User Requirement Specification (URS)

Document Information

Project: SportConnect
Created on: 2025-03-19
Purpose: Defining the functional and non-functional requirements for a sports networking platform focused on **Basketball, Soccer, Tennis, Dodgeball, and Hockey**.

Table of Contents

1. Introduction

SportConnect is an online social networking platform designed for sports enthusiasts to connect, engage, and organize sports activities. This document defines the functional and non-functional requirements necessary to develop the platform, focusing exclusively on **Basketball, Soccer, Tennis, Dodgeball, and Hockey**. Additionally, users will have a **ranking system** to measure proficiency in each sport, and other users can rate their skill level.

2. System and Functional Requirements (SFR)

User Authentication

ID	Requirement	Actor	Priority
UA-001	Users must be able to register with a secure password.	User	Must Have
UA-002	Users must be able to log in using their credentials.	User	Must Have
UA-003	Implement password hashing for security.	System	Must Have
UA-004	Session management must be implemented.	System	Must Have

User Profiles

ID	Requirement	Actor	Priority
UP-001	Users should be able to update their profiles.	User	Must Have
UP-002	Users should select their favorite sports from Basketball, Soccer, Tennis, Dodgeball, or Hockey.	User	Must Have
UP-003	Profile information must be stored in the database.	System	Must Have
UP-004	Users should be able to see their ranking and skill level in each sport.	User	Must Have

Event Management

ID	Requirement	Actor	Priority
EM-001	Users must be able to create events for Basketball, Soccer, Tennis, Dodgeball, or Hockey.	User	Must Have
EM-002	Users can invite others to events within the selected sports.	User	Must Have
EM-003	Users should be able to RSVP for events.	User	Must Have

Messaging System

ID	Requirement	Actor	Priority
MS-001	Users must be able to send messages to event participants.	User	Must Have
MS-002	Messages should be stored in the database.	System	Must Have

Review & Rating System

ID	Requirement	Actor	Priority
RR-001	Users must be able to leave reviews for events.	User	Must Have
RR-002	Ratings should be averaged and displayed on events.	System	Must Have

Player Ranking System

ID	Requirement	Actor	Priority
PR-001	Users should have a ranking system that reflects their proficiency in each sport.	System	Must Have
PR-002	Other users should be able to rate a player's skill level after an event.	User	Must Have
PR-003	The ranking should be displayed on the user's profile.	System	Must Have
PR-004	The ranking system should aggregate scores based on event ratings and achievements.	System	Must Have

3. Use Cases

User Authentication Use Cases

UA-UC-1: User Registration

Actors: User
Preconditions: User is not registered.
Basic Flow:

1. User enters email and password.
2. System validates input and creates an account.
3. User is redirected to profile.

Event Management Use Cases

EM-UC-1: Create an Event

Actors: User
Preconditions: User is logged in.
Basic Flow:

1. User selects a sport (Basketball, Soccer, Tennis, Dodgeball, or Hockey).
2. User enters event details.
3. System saves event to the database.
4. Event is visible to other users.

Player Ranking Use Cases

PR-UC-1: User Skill Rating

Actors: Event Participants
Preconditions: User has participated in an event.
Basic Flow:

1. After an event, participants are prompted to rate each other's skill level.
2. Ratings are aggregated and added to the user's overall ranking.
3. The updated ranking is displayed on the user's profile.

4. External Interface Requirements (EIR)

External Components

- Database (MySQL) for storing user and event data.
- Web Browser (Chrome, Firefox, Safari) as the primary interface.

Communication Protocols

- HTTPS for secure communication.
- WebSockets for real-time messaging.

Security Measures

- Authentication with JWT sessions.
- Input validation to prevent SQL injection.

---

5. Non-functional Requirements (NFR)

Performance Standards

- The system shall respond to user interactions within **1 second**.
- Support up to **500 concurrent users** without significant lag.

Usability & Accessibility

- Must be mobile-friendly.
- Support multiple languages in the future.

Maintainability & Scalability

- Use **modular code structure** to allow future feature expansion.
- Implement **version control (Git)** for tracking changes.

Document Approved By:

Project Owner: [Your Name]
Date: 2025-03-19