
Software Requirements Specification

for Alumni Affairs Network

Version 1.0

Prepared by

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1 Introduction

This project is a prototype for the Alumni Affairs Network (AAN), an application designed to facilitate better administration of activities related to alumni engagement at NITC. The system aims to streamline alumni interactions, including networking, event coordination, job openings, and resource sharing. This section provides an overview of the project's aim, significance, and utility, with a focus on the targeted set of users, such as alumni, students, and administrators involved in managing alumni affairs at NITC.

1.1 Document Purpose

This document provides a comprehensive analysis of the Alumni Affairs Network (AAN) of NITC, covering both functional and non-functional requirements. The system offers a user-friendly platform to enhance alumni engagement by managing user profiles, networking opportunities, event coordination, mentorship programs, and resource sharing, ensuring seamless interaction between alumni, students, and administrators. It also highlights key functionalities such as alumni registration, event participation, job openings, and sharing achievements. Use case diagrams illustrate interactions between users and the system, showcasing workflows and scenarios involving alumni, students, and administrators.

1.2 Product Scope

The **Alumni Affairs Network (AAN)** provides an efficient and interactive platform for alumni, students, and faculty to stay connected, fostering lifelong engagement within the NITC community. The system enhances traditional alumni management by offering a **user-friendly interface** where alumni can register, log in, and update their profiles.

The platform will facilitate **networking, job postings, event organization, and mentorship opportunities**, allowing alumni to contribute to and benefit from the community. Features such as **batch-wise directories, job openings, achievements blog** will ensure a seamless and enriching experience.

1.3 Intended Audience and Document Overview

This document is intended to serve multiple stakeholders (Mathew Kurian, Nivin Prasad, Athel Sumoj) involved in the development and operation of the Alumni Affairs Network.

- **System designers** will reference it to develop the design of the application.
- **Developers and testers** will use it to ensure all requirements are accurately implemented and validated.
- **The targeted users-alumni and students** as key clients of the project, will review the document to understand the system's core functionalities.
- **Maintenance staff** will refer to it for future modifications, ensuring clarity on the current features and operations.

The next section, **Functional Requirements** section will cover the functional requirements of the application. The next section focuses on **Non-functional Requirements**, such as performance, reliability, and security. The final section will explain the use cases along with the use case diagram.

1.4 Definitions, Acronyms and Abbreviations

S.No	Abbreviation/Term	Definition(s)
1	SRS	Software Requirements Specifications
2	NITC	National Institute of Technology, Calicut
3	AAN	Alumni Affairs Network
4	User	A person accessing the alumni affairs site
5	Admin	Super Admin of the system managing the network
6	Database	Stores information about users,job openings,events,etc

1.5 Document Conventions

This document follows the IEEE formatting requirements.

1.6 References and Acknowledgments

- [Use-Case Diagram- Visual Pradigm](#)
- IEEE. IEEE Std 830-1998 IEEE Recommended Practice for Software Requirements Specifications. IEEE Computer Society, 1998

2 Functional Requirements

User Management

- F1-Alumni should be able to register and log in securely.
- F2-Users should have the ability to edit and update their profiles, including personal details, professional information, and social links.

Alumni Directory

- F4-The system should maintain batch-wise directories, displaying alumni profiles with pictures, short bios, and links.

Job Posting and Career Assistance

- F5-Alumni should be able to post job openings at their companies or places they know.
- F6-Users should be able to search and filter job postings by company, location, and job role.

Event Management and Meetups

- F7-Alumni should be able to create, join, and manage meetups or trips.
- F8-A calendar should display upcoming events.
- F9-Countdown timers and animations should enhance user engagement.

News Bulletin and Updates

- F10-The platform should have a news bulletin to display recent college and neighborhood news.
- F11-Notifications should be sent to registered users about important updates.

Accessibility Features

- F12-Font and contrast settings should be customizable for readability, especially for older members.

Automated Email Invitations

- F13-The system should import alumni email directories and send automated promotional emails about the platform.

Gallery and College Memories

- F14-A gallery page should display batch-wise college images and old event pictures.
- F15-Users should be able to upload and tag images with their batch year.

Faculty Interaction and Research Support

- F16-A portal should enable easy access to faculty for research discussions and project collaborations.
- F17-Users should be able to schedule meetings with faculty members.

Recommendation Letters

- F18-Alumni should be able to request recommendation letters online from faculty and HoDs.
- F19-The system should send an automated email to the concerned faculty with the alumni's details.

Campaigns and Community Initiatives

- F20-A campaigns page should list alumni board activities like rallies and charity events.
- F21-Users should be able to donate or volunteer for initiatives.

Sponsorship and Rewards

- F22-The system should support sponsorships from food outlets or entertainment facilities.
- F23-First-time alumni users should get vouchers or rewards upon registration.

Blog and Story Sharing

- F24-Alumni should be able to write and publish blog posts about their experiences.
- F25-The best stories should be highlighted on the homepage.

