

Requirement 4.4.1: Display League Schedule and Standings ok

- **Situation:** “Real-Time Schedule and Standings Access for League Officials”
- **Summary:** The system provides league officials with up-to-date schedules and standings, refreshing data within one minute of updates.
- **Author:** Prajwal
- **Date:** 10/27/2024
- **System Specification:**
 1. When users access the league schedule page, the system shall:
 - Display the most up-to-date league schedule and standings without requiring a login.
 - Refresh data and update the display within 1 minute of any match result update.
 - Present information in a tabular format with columns for:
 - Match Date (YYYY-MM-DD format),
 - Competing Teams (full team names),
 - Final Scores (format: Team1 Score - Team2 Score),
 - Updated Standings (rank position for each team).

Requirement 4.5.1: Secure Access for City Officials ok

- **Situation:** “Controlled Access to Sensitive Venue Information”
- **Summary:** The system ensures that only authorized city officials can access sensitive venue information through secure login.
- **Author:** Prajwal
- **Date:** 10/27/2024
- **System Specification:**
 1. Upon accessing the venue regulations and weather information page, the system shall prompt city officials to enter login credentials.
 - The login form shall include fields for:
 - Username (text input, min. 3 characters, max. 20 characters),
 - Password (masked input, min. 8 characters, alphanumeric with at least one special character).
 2. Authentication Process:
 - The system shall validate entered credentials against the authorized users' database.

- Upon successful login, the system shall display the venue regulations and weather information dashboard.
- If login fails after three attempts, the system shall lock the account and notify the official via email.

Requirement 4.5.2: Real-Time Venue Monitoring ok

- **Situation:** “Weather and Safety Monitoring for Venue Compliance”
- **Summary:** The system displays current weather and compliance information, alerting city officials to any non-compliance issues.
- **Author:** Prajwal
- **Date:** 10/27/2024
- **System Specification:**
 1. When a city official selects a venue, the system shall:
 - Query a live weather API to display current weather data specific to the selected venue.
 - Display the following weather conditions in real-time:
 - Temperature (in °F),
 - Humidity (%),
 - Wind Speed (km/h),
 - Precipitation (inch)
 - Any severe weather alerts.
 2. Safety Regulation Display:
 - For the selected venue, the system shall display specific safety regulations retrieved from the regulations database.
 - If any safety regulation is not met, the system shall:
 - Display a warning message highlighting the unmet regulation,
 - Suggest corrective actions for compliance,
 - Include timestamped notifications of non-compliance.

Requirement 4.5.3: Venue Safety Regulation Access ok

- **Situation:** “Venue Safety Information Display for City Officials”
- **Summary:** The system displays safety regulations and weather warnings for venues, supporting compliance checks by city officials.
- **Author:** Prajwal

- **Date:** 10/27/2024

· **System Specification:**

1. When city officials select a venue for an upcoming event, the system shall:
 - Display associated safety regulations and weather warnings.
 - Highlight any non-compliance issues and severe weather warnings prominently in a separate warning section.
2. System Data Retrieval and Display:
 - The system shall query both the venue safety regulations database and the live weather API.
 - Any potential issue or warning shall be displayed as:
 - “Warning” label with specific details,
 - Suggested remedial actions, and
 - Timestamp for all warnings and compliance alerts.

Requirement 4.6.1: Match Results and Standings Update ok

- **Situation:** “Automatic Standings Update After Match Results”
- **Summary:** The system allows league officials to input match results and updates standings in real-time.
- **Author:** Prajwal
- **Date:** 10/27/2024

System Specification:

1. After each game, league officials shall be able to enter match results through a results form with the following fields:
 - Match Date (auto-filled to current date),
 - Competing Teams (dropdown with team selection),
 - Final Score (two integer fields, one for each team’s score),
 - Additional Comments (optional text field).
2. On form submission:
 - The system shall validate the score entries and update the standings in the league database.
 - The display of standings shall refresh within 1 minute of the data entry, visible to all users viewing the league standings.

