

JoinSports

Software Requirements Specification

For the Development of the Android Application

Version 1.3

Revision History

Date	Version	Description	Author
21/oct/2016	1.0	Initial Design	All group members
01/nov/2016	1.1	added Use Case reference	Dominik Schmitt
12/apr/2017	1.2	some changes	Alexander Bierenstiel
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Software Requirements Specification

1. Introduction

JoinSports is a project to connect sport fans with an android app. We want to help people to meet other sportsmen with the same sport interests. All the necessary organisation for events will be possible by using this app.

1.1 Purpose

This SRS gives an overview of the requirements and documents of our JoinSports project.

1.2 Scope

This document is for internal use and serves as a guideline for the development of our project .

1.3 Definitions, Acronyms and Abbreviations

n/a

1.4 References

Blog	https://joinsportsblog.wordpress.com/
Github - Android App	https://github.com/JoinSports/AndroidApp
Github - Documentation	https://github.com/JoinSports/Documentation
Google Drive	https://drive.google.com/open?id=0B9TxrfCIR7EIOU43R3IzM0JzTTg

1.5 Overview

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2. Overall Description

Primarily JoinSports is a project which creates an opportunity for motivated football enthusiasts to get in contact with each other. In general there are provided two use-cases:

- Find places to join football games (as single person).
- If you already have an existing team: Find motivated opponent teams and arrange football games on public sport fields.

Furthermore it is possible to use the application for other sports, but not the ranked mode at the moment.

Detailed features:

- **User account:**

If you create an account you are a standard user who has no relation to any team.

You are allowed to see all public sport events near your region and you can join them. If you want to join a team you can send a request to an existing team.

- **Create Teams:**

If you have an user account, it is possible for you to create a team. The user who creates the team is automatically the leader (administrator). He can also add members or delete them.

- **Play mode:**

There are two different play modes:

- *Competitive mode:*

For already existing and ambitious teams there is a competitive mode to compete against other teams. After the matches the game result has to be signed in this app. So it is possible to build a descending ranking for all the teams. On basis of the ranking of each team the algorithm of this app can suggest your team matching opponents according to your strength. To avoid abuse and to prevent cheating it is necessary that both team captains accept the game result. To make it impossible to benefit by creating fake accounts and pretending wrong results, the award of points is depending on the opponent's strength. So it is not possible to cheat by creating fake accounts and playing against only this fake team to collect many points, because if a team has much less points in relation to the opponent team, the obtained points are very small to none. In principle there is the intention that teams only get many points by competing against stronger teams. The concept of JoinSports intends to increase the incentive to win especially against weak opponents to not lose many points. By using this rule every game has the same excitement.

Within the competitive mode users are not allowed to belong to more than one team at the same time. Also the waiting time between team changes is strictly defined.

(Note: These rules against cheating are primarily to maintain the functionality to get sensible opponent suggestions from the JoinSports algorithm. They are not for preventing the opportunity of a wrong champion. At last the purpose of the competitive mode is not only to be on 1st place of the ranking but rather to be not bored about weak opponents.)

- *Free mode:*

There are also events just for fun (without any ranking). So the interested users have the opportunity to take part in offered events. On the ground they can independently organize the match structure (e.g. how they divide the teams).

- **Find matches nearby your location:**

Use of Google Maps for visualize all possible offers near your region.

- **Integration of an calendar:**

Use a calendar to manage the game dates and places, so the users can organize their events.

- **Chat function:**

Over an integrated messenger the users can communicate detailed information for the next meeting.

- **Help of the social community:**

JoinSports is only able to work with the help from the social community. Every user can suggest public locations of sport grounds. But finally an administrator of JoinSports has to authorize the suggestion.

- **Assessment of opponents after matches:**

After every game the members of a team may assess the opponent's team according to the criteria such as fairness, seriousness, strength of the opponent or fun factor. Additionally the team users can leave a short comment if they want to mention something special. Due to this collected data the teams have a benchmark to decide which team would fit in the selection for their next opponent.

- **View of match results:**

Every user can have a look at the match result of any finished match.

- **Reporting users:**

In the application is an option to report users who do not stick to rules of the JoinSports community. So it depends on the administrator to ban this user.

3. Specific Requirements

3.1 Functionality

3.1.1 Authentication

We use our own user control system but we keep the option open to add a login with google or facebook to remove the registration process for these people.

3.2 Usability

3.2.1 Training

There is no training required for average android users.

3.3 Reliability

3.3.1 Database Uptime

The server database should have at least 99.9% uptime per year.

3.4 Performance

3.4.1 Number of users

The capacity of the server shall be sufficient for about 10.000 users using the app at the same time.

3.4.2 Input response

The app should react to user inputs in less than one second.

3.4.3 Launch time

The initial startup time should be less than 5 seconds.

3.5 Supportability

3.5.1 Documentation

The code will be commented. As needed there will be some refactoring of variable names to ensure the understanding and meaning of them. There is more documentation planned during the programming.

3.6 Design Constraints

3.6.1 Programming language

Java

3.6.2 Integrated Development Environment

Android Studio

3.7 On-line User Documentation and Help System Requirements

n/a

3.8 Purchased Components

We do not need components at the moment, because we plan to use only free and open-source software for our project.

3.9 Interfaces

3.9.1 *User Interfaces*

Android App, the layout and exact design needs to be discussed.

3.9.2 *Hardware Interfaces*

There are no hardware interfaces. Our application is available for every Android-powered smartphone.

3.9.3 *Software Interfaces*

tbd

3.9.4 *Communications Interfaces*

The Android app has an interface to a data base.

3.10 Licensing Requirements

tbd

3.11 Legal, Copyright, and Other Notices

tbd

3.12 Applicable Standards

n/a

4. Supporting Information

n/a