Batch Enrollment Statistics

- F26-A dashboard should show batch-wise statistics on alumni enrollments.
- F27-The system should send reminder emails to batches with lower participation.

Alumni Achievements and Recognition

- F28-A dedicated page should showcase awards like "Alumnus of the Year" or "Rising Star" based on active alumni participation.

College Event Participation

- F29-Alumni should be able to register for college events like convocation or festivals.
- F30-Special recognition should be given to attending alumni during events.

Alumni Club Membership

- F31-A membership section should allow alumni to apply for club facilities (e.g., RECCAA club).
- F32-Members should be able to book stays and activities through the platform

3 Non-functional Requirements

3.1 Performance Requirements

- **System Responsiveness:** The alumni affairs network is designed to respond to user actions within one or two second for standard operations such as logging in, finding batchmates, and viewing readings and achievements.
- **Scalability:** The system is capable of handling a large volume of data, including information on a vast number of users,their readings and achievements,events,job openings. It will also support a high number of concurrent users, ensuring smooth performance even during peak usage times.

3.2 Safety and Security Requirements

- **Data Security:** All user data, including personal information, will be stored securely in a protected database. Sensitive data will be encrypted to prevent unauthorized access.
- **User Privacy:** The system will comply with data privacy regulations, ensuring that user data is collected and stored responsibly, with access limited to authorized personnel.

3.3 Software Quality Attribute

3.3.1 Reliability

The system will not lag and will provide instant and accurate results to all the users.

3.3.2 Adaptability

The system can be extended to other organizations as well.

3.3.3 Maintainability

In case of errors, it can be rectified by any developer due to the ease of maintenance.

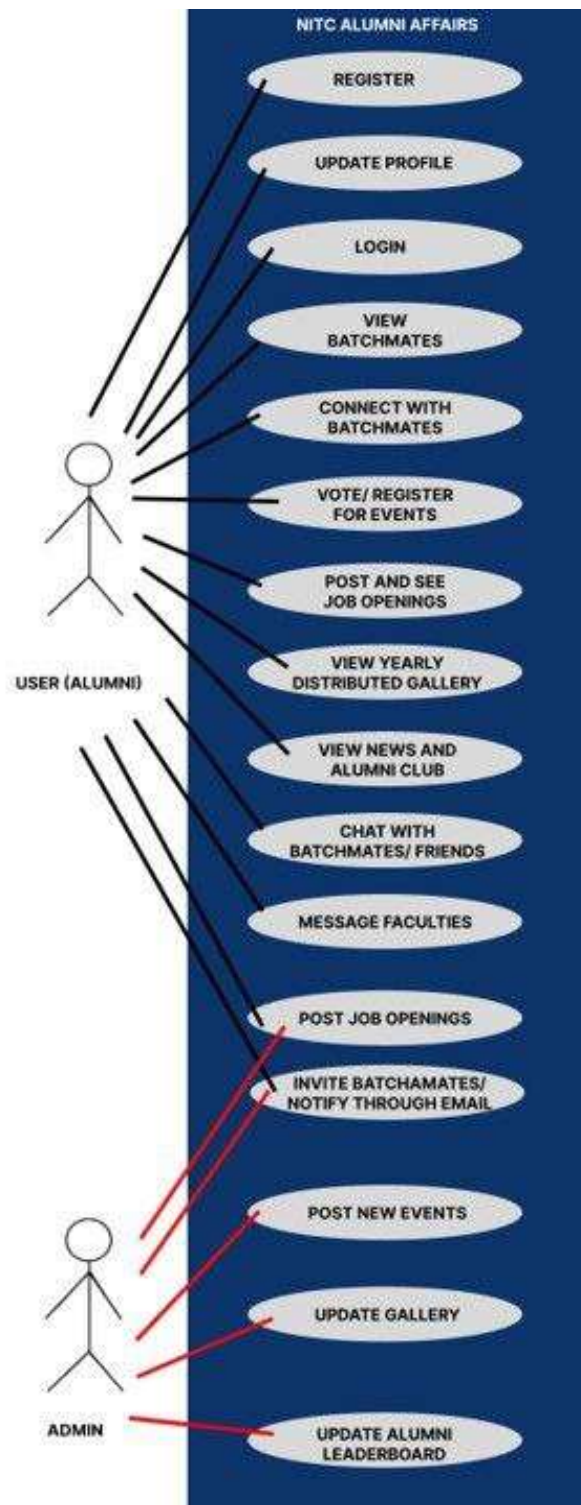
3.3.4 Portability

The system can be deployed on any machine. The quality of the database is maintained to be user-friendly.

3.3.5 Cost-effectiveness

This system is less in cost and bearable to any organization

4 Use Case Diagram



User Use Cases

4.1.1 Register - U1

- **Purpose:** Allow new alumni to register and create accounts.
- **Traceability:** F1
- **Actors:** User (Alumni)
- **Preconditions:** Alumni must not be pre-registered.
- **Postconditions:** Alumni credentials are saved in the database.

