**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 |
| 23/may/2017 | 1.3 | adjustment of table of contents | Timo Rautenberg |

**Table of Contents**

**1. Introduction**

1.1 Purpose

1.2 Scope

1.3 Definitions, Acronyms and Abbreviations

1.4 References

1.5 Overview

**2. Overall Description**

**3. Specific Requirements**

3.1 Functionality

3.1.1 Authentication

3.2 Usability

3.2.1 Training

3.3 Reliability

3.3.1 Database Uptime

3.4 Performance

3.4.1 Number of users

3.4.2 Input response

3.4.3 Launch time

3.5 Supportability

3.5.1 Documentation

3.6 Design Constraints

3.6.1 Programming language

3.6.2 Integrated Development Environment

3.7 Online User Documentation and Help System Requirements

3.8 Purchased Components

3.9 Interfaces

3.9.1 User Interfaces

3.9.2 Hardware Interfaces

3.9.3 Software Interfaces

3.9.4 Communications Interfaces

3.10 Licensing Requirements

3.11 Legal, Copyright and Other Notices

3.12 Applicable Standards

**4. Supporting Information**

**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=0B9TxrfClR7EIOU43R3lzM0JzTTg> |

## **1.5** **Overview**

See “Table of Contents”

## **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 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 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 intend to increase the [incentive](https://www.dict.cc/englisch-deutsch/incentive.html) 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 strict 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 an 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 to 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 a 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 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 programing.

## **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