Grading Ecosystem – User Guide



Contents

[Introduction 3](#_Toc369200269)

[System 3](#_Toc369200270)

[Web Interface 3](#_Toc369200271)

[Eclipse Plug-in 3](#_Toc369200272)

[API 3](#_Toc369200273)

[Application Server 3](#_Toc369200274)

[Spoj0 3](#_Toc369200275)

[Maycamp Arena 3](#_Toc369200276)

# Introduction

The purpose of this document is to serve as guide for the users of the grading ecosystem and developers who want to extend the system with new clients or make use of the web service interface exposed by the system.

For more information on creating new application for the system please refer to the **Grading Ecosystem - Application Development Guide** document.

For more information on extending the support for the Eclipse platform when adding new applications please refer to the **Grading Ecosystem - Ecliplse Plug-in Development Guide** document**.**

# System

# Web Interface

# Eclipse Plug-in

# API

This section provides an overview of RESTful web services provided by the various components of the grading ecosystem. The following list provides an overview of the common status codes that may be returned by either the repository of the application server:

200 - OK (reason: successful request)

201 - Created (reason: resource is created successfully)

304 - Not Modified (reason: resource is not modified)

400 - Bad Request (reason: malformed request)

401 - Unauthorized (reason: unauthorized user)

403 - Forbidden (reason: user does not have sufficient privileges to perform the operation)

404 - Not Found (reason: resource not found)

406 - Not Acceptable (reason: invalid format of request)

409 - Conflict (reason: concurrent modification has occurred)

412 - Precondition Failed (reason: precondition is not met prior to invoking the operation)

429 - Too many requests (reason: too many request are served at that moment)

500 - Internal Server Error (reason: server error has occurred)

503 - Service Unavailable (reason: service is not available – e.g. due to overload)

Furthermore the following error response might be returned as part of the payload:

{

"code" : <error\_subcode>,

"message": <link\_to\_error\_code\_message>,

"more\_info": <link\_to\_error\_code\_description\_page>

}

*Note: All of the above fields are optional and are returned depending on the particular web service.*

## Repository

## Application Server

## Spoj0

Authentication and authorization to the system are provided by means of the **user** and **pass** custom headers that must be passed to the REST request. The values provide the username and password of the user to spoj0 and both values must be Base64 encoded. Source code and test data must be, of course, properly escaped before being sent as JSON strings. The following is a list of the REST-based web services provided by the system:

**PUT** http://localhost/spoj0/api/start

Sample request:

<< empty >>

Sample response:

{

"response" : "Spoj0 daemon started.",

"response\_code" : 0

}

Other response codes:

1 - Failed to start daemon.

20 - Unauthorized access.

99 – Other error.

**PUT** http://localhost/spoj0/api/stop

Sample request:

<< empty >>

Sampler response:

{

"response" : "Spoj0 daemon stopped.",

"response\_code" : 0

}

Other response codes:

1 - Failed to stop daemon.

20 - Unauthorized access.

99 – Other error.

**PUT** http://localhost/spoj0/api/kill

Sample Request:

<<empty>>

Sample Response:

{

"response" : "Spoj0 daemon killed.",

"response\_code" : 0

}

Other response codes:

1 - Failed to kill daemon.

20 - Unauthorized access.

99 – Other error.

**PUT** http://localhost/spoj0/api/status

Sample Request:

<<empty>>

Sample Response:

{

"response" : "There are 1 instances running.",

"response\_code" : 0

}

Other response codes:

20 - Unauthorized access.

99 – Other error.

**GET** http://localhost/spoj0/api/contests/

Sample Request:

<<empty>>

Sample Response:

{

"response" : [

{

"c\_ustart" : "1173654000",

"contest\_id" : "1",

"set\_code" : "test1-fmi-2007-03-04",

"start\_time" : "2007-03-12 01:00:00",

"name" : "Test1 - Fmi internal contest 2007-03-04",

"duration" : "300",

"c\_active" : "1",

"unow" : "1381477444",

"show\_sources" : "1",

"c\_online" : "0",

"about" : "This is sample set intended to test the system."