4.1.2 Update Profile - U2

- **Purpose:** Allow users to edit and update their profiles, including personal details, professional information, and social links.
- **Traceability:** F2
- **Actors:** User (Alumni)
- **Preconditions:** User is logged in.
- **Postconditions:** Updated profile information is saved in the system.

4.1.3 Login - U3

- **Purpose:** Enable users to log in securely.
- **Traceability:** F1
- **Actors:** User (Alumni)
- **Preconditions:** Alumni must have valid credentials.
- **Postconditions:** Successful login redirects to the user dashboard.

4.1.4 View Batchmates - U4

- **Purpose:** Allow alumni to view batch-wise directories.
- **Traceability:** F4
- **Actors:** User (Alumni)
- **Preconditions:** The alumni database must be updated with batch details.
- **Postconditions:** The system displays alumni profiles with pictures and bios.

4.1.5 Connect with Batchmates - U5

- **Purpose:** Enable alumni to connect and network with their batchmates.
- **Traceability:** F4
- **Actors:** User (Alumni)
- **Preconditions:** User is logged in.
- **Postconditions:** Connection request sent to the selected batchmate.

4.1.6 Vote/Register for Events - U6

- **Purpose:** Allow alumni to register for and participate in events or meetups.
- **Traceability:** F7

- **Actors:** User (Alumni)
- **Preconditions:** Event details must be available in the system.
- **Postconditions:** Registration is confirmed, and participation status is updated.

4.1.7 Post and See Job Openings - U7

- **Purpose:** Allow alumni to post job openings and search for opportunities.
- **Traceability:** F5, F6
- **Actors:** User (Alumni)
- **Preconditions:** User is logged in, and job postings exist.
- **Postconditions:** Job listings are displayed based on search criteria.

4.1.8 View Yearly Distributed Gallery - U8

- **Purpose:** Enable alumni to browse images from past events and college life.
- **Traceability:** F14
- **Actors:** User (Alumni)
- **Preconditions:** The gallery must contain uploaded images.
- **Postconditions:** Images and tagged users are displayed.

4.1.9 View News and Alumni Club - U9

- **Purpose:** Provide updates on college news and alumni activities.
- **Traceability:** F10
- **Actors:** User (Alumni)
- **Preconditions:** News updates and alumni club activities exist in the system.
- **Postconditions:** Recent news and updates are displayed.

4.1.10 Chat with Batchmates/Friends - U10

- **Purpose:** Enable communication between alumni.
- **Traceability:** F4
- **Actors:** User (Alumni)
- **Preconditions:** Both users must be logged in.
- **Postconditions:** Message is sent and stored in the chat history.

4.1.11 Message Faculties - U11

- **Purpose:** Allow alumni to send messages to faculty members.
 - **Traceability:** F16
 - **Actors:** User (Alumni)
 - **Preconditions:** Faculty must be available for contact.
 - **Postconditions:** Message is delivered to the respective faculty member.
-

Admin Use Cases

4.1.12 Post Job Openings - U12

- **Purpose:** Allow administrators to post job opportunities.
- **Traceability:** F5
- **Actors:** Administrator
- **Preconditions:** Admin must be logged in.
- **Postconditions:** The job posting is available for users.

4.1.13 Invite Batchmates/Notify Through Email - U13

- **Purpose:** Allow admins to send email notifications to alumni.
- **Traceability:** F13
- **Actors:** Administrator
- **Preconditions:** Alumni email directories must be imported.
- **Postconditions:** Emails are sent to selected alumni.

4.1.14 Post New Events - U14

- **Purpose:** Enable admins to create and announce alumni events.
- **Traceability:** F7
- **Actors:** Administrator
- **Preconditions:** Admin is logged in.
- **Postconditions:** The event is visible to alumni.

4.1.15 Update Gallery - U15

- **Purpose:** Allow administrators to upload and manage event images.
- **Traceability:** F14
- **Actors:** Administrator
- **Preconditions:** Admin is logged in.
- **Postconditions:** New images are added to the gallery.

4.1.16 Update Alumni Leaderboard - U16

- **Purpose:** Maintain and update a leaderboard recognizing alumni achievements.
- **Traceability:** F28
- **Actors:** Administrator
- **Preconditions:** Admin is logged in.
- **Postconditions:** The leaderboard is updated with the latest rankings.

Appendix A – Data Dictionary

Admin	They are the super admins who have built the alumni affairs network
User	They are the people accessing the alumni affairs network
Database	A database is an organized collection of data, generally stored and organised on a computer
National Institute Of Technology (NITC)	The organization for which the application is developed

Appendix B – Group Log

Meeting Day	Timings
17/02/2025	05:00 - 08:00 PM
18/02/2025	05:00 - 09:00 PM
19/02/2025	05:00 - 07:00 PM

Name	Contributions
Mathew Kurian Pattam	Design,Functional Requirements F1-F10
Nivin Prasad	Introduction,Functional Requirements F11-F18,Non-Functional Requirements
Athel Sumoj	Functional Requirements F19-F32,Use Case Diagram and Use Cases