Requirement 4.6.2: Search Function for Teams and Leagues ok

- **Situation:** “Searchable Database of Teams and Leagues”
- **Summary:** The system retrieves relevant teams and leagues based on user-inputted search terms, improving information access.
- **Author:** Prajwal
- **Date:** 10/27/2024
- **System Specification:**
 - a. The search bar shall be available on the main search page, allowing users to search for teams, leagues, or venues.
 - b. Users can type the full name or partial keywords (minimum 3 characters).
 - c. The system shall search in real time as the user types.
- **Searchable Objects:**
 - a. The system shall match keywords to fields including:
 - Team Names,
 - League Names,
 - Venue Names,
 - Awards and Honors.
- **Search Result Display:**
 - a. Results shall display in a list view with the following fields:
 - Object Type (e.g., Team, Venue),
 - Name,
 - Relevant Details (e.g., game schedules, award achievements).

Requirement 4.7.3: Player Notifications for Schedule Updates ok

- **Situation:** “Automated Notifications for Schedule Changes”
- **Summary:** The system notifies players and team managers of schedule updates, ensuring they are informed of changes.
- **Author:** Prajwal
- **Date:** 10/27/2024
- **System Specification:**
 1. The system shall record each user’s activities in a log file for security and auditing purposes, including:
 - Search History (keywords and timestamp),
 - Downloaded Files (file name, type, and timestamp),
 - Text Entries (timestamp and activity type),

- Deleted Files (file name, timestamp, and location),
 - Transferred Files (source, destination, timestamp),
 - Edited Information (field name, previous value, new value, timestamp).
- For threat detection:
 - The system shall generate an alert if any suspicious activity is detected, such as firewall breaches or unauthorized access.
 - A detailed log of the threat source, type, method of access, and detection timestamp shall be stored and sent to the system administrator for further investigation.

Requirement #: 4.1.1 ok

- **Situation:** User Authentication
- **Summary:** The system requires users to log in with their credentials to access registration and viewing functionalities.
- **Variant:** None
- **Author:** Poorna Bengaluru Shivaji Rao
- **Date:** 10/05/2024
- **System Specification:**
 - **Input Requirements:** Users must enter a valid username and password.
 - **Authentication Process:** The system must validate credentials against the user database.
 - **Security Measures:** Passwords should be hashed and salted for storage. Implement account lockout mechanisms after three failed login attempts to prevent brute-force attacks.
 - **Recovery Options:** Include a "Forgot Password?" feature that sends a password reset link to the registered email.
 - **User Feedback:** Provide clear error messages for invalid credentials and success messages upon successful login.

Requirement #: 4.1.2 ok

- **Situation:** Sport and League Selection
- **Summary:** The system allows users to select a sport and league from predefined lists to facilitate registration.
- **Variant:** None
- **Author:** Poorna Bengaluru Shivaji Rao
- **Date:** 10/05/2024

- **System Specification:**
 - **Data Management:** The system must maintain a database of available sports and leagues, allowing for easy updates.
 - **Dynamic Dropdowns:** Implement AJAX calls to update league options based on the selected sport without refreshing the page.
 - **User Interface:** Ensure that the dropdown menus are intuitive and clearly labeled for user understanding.
 - **Accessibility:** Ensure that selections can be made using keyboard navigation for users with disabilities.

Requirement #: 4.1.3 ok

- **Situation:** Registration Form Display
- **Summary:** The system displays a registration form for users to fill in mandatory details after selecting a league and class.
- **Variant:** None
- **Author:** Poorna Bengaluru Shivaji Rao
- **Date:** 10/05/2024
- **System Specification:**
 - **Form Fields:** Include fields for player name, age, contact information, and medical history, with clear labels and placeholder text.
 - **Validation Rules:** Implement client-side validation to check for required fields and valid input formats (e.g., email validation).
 - **Error Handling:** Provide inline error messages for invalid inputs, guiding users to correct mistakes before submission.
 - **Submission Confirmation:** Display a loading indicator while the form is being submitted, followed by a success message or error feedback.

Requirement #: 4.1.4 ok

- **Situation:** Payment Processing
- **Summary:** The system provides multiple payment options for users to complete their league registration securely.
- **Variant:** None
- **Author:** Poorna Bengaluru Shivaji Rao
- **Date:** 10/05/2024
- **System Specification:**

- **Payment Gateway Integration:** Support multiple payment methods, including credit cards and popular e-wallets (e.g., PayPal, Stripe).
- **Secure Transactions:** All payment data must be encrypted using TLS/SSL during transmission to protect sensitive information.
- **Transaction Confirmation:** After payment completion, the system should display a confirmation screen and send a confirmation email to the user.
- **Error Handling:** Handle payment failures gracefully, allowing users to retry or choose an alternative payment method.