},

{

"c\_ustart" : "1417853856",

"contest\_id" : "8",

"set\_code" : "456",

"start\_time" : "2014-12-06 10:17:36",

"name" : "456",

"duration" : "300",

"c\_active" : "0",

"unow" : "1381477444",

"show\_sources" : "0",

"c\_online" : "0",

"about" : "hyz"

}

],

"response\_code" : 0

}

Other response codes:

20 - Unauthorized access.

99 – Other error.

**GET** http://localhost/spoj0/api/contests/123

Sample Request:

<<empty>>

Sample Response:

{

"response" : {

"c\_ustart" : "1381043856",

"contest\_id" : "7",

"set\_code" : "123",

"start\_time" : "2013-10-06 10:17:36",

"name" : "123",

"duration" : "300",

"c\_active" : "1",

"unow" : "1381477792",

"show\_sources" : "1",

"c\_online" : "0",

"about" : ""

},

"response\_code" : 0

}

Other response codes:

1 – Failed to retrieve contest with specified id.

20 - Unauthorized access.

99 – Other error.

**PUT** http://localhost/spoj0/api/contests/

Sample request:

{

"name": "sample",

"start\_time": "2013-10-06 12:00:00",

"duration" : "600",

"show\_sources" : 1,

"about": "This is a sample contest"

}

Sample response:

{

"response" : {

"c\_ustart" : "1381050000",

"contest\_id" : "11",

"set\_code" : "sample",

"start\_time" : "2013-10-06 12:00:00",

"name" : "sample",

"duration" : "600",

"c\_active" : "1",

"unow" : "1381478224",

"show\_sources" : "1",

"c\_online" : "0",

"about" : "This is a sample contest"

},

"response\_code" : 0

}

Other response codes:

1 – No name specified for contest.

2 – Contest name must contain only letters, numbers, whitespaces, dashes and underscores.

3 – Contest directory already exists on file system.

4 – Contest already exists in system.

20 - Unauthorized access.

99 – Other error.

**POST** http://localhost/spoj0/api/contests/

Sample request:  
{

"set\_code":"sample",

"name":"Sample Contest",

"start\_time": "2013-10-06 12:00:00",

"duration": "90",

"show\_sources" : 0,

"about" : "welcome to another test contest man :- )))"

}

Sample response:

{

"response" : {

"c\_ustart" : "1381050000",

"contest\_id" : "11",

"set\_code" : "sample",

"start\_time" : "2013-10-06 12:00:00",

"name" : "Sample Contest",

"duration" : "90",

"c\_active" : "1",

"unow" : "1381478894",

"show\_sources" : "0",

"c\_online" : "0",

"about" : "welcome to another test contest"

},

"response\_code" : 0

}

Other response codes:

1 - No set code specified for contest.

2 - Set code must contain only letters, numbers, whitespaces, dashes and underscores.

3 - Contest directory does not exist on file system.

4 – Contest exists on file system but is not imported.

20 - Unauthorized access.

99 – Other error.

**DELETE** http://localhost/spoj0/api/contests/sample2

Sample request:

<<empty>>

Sample response:

{

"response" : "Contest with set code: 'sample2' deleted.",

"response\_code" : 0

}

Other response codes:

1 - Set code must contain only letters, numbers, whitespaces, dashes and underscores.

20 - Unauthorized access.

99 – Other error.

**GET** http://localhost/spoj0/api/contests/trivial/problems

Sample request:

<<empty>>

Sample response:

{

"response" : [

{

"problem\_id" : "27",

"about" : "Sample problem to test the system",

"letter" : "a",

"name" : "A - Hello World",

"unow" : "1381479835",

"time\_limit" : "1"

},

{

"problem\_id" : "28",

"about" : "Sample problem to test the system",

"letter" : "b",

"name" : "B - A+B",

"unow" : "1381479835",

"time\_limit" : "1"

},

{

"problem\_id" : "32",

"about" : "Sample DP problem",

"letter" : "d1",

"name" : "Problem D",

"unow" : "1381479835",

"time\_limit" : "2"

}

],

"response\_code" : 0

}

Other response codes:

1 - Set code must contain only letters, numbers, whitespaces, dashes and underscores.

2 - Failed to retrieve contest.

20 - Unauthorized access.

99 - Other error.

