) Supervisor writes the feedback/comment. 10) Supervisor submits the feedback. 11) System updates and notifies the student.
Alternative path	None
Exceptional path	None
Post-condition	System shows a feedback submission successful message.

### 3.4 Activity Diagram

### 3.5 System Sequence Diagram



