
Software Requirements Specification

Doctoral Student Progress Tracker

Version 1.0

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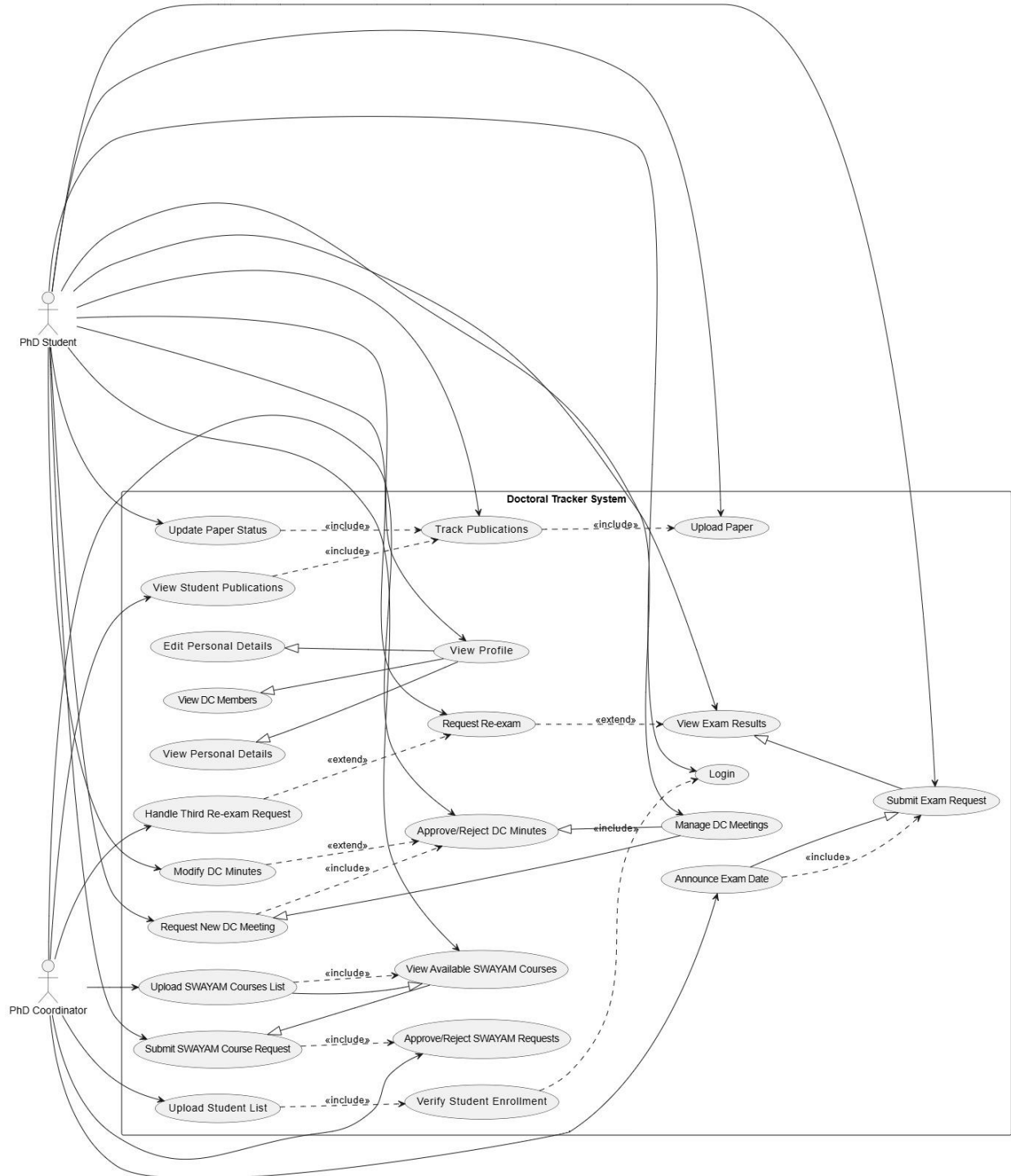
Group-10

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Revisions

Version	Primary Author(s)	Description of Version	Date Completed
Initial Draft - 1	Maakhish Sai NBS Manhaas Deeraj	The first version of SRS is prepared.	18-02-2025

Use Case Diagram:



Use Case Descriptions and Steps

1. Upload Student List (U0)

Description: The **PhD Coordinator** uploads the list of PhD students into the system in excel format. This list is used to verify student enrollment before login.

