

Spoural Management System

Software Requirements Specification

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1. Introduction

1.1 User Story

- The **Spoural Management System** is being developed to help **Trusha Patel (Mentor)** efficiently manage event participation records of students at **Charotar University of Science & Technology**.
- Previously, event participation details were stored in **Excel sheets**, making it difficult to track students involvement in various events. To streamline the process, we are designing a **centralized system** where event details, student participation, and management tasks can be handled in one place.

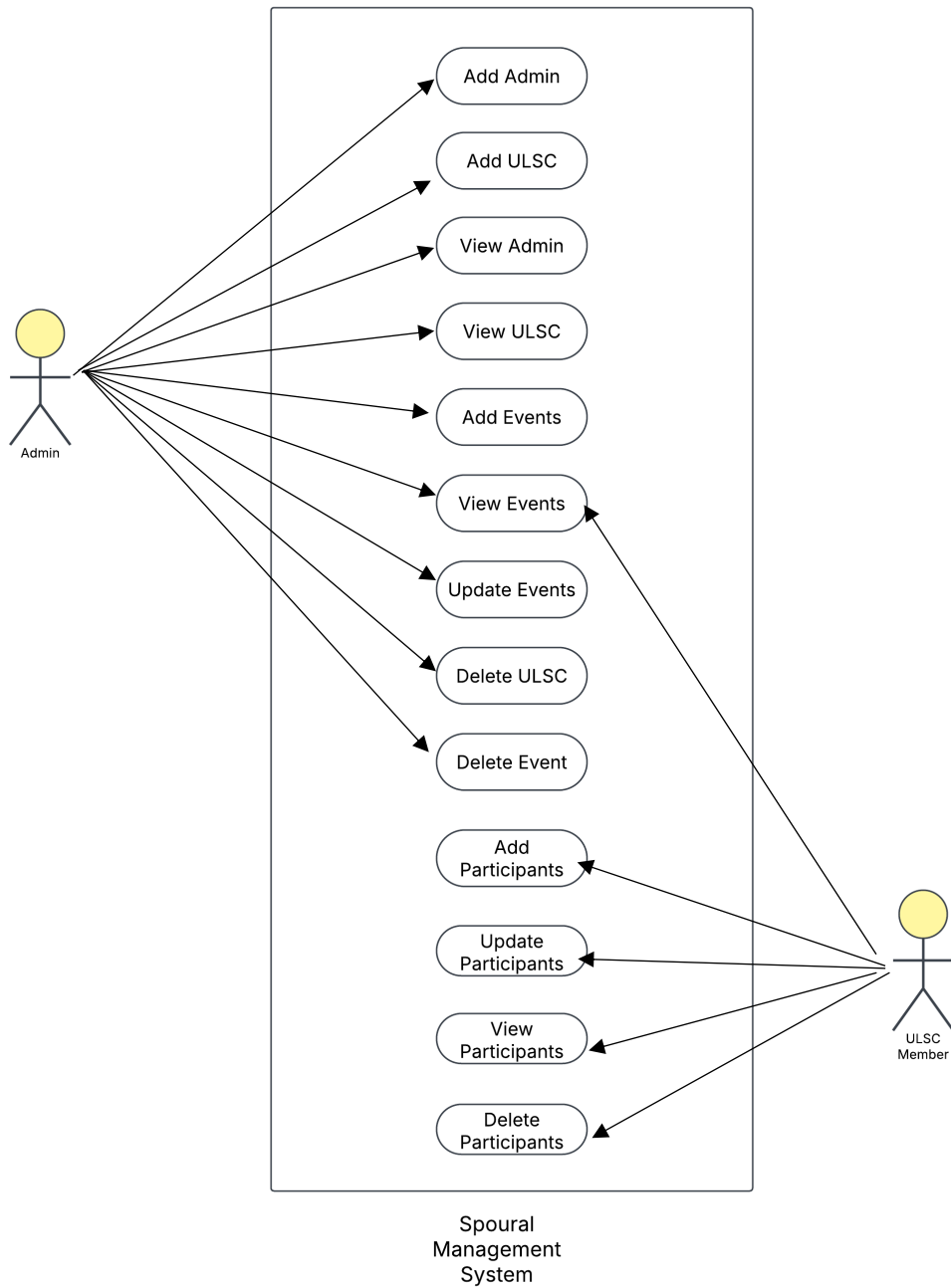
1.2 Purpose

- The purpose of the **Spoural Management System** is to provide an efficient and organized way to manage student participation in university events. The system aims to replace the traditional Excel-based tracking method with a **centralized, digital solution** that simplifies event registration, participation tracking, and record management.