Requirement #: 4.1.5 ok

- **Situation:** Registration Confirmation
- **Summary:** The system confirms a player's registration after successful payment and updates their schedule accordingly.
- **Variant:** None
- **Author:** Poorna Bengaluru Shivaji Rao
- **Date:** 10/05/2024
- **System Specification:**
 - **Email Notification:** Generate and send a confirmation email with registration details, including the player's name, league, and match schedule.
 - **Schedule Update:** Automatically update the user's personal schedule in the system to reflect upcoming matches and training sessions.
 - **Data Storage:** Store registration details in the database for future reference and reporting.
 - **User Access:** Ensure that users can access their registration information and schedules through their account dashboard.

Requirement #: 4.1.6 ok

- **Situation:** Schedule Access
- **Summary:** The system allows players to view their updated personal schedules at any time.
- **Variant:** None
- **Author:** Poorna Bengaluru Shivaji Rao
- **Date:** 10/05/2024
- **System Specification:**
 - **Dashboard Access:** Implement a dedicated "My Schedule" section in the user dashboard where players can view their schedules.

- **Schedule Format:** Present the schedule in a calendar view that highlights upcoming matches, training sessions, and any changes to the schedule.
- **Real-Time Updates:** Ensure that any changes to the schedule (e.g., match rescheduling) are reflected immediately in the user's view.
- **Notifications:** Send notifications to users via email or SMS for any schedule updates.

Requirement #: 4.2.1 ok

- **Situation:** Team Manager Authentication
- **Summary:** The system requires team managers to log in to secure the team registration process.
- **Variant:** None
- **Author:** Poorna Bengaluru Shivaji Rao
- **Date:** 10/05/2024
- **System Specification:**
 - **Role-Based Access Control:** Differentiate between user and manager roles in the authentication system, ensuring managers have access to team-specific functionalities.
 - **Authentication Process:** Managers must enter a valid username and password, with similar security measures (hashed passwords, account lockout) as user authentication.
 - **Audit Trail:** Maintain logs of manager logins and actions taken in the system for accountability.
 - **User Feedback:** Provide feedback upon successful login and detailed error messages for failed attempts.

Requirement #: 4.2.2 ok

- **Situation:** “Registration of Team Manager for League”
- **Summary:** The system allows the team manager to register themselves and manage their team within a chosen league.
- **Author:** Prajwal Umesha
- **Date:** 10/05/2024
- **System Specification:**
 - **Game Selection:** Selected sport and league.
 - **Registration Processing:** The system presents a registration form with fields such as manager's name, team name, sport, league, and contact details.

- **Registration Recorded:** Successful registration confirmation message if details are valid; error message if any fields are missing.
- **Games Update:** Updated league and team manager records.

Requirement #: 4.2.3 ok

- **Situation:** “Registration of Players for League”
- **Summary:** Enables team managers to add players to their team by filling in personal and team-related details.
- **Author:** Prajwal Umesha
- **Date:** 10/05/2024
- **System Specification:**
 - **Player Information:** Player details, including name, age, position, and contact information.
 - **Data Submission:** Provides a form to the manager for entering player data and validates it.
 - **Data Checkness:** Success confirmation if all fields are complete and conform to league standards; error notification if data is invalid.
 - **Records Update:** Player registration records updated in the system.

Requirement #: 4.2.4 ok

- **Situation:** “Team Manager registers and pays for a league”
- **Summary:** Facilitates payment processing for team managers registering for leagues.
- **Author:** Prajwal Umesha
- **Date:** 10/05/2024
- **System Specification:**
 - **Payment Information:** Payment details, including payment method, card details, and PayPal as an option.
 - **Payment Processing:** System verifies the payment and encrypts all sensitive data.
 - **Payment Confirmation:** Confirmation message if payment is successful; error message if the transaction fails.
 - **Payment Recorded:** Payment records stored securely.

Requirement #: 4.2.5 ok

- **Situation:** “System generates and displays team match history”
- **Summary:** Provides a comprehensive match history, including details on dates, outcomes, and statistics.
- **Author:** Prajwal Umesha
- **Date:** 10/05/2024
- **System Specification:**

- **Match Information:** Match results and statistics.
- **Records Update:** System records match details and updates team history in real time.
- **Summary Display:** Match history displayed with summary statistics.
- **History Recorded:** Historical match records updated continuously.

