
Software Requirements Specification

for

NITCONF

Prepared by

Rasmiya

B210598CS

rasmiya_b210598cs@nitc.ac.in

Aiswarya V S

B211258CS

aiswarya_b211258cs@nitc.ac.in

Sonu Kumar Mandal

B210590CS

sonukumar_b210590cs@nitc.ac.in

Course: Software Engineering Laboratory

Date: 16/01/2024

Software Requirements Specification for NITCONF

Page 2

Document Purpose	1
Product Scope	1
Intended Audience and Document Overview	1
Document Conventions	2
2 Overall Description	3
Product Overview	3
Product Functionality	4
3 Specific Requirements	
External Interface Requirements	5
User Interfaces	5
Software Interfaces	6
Functional Requirements	6
Use Case Model	7
4 Other Non-functional Requirements	27
Performance Requirements	27
Safety and Security Requirements	

1

Introduction

The NITCONF project is a dynamic web solution crafted to facilitate the seamless submission and evaluation of academic papers for conferences. This web platform allows individuals to submit papers for evaluation by a team of designated reviewers. Following the review process, a Program Committee will make decisions on paper acceptance or rejection and subsequently notify the speakers. This section provides an overview of the project's core objectives, significance, and its relevance to the intended users.

Document Purpose

This Software Requirements Specification (SRS) document serves as a comprehensive guide for the NITCONF project. Its primary purpose is to define the functional and non-functional requirements of the system, fostering a shared understanding among stakeholders, including developers, testers, project managers, and clients. The document serves as a roadmap for the development process, ensuring alignment with the client's vision. Moreover, it establishes the foundation for testing, validation, and future enhancements of the NITCONF project, providing a valuable resource throughout the system's lifecycle.

Product Scope

The NITCONF project aims to develop an intuitive web platform that simplifies the submission of papers for academic conferences and enhances the evaluation process. It includes features such as the Call for Papers (CFP) submission, paper review by designated reviewers, and decision-making by the Program Committee. The system emphasizes user-friendly interactions, robust security, and efficient data management.

Intended Audience and Document Overview

This SRS document is intended for a diverse audience of stakeholders involved in the development, testing, and deployment of the NITCONF. The primary intended audience includes:

- **Developers:** Those responsible for designing, implementing, and testing the NITCONF system to meet the specified requirements.
- **Testers:** Tasked with verifying that the system adheres to defined requirements.
- **Project Managers:** Overseeing project execution, progress, and delivery.

- **Clients:** Individuals or organizations hosting academic conferences and approving the final implementation of the NITCONF.
- **System Administrators:** Responsible for maintaining and managing the NITCONF post deployment.
- **Quality Assurance Teams:** Those responsible for ensuring the overall quality and reliability of the NITCONF.