**GET** http://localhost/spoj0/api/contests/trivial/problems/a

Sample request:

<<empty>>

Sample response:

{

"response" : {

"problem\_id" : "27",

"about" : "Sample problem to test the system",

"letter" : "a",

"name" : "A - Hello World",

"unow" : "1381480157",

"time\_limit" : "1"

},

"response\_code" : 0

}

Other response codes:

1 - Set code must contain only letters, numbers, whitespaces, dashes and underscores.

2 - Problem id (letter) must contain only letters, numbers, whitespaces, dashes and underscores.

3 - Failed to retrieve contest.

4 - Failed to retrieve problem.

5 - Contest directory does not exist on file system.

6 - Problem directory does not exist on file system.

20 - Unauthorized access.

99 - Other error.

**PUT** http://localhost/spoj0/api/contests/trivial/problems

Sample request:

{

"letter" : "g",

"name" : "Travelling salesman",

"time\_limit" : 3,

"about" : "NP problem"

}

Sample response:

{

"response" : {

"problem\_id" : "37",

"about" : "NP problem",

"letter" : "g",

"name" : "Travelling salesman",

"unow" : "1381481188",

"time\_limit" : "3"

},

"response\_code" : 0

}

Other response codes:

1 - Failed to retrieve contest.

2 - No problem id (letter) specified.

3 - Problem id (letter) must contain only letters, numbers, whitespaces, dashes and underscores.

4 - Contest does not exist on file system.

5 - Problem directory already exists in contest.

6 - Problem already exists in contest.

7 - No solution type provided for solution.

8 - Solution type must contain only letters and numbers.

9 - Description type must contain only letters and numbers.

20 - Unauthorized access.

99 – Other error.

Additional fields:

**description** – base64 encoded value that provides the problem description in particular format

**description\_type** – type of the description (e.g. pdf, text, doc)

**solution** – provides a solution for the problem

**solution\_type** – provides the type of solution (e.g. java, cpp)

**checker** – base64 encoded value that provides a checker for a problem (must be a compiled binary)

**POST** http://localhost/spoj0/api/contests/trivial/problems

Sample request:

{

"letter" : "g",

"solution" : "int x = \"123\";",

"solution\_type" : "cpp",

"description" : "c2FtcGxlIGRlY3JpcHRpb24=",

"description\_type" : "txt",

"checker" : ""

}

Sample response:

{

"response" : {

"problem\_id" : "37",

"about" : "Sample NP problem",

"letter" : "g",

"name" : "Travelling salesman",

"unow" : "1381481942",

"time\_limit" : "3"

},

"response\_code" : 0

}

Other response codes:

1 - Failed to retrieve contest.

2 - No problem id (letter) specified.

3 - Problem id (letter) must contain only letters, numbers, whitespaces, dashes and underscores.

4 - Contest does not exist on file system.

5 - Problem directory does not exist in contest.

6 - Problem exists on file system but is not imported.

7 - No solution type provided for solution.

8 - Solution type must contain only letters and numbers.

9 - Description type must contain only letters and numbers.

20 - Unauthorized access.

99 – Other error.

**DELETE** http://localhost/spoj0/api/contests/trivial/problems/g1

Sample request:

<<empty>>

Sample response:

{

"response" : "Problem: 'g1' deleted from contest: trivial.",

"response\_code" : 0

}

Other response codes:

1 - Failed to retrieve contest.

2 - No problem id (letter) specified.

3 - Problem id (letter) must contain only letters, numbers, whitespaces, dashes and underscores.

20 - Unauthorized access.

99 – Other error.

**GET** http://localhost/spoj0/api/contests/trivial/problems/g/tests

Sample request:

<<empty>>

Sample response:

{

"response" : [

{

"test" : "1\n",

"ans" : "2\n",

"seq" : 1

},

{

"test" : "2\n",

"ans" : "3\n",

"seq" : 2

},

{

"test" : "3\n",

"ans" : "4\n",

"seq" : 3

}

],

"response\_code" : 0

}

Other response codes:

1 - Set code must contain only letters, numbers, whitespaces, dashes and underscores.

2 - Problem id (letter) must contain only letters, numbers, whitespaces, dashes and underscores.

3 - Failed to retrieve contest.

4 - Failed to retrieve problem.

5 - Contest directory does not exist on file system.

