

# Software Requirements Specification

## Game Team Finder System

### 1. Introduction

This document describes the Software Requirements Specification (SRS) for the Game Team Finder system. The system helps players find teammates for online games by creating and joining matchmaking posts.

#### 1.1 Purpose

The purpose of this SRS is to clearly define the functional and non-functional requirements of the Game Team Finder system. This document is intended for developers, instructors, and stakeholders.

#### 1.2 Scope

The system provides:

- User registration and authentication
- Player profiles and rankings
- Game and group discovery
- Group participation management
- Administrative control over users, games, and posts

The website is intended for online gamers looking to connect and organize gameplay sessions.

#### 1.3 Definitions, Acronyms, and Abbreviations

- **SRS:** Software Requirements Specification
- **Admin:** User with management privileges
- **Player:** Regular user of the system

### 2. Overall Description

#### 2.1 Product Perspective

The Game Team Finder is a web-based application consisting of a frontend user interface and a backend server connected to a relational database.

#### 2.2 User Classes and Characteristics

- Player (User): Can create posts, join posts, and manage their profile.
- Admin: Can manage users, games, posts, and moderate content.

#### 2.3 Operating Environment

- Web browser (Chrome, Firefox, Edge)
- Server-side web application
- Internet connection required

#### 2.4 Assumptions and Dependencies

- Users have internet access
- Users have basic knowledge of web navigation

### **3. System Features (Functional Requirements)**

#### **3.1 User Registration**

- Users can create an account using a username and email
- System validates uniqueness of username and email

#### **3.2 User Login and Logout**

- Registered users can log in and log out securely

#### **3.3 Profile Management**

- Players can update display name and region
- System stores player rank information

#### **3.4 Game Management (Admin)**

- Admin can add, update, and remove games

#### **3.5 Group (Post) Creation**

- Players can create groups for a selected game
- Groups have a maximum number of players

#### **3.6 Group Participation**

- Players can join or leave groups
- System prevents exceeding maximum players

#### **3.7 User Management (Admin)**

- Admin can view, manage, or deactivate users

### **4. Non-Functional Requirements**

#### **4.1 Performance**

- Pages should load within 3 seconds under normal load

#### **4.2 Security**

- Passwords must be securely stored
- Role-based access control must be enforced

#### **4.3 Reliability**

- System should be available 99% of the time

#### **4.4 Usability**

- Simple and intuitive user interface

#### **4.5 Scalability**

- System should support growth in users and games

#### **4.6 Maintainability**

- Codebase should be modular and easy to update.

## **5. External Interface Requirements**

### **5.1 User Interface**

- Responsive web pages
- Forms for login, registration, and group creation

### **5.2 Hardware Interfaces**

- None

### **5.3 Software Interfaces**

- Database system for storing users, games, and groups

### **5.4 Communication Interfaces**

- HTTP/HTTPS protocol

## **6. Appendices**

- UML Class diagram
- Use case Diagram
- Activity Diagram
- Sequence Diagram
- ERD