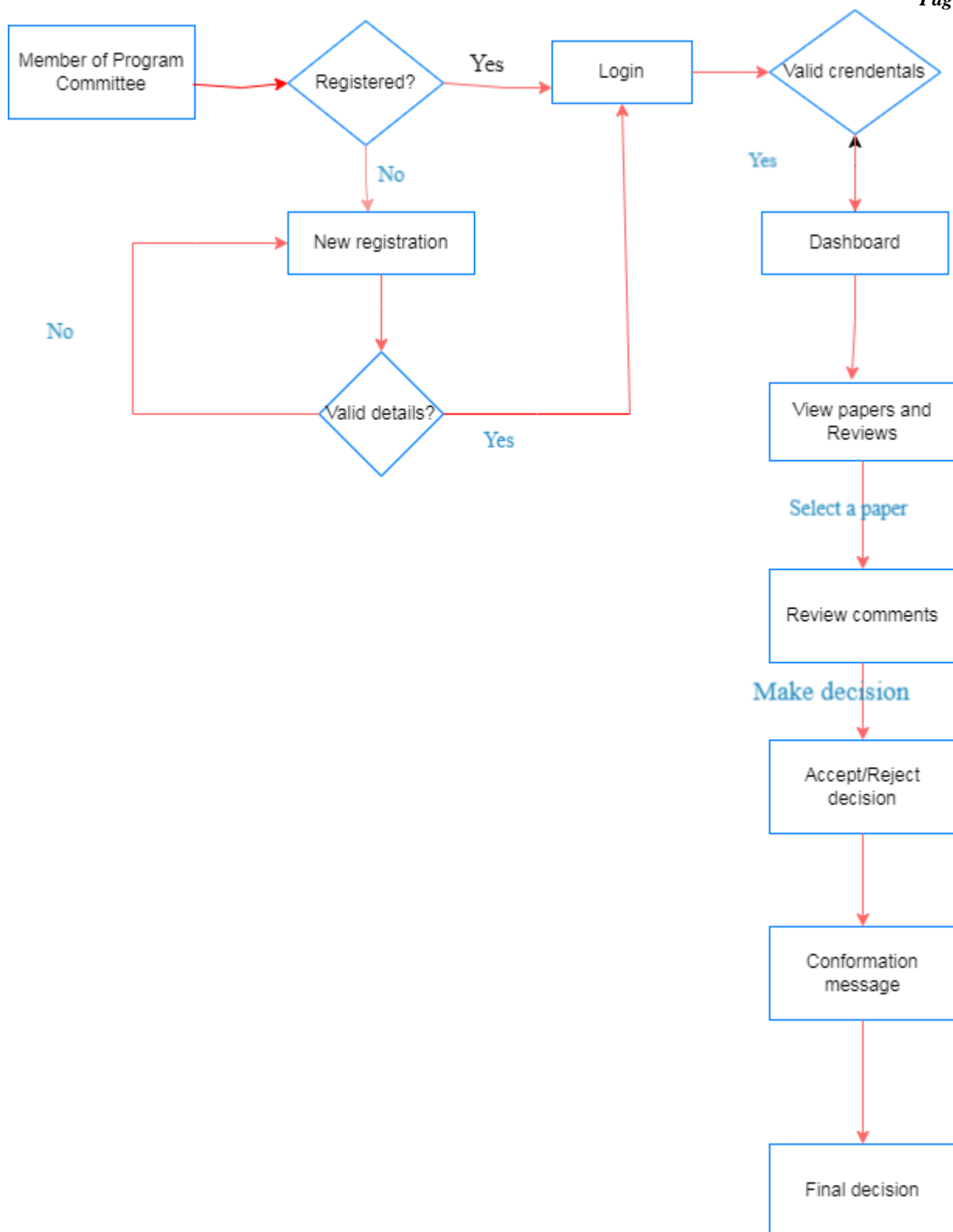
Document Conventions

This document follows the IEEE formatting requirements.

2 Overall Description

Product Overview

The NITCONF Submission and Evaluation System (NSES) is a web-based platform specifically designed to facilitate the submission and evaluation of papers for the NITCONF conference. The system offers a user-friendly interface with distinct functionalities for speakers, designated reviewers, and members of the Program Committee, ensuring a seamless and efficient process.



Product Functionality

- **User Registration:**
 - Participants, including speakers, reviewers, and Program Committee members, can securely register to create their accounts within the system.
- **User Login:**
 - Registered users can log in to access the platform's features, ensuring a personalized and secure experience.
- **Paper Submission:**
 - Speakers can utilize a dedicated "Submit Abstract" button to initiate the paper submission process, accessing a secure login site..
- **Reviewer Portal:**
 - Designated reviewers can log in to the system to access papers assigned for review, providing detailed comments and assigning a ranking on a predefined scale.
- **Reviewer Preferences and Expertise Profiles:**
 - Allow reviewers to set preferences for the types of papers they are interested in reviewing (e.g., specific topics, formats).
 - Create reviewer profiles highlighting their areas of expertise and past review history.
- **Program Committee Collaborative Review Assignment:**
 - Program Committee members have access to a dedicated portal where they can collaboratively assign papers to reviewers.
 - The portal displays submitted papers and suggests reviewers based on matching algorithms.
 - Committee members discuss assignments, considering collective expertise and preferences.
- **Program Committee Decision-Making:**
 - Members of the Program Committee can log in to a dedicated portal to collectively review comments and make informed decisions on paper acceptance or rejection, shaping the conference program.
- **Paper Status Tracking:**
 - Participants, including speakers and reviewers, can track the status of their submissions within the system.

- **Notification System:**
- Automated notifications will be sent to speakers following Program Committee decisions, ensuring timely communication of acceptance or rejection.

3 Specific Requirements

External Interface Requirements

User Interfaces (program committee)

Intuitive Design:

- The NSES user interface is thoughtfully designed to be intuitive, ensuring a clear and engaging layout that enhances the overall user experience.

Access via Login Page:

- Upon launching the application, Program Committee members are directed to a dedicated login page. Here, they are prompted to enter their user credentials, including a user ID and password, ensuring secure and authorized access to the system.

Login Confirmation:

- Upon successful login, the system promptly issues a confirmation message, assuring Program Committee members of a successful login and facilitating a smooth entry into the system.

New User Registration:

- In the event that a Program Committee member is new to the system, they will seamlessly navigate to a registration page, where they can efficiently create their account.

Aesthetic Design and Layout:

- The user interface boasts a visually appealing design with carefully chosen graphic elements, font styles, and a harmonious colour scheme. These considerations are
 - made to optimize readability and organizational clarity, with a focus on accommodating users with colour vision impairments.

Uniform Design Consistency:

- The NSES maintains a consistent design across its various interfaces, ensuring a cohesive and unified user experience for Program Committee members.

User-Focused Clarity:

- The software is specifically geared towards user-centricity, with design elements aimed at facilitating a clear understanding and ease of use for Program Committee members.

Task Support:

The user interface provides comprehensive support for Program Committee tasks, including the ability to seamlessly view review comments for all submitted papers. Additionally, the interface facilitates efficient decision-making by allowing Committee members to accept or reject papers directly from the platform.

