

SportChef

Technical Documentation

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Abstract

This document holds the technical documentation for SportChef, a suite of applications and services to organise sports events from registration through the execution to the ranking list publication, everything in real-time!

Here you can find the definitions and specifications needed to develop all parts of SportChef and provide maintenance. Actually SportChef is under heavy development — this means that this document is under heavy development, too!

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Chapter 1

Common

1.1 Communication

The communication between the server and the clients is based on HTTP¹ requests and uses the REST² approach. Data that will be exchanged between the server and the clients has to conform to the JSON³ standard.

1.2 Security

While the first version is under development, the connections are not encrypted. SSL⁴ security (HTTPS⁵) will be added later before the release. This decision is based on two reasons: First, a commercial SSL certificate is needed which is valid only for a limited time. Buying it before it is really needed makes no sense and wastes money. Second, adding security using SSL certificates adds additional complexity to development in a very early stage which makes the learning curve for new developers unnecessary steep.

1.3 Definitions

1.3.1 Server

Technical specifications

The SportChef server is written in Java⁶ using JavaEE⁷ technology and can be deployed to every application server⁸ which is Java EE 7 compatible.

1.3.2 Webinterface

Technical specifications

The web client is written in Java using JSF⁹ technology and the PrimeFaces¹⁰ framework.

¹http://en.wikipedia.org/wiki/Hypertext_Transfer_Protocol

²http://en.wikipedia.org/wiki/Representational_state_transfer

³<http://en.wikipedia.org/wiki/JSON>

⁴http://en.wikipedia.org/wiki/Transport_Layer_Security

⁵http://en.wikipedia.org/wiki/HTTP_Secure

⁶[http://en.wikipedia.org/wiki/Java_\(programming_language\)](http://en.wikipedia.org/wiki/Java_(programming_language))

⁷https://en.wikipedia.org/wiki/Java_Platform,_Enterprise_Edition

⁸https://en.wikipedia.org/wiki/Application_server

⁹https://en.wikipedia.org/wiki/JavaServer_Faces

¹⁰<http://www.primefaces.org>

Browser support

The SportChef web interface uses HTML 5, so every HTML 5 capable browser will do. The web interface can be accessed by desktop systems as well as by tablet computers and smartphones. The user interface is fully responsive.

Chapter 2

Application Programming Interface

2.1 General information

2.1.1 JSON listings

The JSON listings in this documentation are reformatted for better readability. The server usually delivers a "compressed" variant without unnecessary spaces and line breaks.

2.2 User Resource

2.2.1 Create a new user

Send a POST request with the following JSON to the URI: /api/users

```
1 {
2   "firstName" : "John",
3   "lastName"  : "Doe",
4   "phone"     : "+41 79 555 00 01",
5   "email"     : "john.doe@sportchef.ch"
6 }
```

The response usually is a "201 Created" with a "Location" header set to the URI of the newly created user or an error response.

2.2.2 Read an existing user

Send a GET request to the URI: /api/users/{userId}

The response usually is a "200 OK" with the following JSON or an error response.

```
1 {
2   "userId" : 1,
3   "firstName" : "John",
4   "lastName"  : "Doe",
5   "phone"     : "+41 79 555 00 01",
6   "email"     : "john.doe@sportchef.ch"
7 }
```


A List of Figures

B List of Tables

Appendix C

License

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