1.3 Scope

The **Spoural Management System** will include the following functionalities:

- **Admin Portal**
 - Add and manage admins.
 - Add and manage **ULSC members** and students.
 - View, update, and delete events.
 - View reports on student participation.
- **ULSC Portal**
 - View and manage events.
 - Add, update, and remove participants.
 - Track and analyze participation records.



2 Software Requirements Specifications

- This section describes all the functional as well as the non-functional requirements. It contains descriptions of functions and capabilities that the product must provide.

2.1 Functional Requirement

- Functional requirements describe how the product must behave, including its features and functionalities.

F1: Login for Admin

The admin can log in to the system using their username and password.

- **Input:** Admin Username and Password.
- **Output:** Admin Dashboard with access to administrative features.
- **Processing:** The system verifies the admin's credentials against the database, and if valid, grants access to the Admin Dashboard.

F2: Login for ULSC Member

ULSC members can log in to the system using their credentials.

- **Input:** ULSC Member Username and Password.
- **Output:** ULSC Member Dashboard with access to event participation features.
- **Processing:** The system verifies the credentials and grants access accordingly.

F3: Logout Functionality

Users can log out of the system to end their session.

- **Input:** 'Logout' option selected by the user.
- **Output:** User is redirected to the login screen.
- **Processing:** The system clears the session and logs the user out securely.

F4: Password Reset

Users can reset their password in case they forget it.

- **Input:** Username or registered email.
- **Output:** Password reset page is provided to the user.
- **Processing:** If the user exists in the database, a reset link is sent via email.

F5: Add Admin

The system allows authorized personnel to add new admins either manually or by uploading an Excel file.

- **Input:** New Admin details (Username, Password, Contact Information).
- **Output:** New Admin added to the system.
- **Processing:** The system stores the admin details from uploaded excel file or details entered manually into database and assigns necessary permissions.

F6: View Admin

Admins can view the list of existing administrators in the system.

- **Output:** List of all registered admins displayed on the dashboard.

F7: Add ULSC Member

The admin can register new ULSC members manually or by uploading an Excel file.

- **Input:** ULSC Member details (Name, Email, Contact, Role, etc.).
- **Output:** Newly added ULSC Member stored in the system.
- **Processing:** The system records member details from the form or from the Excel file and generates login credentials.

F8: View ULSC Member

Admins can view all registered ULSC members.

- **Output:** List of all ULSC members displayed.

F9: Add/Update Events

The admin can create new events or modify existing ones manually or by uploading an Excel file.

- **Input:** Event details (Name, Date, Location, Description, etc.).
- **Output:** New or updated event information stored in the system.

- **Processing:** The system saves or modifies event details either from manual input or from uploaded Excel files into the database.

F10: View Events

Users can view a list of all upcoming and past events.

- **Output:** List of events displayed with relevant details.

F11: Delete Events

Admins can delete an event from the system.

- **Input:** Event ID.
- **Output:** Selected event removed from the system.
- **Processing:** The system deletes the event and all associated records.

F12: Add/Update Participants

Admins can add or update participants for an event manually or by uploading an Excel file.

- **Input:** Participant details (Name, Contact, Event ID, Role, etc.).
- **Output:** Updated participant list for the event.
- **Processing:** The system stores participant details

F13: View Participants per Event

Users can view a list of participants for a specific event.

- **Output:** List of participants displayed under the event details.

F14: Delete Participants

Admins can remove participants from an event.

- **Input:** Participant ID and Event ID.
- **Output:** The selected participant is removed from the event.
- **Processing:** The system updates the event participant list accordingly.

F15: Session Management

The system must manage user sessions on all pages, with sessions expiring automatically after 30 minutes of inactivity.

- **Input:** User activity or inactivity over time.
- **Output:** Automatic logout after session expiration; user redirected to the login page.
- **Processing:** The system monitors session time and invalidates sessions after 30 minutes of inactivity.

F16: Download PDF for Cultural Entries by ULSC member

ULSC can download event details in PDF format for both individual and multiple cultural events.

- **Input:** Selection of single or multiple cultural events.
- **Output:** Downloadable PDF file containing event details.
- **Processing:** The system generates PDF documents dynamically based on the selected event(s) and provides them for download.

2.2 Non-Functional Requirement

2.2.1 Usability

- The system must be easy to navigate for both admins and ULSC members.
- User interfaces should be intuitive and require minimal training.

2.2.2 Reliability

- The system should be available with minimal downtime.
- Data integrity must be ensured with regular backups.
- The database update process must roll back all related updates when any update fails.

2.2.3 Performance

- The system should handle concurrent users efficiently.
- The front-page load time must not exceed **5 seconds**.

2.2.4 Security

- Only authorized users should be able to access sensitive data.
- The system must enforce role-based access control (RBAC).
- Unauthorized users cannot log in or modify system data.