Software Interfaces

Software Used	Description
Operating System	Linux Operating System
Database	We have used springboot for server-side development and MySQL, an open-source relational database management system.
HTML, CSS, JS	Used in the development of the front-end of the application.

Functional Requirements

F1: Program Committee Member Access:

The system shall provide a dedicated login link for Program Committee members to access their portal.

F2: View Review Comments:

Program Committee members, upon login, shall have the ability to view detailed review comments for all submitted papers.

F3: Decision-Making Interface:

The system shall present a user-friendly interface within the Program Committee portal, allowing members to make decisions to accept or reject papers.

F4: Decision Confirmation:

Upon the Program Committee member making a decision, the system shall promptly issue a confirmation message, acknowledging the acceptance or rejection of the paper.

F5: Decision Logging:

The system shall log the decisions made by Program Committee members, maintaining a record of accepted and rejected papers.

F6: Automated Notifications:

Following a decision, the system shall automatically send notifications to speakers, informing them of the acceptance or rejection of their submitted papers.

Use Case Model

Login - U1 (Program Committee Member)

Author – Rasmiya

Purpose - To log in to the NITCONF as a Program Committee member.

Priority - High.

Pre conditions –

- 1.The Program Committee member must have valid login credentials.
- 2.The NITCONF system must be accessible.

Post conditions -

- 1.The Program Committee member successfully logs into the NITCONF system.

F2: View Review Comments:

Program Committee members, upon login, shall have the ability to view detailed review comments for all submitted papers.

F3: Decision-Making Interface:

The system shall present a user-friendly interface within the Program Committee portal, allowing members to make decisions to accept or reject papers.

F4: Decision Confirmation:

Upon the Program Committee member making a decision, the system shall promptly issue a confirmation message, acknowledging the acceptance or rejection of the paper.

F5: Decision Logging:

The system shall log the decisions made by Program Committee members, maintaining a record of accepted and rejected papers.

F6: Automated Notifications:

Following a decision, the system shall automatically send notifications to speakers, informing them of the acceptance or rejection of their submitted papers.

Use Case Model

Login - U1 (Program Committee Member)

Author – Rasmiya

Purpose - To log in to the NITCONF as a Program Committee member.

Priority - High.

Pre conditions –

- 1.The Program Committee member must have valid login credentials.
- 2.The NITCONF system must be accessible.

Post conditions -

- 2.The Program Committee member successfully logs into the NITCONF system.

Actors – Program Committee Member

Extends – None

Flow of Events:

1. Basic Flow -
 - The Program Committee member attempts to log in using their credentials.
 - Successful login grants access to the Program Committee portal.
2. Alternative Flow -
 - Incorrect credentials result in an error message: "Invalid Login."
 - The system redirects to the login page.
3. Exceptions -
 - Program Committee member encounters technical issues during login.
 - Incorrect credentials provided.

Includes - None

Notes/Issues – None

View Paper Reviews and Make Decisions - U16 (Program Committee Member)

Author – Aiswarya

Purpose - To view review comments of all submitted papers and make decisions to accept or reject.

Priority - High.

Preconditions -

1. Program Committee member must be logged into the NSES system.
2. Papers submitted for review should be available in the system.

Post conditions -

1. The Program Committee member successfully reviews comments and makes decisions on the submitted papers.
2. Acceptance or rejection decisions are recorded and communicated to relevant stakeholders.

Actors – Program Committee Member

Extends – None

Flow of Events:

1. Basic Flow -
 - The Program Committee member logs into the system.
 - Selects the "View Paper Reviews" option from the Program Committee portal.
 - Reviews comments on each paper along with the ranking.
 - Makes a decision to accept or reject each paper.
 - Records the decisions.
2. Alternative Flow -
 - If there are no papers available for review, a message is displayed indicating the absence of papers for evaluation.
3. Exceptions -
 - Technical issues during the paper review process.
 - Incomplete data or missing reviews.

Includes - None

Notes/Issues -

4 Other Non-functional Requirements

Performance Requirements

The search and retrieval functionalities in the NITCONF depend on the timely updates made to the system. The system must promptly respond to user requests, allowing them to efficiently search for and submit papers in a matter of seconds. During peak submission periods, the system should handle a high volume of paper submissions to ensure a smooth and satisfactory user experience. Furthermore, the system should efficiently process abstract submissions and reservations while maintaining reliable and responsive performance. Overall, the performance of the system will be optimized for speed, accuracy, and user satisfaction.

Safety and Security Requirements

All data within the NITCONF S must be securely stored in a protected database to safeguard sensitive information, including paper submissions and reviewer feedback. While users interact with the system to submit papers, view reviews, and make decisions, robust access controls will be implemented to ensure that only authorized personnel, such as Program Committee members, can modify or make decisions on papers. This stringent access control mechanism helps prevent unauthorized changes, preserving the integrity of the system's records and fostering confidence among users in the reliability and security of the NITCONF service..