

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