Steps:

1. **PhD Coordinator selects** a file containing student details (e.g., CSV or Excel format) and uploads it to the system.

2. Verify Student Enrollment (U0A)

Description: Before a student can log in, the system checks if their name exists in the uploaded student list.

Steps:

1. A **PhD Student** enters their credentials on the login page.
2. The system checks if their name exists in the uploaded student list.
3. If the student is found, they proceed to the login process.
4. If not found, an error message is displayed, and login is denied leading to another use – case meant to deal with this exception.

3. Login (U1)

Description: A **PhD Student** logs into the **Doctoral Tracker System** after enrollment verification.

Steps:

1. The student logs in to the system using NITC Google Mail Address.

4. View Profile (U2)

Description: A **PhD Student** views their personal details, DC members, and other profile-related information.

Steps:

1. Students after successful login can view their profile pages.

2. It is a generalized use case for U2A, U2B, U2C.

5. View DC Members (U2A)

Description: A student can see the list of Doctoral Committee (DC) members assigned to them.

Steps:

1. Students can view the details of DC Members to the committee they belong to.

6. View Personal Details (U2B)

Description: A student can see their personal details (name, email, registration date, etc.).

Steps:

1. Students can see their "**Personal Details**".

7. Edit Personal Details (U2C)

Description: A student can update their contact details and other editable fields.

Steps:

1. Students can update their personal details.
2. After updating they can save it.

8. Manage DC Meetings (U3)

Description: Students and coordinators manage DC meetings, including scheduling and modifications.

Steps:

1. Student/coordinator accesses "**Manage DC Meetings**".
2. Views scheduled meetings.
3. Can request a **new meeting** (U4) or **modify minutes** (U5A).

9. Request New DC Meeting (U4)

Description: A student submits a request for a new DC meeting.

Steps:

1. Students click on "**Request New DC Meeting**".
2. A computer-generated mail is sent to DC Committee Members.

10. Approve/Reject DC Minutes (U5)

Description: The **PhD Coordinator** reviews and approves or rejects DC meeting minutes.

Steps:

1. Coordinator reviews meeting minutes.
2. Approves or rejects them.

11. Modify DC Minutes (U5A)

Description: Allows **PhD Students** to modify DC meeting minutes before approval.

Steps:

1. Student modifies the DC Minutes.
2. The student then saves it and sends another request to PhD Co-Ordinator.

12. Announce Exam Date (U6)

Description: The **PhD Coordinator** announces the exam date.

Steps:

1. Coordinator selects the date and confirms.
2. Students receive notifications.

13. Submit Exam Request (U7)

Description: A student submits a request to appear for an exam.

Steps:

1. Student fills out required details.
2. Students submit the request.

14. View Exam Results (U8)

Description: Students can check their exam results.

Steps:

1. Students can see their results posted by the PhD Co-Ordinator.

15. Request Re-exam (U9)

Description: If a student fails the comprehensive exam for the first two attempts, they can request a re-exam.

Steps:

1. Students view the results.
2. Student submits a Re-Examination request to PhD Co-Ordinator.

16. Handle Third Re-exam Request (U9A)

Description: If a student requests to attempt the comprehensive exam third time, then a error message is displayed to student.

Steps:

1. An Error Message is displayed to the student.

17. Track Publications (U10)

Description: A student can track the status of their research publications.

Steps:

1. Student can see his/her's papers and can see their status.

18. Upload Paper (U11)

Description: A student uploads their research paper to the system.