Requirement #: 4.3.1 ok

- **Situation:** “Venue owners provide and update details on venue facilities”
- **Summary:** Allows venue owners to add details such as seating, facilities, and address.
- **Author:** Prajwal Umesha
- **Date:** 10/05/2024
- **System Specification:**
 - **Venue Information:** Venue details including name, address, capacity, facilities.
 - **Detail Displays:** Displays venue details to organizers for informed scheduling.
 - **Information Submission:** Venue information is visible to organizers.
 - **Information Updated:** Venue information records are updated as needed.

Requirement #: 4.3.2 ok

- **Situation:** “Management of Venue Schedule for Organizers”
- **Summary:** Venue owners can update venue availability, enabling organizers to view open slots for scheduling.
- **Author:** Prajwal Umesha
- **Date:** 10/05/2024
- **System Specification:**
 - **Basic Information:** Venue, date, and time slots for scheduling.
 - **Calendar Displays:** Displays a calendar with availability, which owners can modify as required.
 - **Schedule Updated:** Updated venue schedule visible to organizers.
 - **Record Updated:** Venue availability records updated.

Requirement #: 4.3.3 ok

- **Situation:** “Organizers book venues for leagues”
- **Summary:** Enables organizers to reserve venues for specific dates and times, with conflict checks.
- **Author:** Prajwal Umesha
- **Date:** 10/05/2024
- **System Specification:**
 - **Data Selection:** Selected venue, date, and time slot.
 - **Booking Confirmation:** Confirms booking if no conflict, or prompts alternative selections.

- **Email Confirmed:** Confirmation email for successful booking; error message for conflicts.
- **Record Updated:** Booking records and updated calendar entries.

Requirement #: 4.7.1 ok

- **Situation:** Venue Schedule Creation
- **Summary:** The system enables venue owners or league officials to create and update venue schedules by selecting available time slots.
- **Variant:** None
- **Author:** Poorna Bengaluru Shivaji Rao
- **Date:** 10/09/2024
- **System Specification:**
 - **User Interface for Scheduling:** Provide an intuitive interface for venue owners to view available slots and create bookings.
 - **Real-Time Availability:** Ensure that the system updates time slot availability in real-time to prevent double bookings.
 - **Notifications:** Implement a notification system that alerts users of booking confirmations, cancellations, or changes to their venue schedules.
 - **Reporting Features:** Allow venue owners to generate reports on bookings, cancellations, and utilization rates for analysis.

Requirement 4.2.6: Team Roster Updates

- **Situation:** “Dynamic Team Roster Management by Team Managers”
- **Summary:** The system enables team managers to manage player rosters, ensuring updated team information.
- **Variant:** Event-driven (WHEN) — This requirement is triggered when a team manager updates the roster.
- **Author:** Haifeng Huang
- **Date:** 10/27/2024

Requirement 4.6.3: User Activity Logging

- **Situation:** “Enhanced Security Through User Activity Logging”
- **Summary:** The system records user activities like searches and edits, providing security and accountability.

- **Variante: Ubiquitous** — This requirement applies to all user interactions that involve data access or modifications.
- **Author:** Haifeng Huang
- **Date:** 10/27/2024

Requirement #: 5.3.1

- **Situation:** “Encryption of Data for Security”
- **Summary:** Implements encryption for all data transmitted between the client and server to secure sensitive information.
- **Author:** Prajwal Umesha
- **Date:** 10/06/2024
- **System Specification:**
 - **Data Transmission:** Data requiring transmission.
 - **Data Encrypted:** Encrypts data using TLS and SSL protocols.
 - **Transmission Confirmed:** Secure transmission confirmation.

Requirement #: 5.3.2

- **Situation:** “Verification for Accessing Sensitive Data”
- **Summary:** Ensures users authenticate before making sensitive modifications, such as updating registration or payment.
- **Author:** Prajwal Umesha
- **Date:** 10/06/2024
- **System Specification:**
 - **User Information:** User credentials.
 - **Information Checked:** Checks and validates user login before permitting access to modification features.
 - **Logging Status Checked:** Authentication success or failure message.
 - **Logs Updated:** Authentication logs updated.