Steps:

1. Student selects a file and uploads it.

19. Update Paper Status (U12)

Description: The student updates the publication status (e.g., "Under Review", "Published").

Steps:

1. Student selects a paper and updates the status of it.

20. View Student Publications (U13)

Description: The **PhD Coordinator** can see the list of all student publications.

Steps:

1. Coordinator can access all student's publications.
2. Coordinator can then select each student and can see each student's publications.

21. Upload SWAYAM Courses List (U14)

Description: The **PhD Coordinator** uploads a list of available SWAYAM courses as an excel sheet.

Steps:

1. Coordinator uploads SWAYAM courses as a file.

22. View Available SWAYAM Courses (U15)

Description: Students can view a list of available SWAYAM courses.

Steps:

1. Student accesses "**View Available SWAYAM Courses**".

23. Submit SWAYAM Course Request (U16)

Description: Students request registration for SWAYAM courses.

Steps:

1. Students select their courses that align their interest.
2. Students then request for approval from the PhD Coordinator.

24. Approve/Reject SWAYAM Requests (U17)

Description: The **PhD Coordinator** approves or rejects SWAYAM course registrations.

Steps:

1. Coordinator accesses "**Approve/Reject SWAYAM Requests**".
2. Reviews requests and decides.

Actors:

1. **Ph.D Students**
2. **Ph.D Co-Ordinator**

Functional requirements

User Authentication and Role Management

- **Student Login:** Students log in to the website using their Google accounts.
- **Ph.D. Coordinator Login:** Coordinators log in using a username and password.
- **Admin Registration:** The Ph.D. Coordinator uploads a list of enrolled students, enabling them to log in without registration.

Student Functionalities

- **Profile Management:** Students can view and update their profiles.
- **DC (Doctoral Committee) Members Management:** Students can add details of their DC members.
- **Paper Publication tracking:** Students can upload paper publication and update their publications
- **SWAYAM Courses:** Students can submit Swayam course registrations requests

DC Meet Workflow

- **Scheduling DC Meetings:** Students can initiate a new DC meeting.
- **DC Meeting Approval Process:**
 - Upon submission, a copy of the DC meeting minutes is sent to the Ph.D. Coordinator.
 - The coordinator can approve or request edits.
 - If approved, students get it signed and submit it to the department.
- **Rejected DC Meet Applications:** Students can update and resubmit rejected applications.

Comprehensive Exam Results and Re-Examination Requests

- View scheduled comprehensive exam dates. Receive notifications about upcoming exams.
- View exam results and past attempts. Submit requests for re-examination.
- The Ph.D. Coordinator can announce exam dates and upload exam results and manage the re-examination results.

Research Paper Publication Tracking

- Upload new research publications and update statuses.
- Attach PDFs or links to published papers. Track publication progress (Submitted, Under Review, Accepted, Published).
- The Ph.D. Coordinator can view the publications of each student and track them.
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SWAYAM Course Registration

- Students can view available SWAYAM courses and submit registration requests.
- Track approval status and receive updates. View enrolled courses and progress.
- Ph.D. Coordinator can view and manage student requests.

Non-Functional Requirements

1. **Performance**
 - a. The system should handle multiple concurrent logins without lag.
 - b. The response time for retrieving exam results should be under 3 seconds.

2. Scalability

- a. The platform should support an increasing number of Ph.D. students.
- b. It should be capable of handling additional features in the future.

3. Security

- a. User authentication should be done via OAuth for Google login.
- b. Passwords for Ph.D. Coordinators should be stored securely (hashed & salted).
- c. Role-based access control should be implemented.

4. Reliability

- a. The system should ensure no data loss in case of a server failure.
- b. Automatic backups should be performed regularly.

5. Usability

- a. The interface should be simple and intuitive for both students and coordinators.
- b. Mobile compatibility should be ensured for ease of access.

6. Maintainability

- a. The codebase should follow best practices to allow easy debugging and updates.
- b. API documentation should be available for future integrations.