6 - Problem directory does not exist on file system.

7 – Failed to retrieve answer for test.

20 - Unauthorized access.

99 - Other error.

**GET** http://localhost/spoj0/api/contests/trivial/problems/g/tests/2

Sample request:

<<empty>>

Sample response:

{

"response" : {

"test" : "1 2\n3 4\n100 10000\n",

"ans" : "3\n7\n10100\n"

},

"response\_code" : 0

}

Other response codes:

1 - Set code must contain only letters, numbers, whitespaces, dashes and underscores.

2 - Problem id (letter) must contain only letters, numbers, whitespaces, dashes and underscores.

3 - Failed to retrieve contest.

4 - Failed to retrieve problem.

5 - Contest directory does not exist on file system.

6 - Problem directory does not exist on file system.

7 – Test id must be a number less than 100.

8 - Test id must not be greater than 1 in case of a multiline test.

9 – Failed to retrieve answer for test.

10 – Answer for test does not exist.

20 - Unauthorized access.

99 - Other error.

**PUT** http://localhost/spoj0/api/contests/trivial/problems/g/tests/

Sample request:

{

"test" : "4",

"ans" : "5",

"multiline" : "false"

}

Sample response:

{

"response" : "Added test 4.",

"response\_code" : 0

}

Other response codes:

1 - Set code must contain only letters, numbers, whitespaces, dashes and underscores.

2 - Problem id (letter) must contain only letters, numbers, whitespaces, dashes and underscores.

3 - Failed to retrieve contest.

4 - Failed to retrieve problem.

5 - Contest directory does not exist on file system.

6 - Problem directory does not exist on file system.

7 - No test case provided.

8 - No test answer provided.

9 - Maximum number of tests reached (99).

10 - Multiline test already exists.

20 - Unauthorized access.

99 - Other error.

**POST** http://localhost/spoj0/api/contests/trivial/problems/g/tests/

Sample request:

{

"test" : "5",

"ans" : "6",

"seq" : "7",

"multiline" : "false"

}

Sample response:

{

"response" : "Test 7 updated.",

"response\_code" : 0

}

Other response codes:

1 - Set code must contain only letters, numbers, whitespaces, dashes and underscores.

2 - Problem id (letter) must contain only letters, numbers, whitespaces, dashes and underscores.

3 - Failed to retrieve contest.

4 - Failed to retrieve problem.

5 - Contest directory does not exist on file system.

6 - Problem directory does not exist on file system.

7 - No test id (seq) provided. *(only for single line tests)*

8 - Test id must a number less than 100.

9 - Test id is larger than the number of tests.

20 - Unauthorized access.

99 - Other error.

*Note: In case of multiline test update the sequence (seq) is ignored.*

**DELETE** http://localhost/spoj0/api/contests/trivial/problems/g/tests/

Sample request:

<<empty>>

Sample response:

{

"response" : "All tests deleted.",

"response\_code" : 0

}

Other response codes:

1 - Set code must contain only letters, numbers, whitespaces, dashes and underscores.

2 - Problem id (letter) must contain only letters, numbers, whitespaces, dashes and underscores.

3 - Failed to retrieve contest.

4 - Failed to retrieve problem.

5 - Contest directory does not exist on file system.

6 - Problem directory does not exist on file system.

10 - Test id is larger than the number of problems.

20 - Unauthorized access.

99 - Other error.

**DELETE** http://localhost/spoj0/api/contests/trivial/problems/g/tests/2

Sample request:

<<empty>>

Sample response:

{

"response" : "Test 4 deleted.",

"response\_code" : 0

}

Other response codes:

1 - Set code must contain only letters, numbers, whitespaces, dashes and underscores.

2 - Problem id (letter) must contain only letters, numbers, whitespaces, dashes and underscores.

3 - Failed to retrieve contest.

4 - Failed to retrieve problem.

5 - Contest directory does not exist on file system.

6 - Problem directory does not exist on file system.

8 - Test id must a number less than 100.

9 - There is only one multiline test and test id must be 1.

10 – Test id is larger than the number of problems.

20 - Unauthorized access.

99 - Other error.

**PUT** http://localhost/spoj0/api/contests/trivial/problems/g/submissions

Sample request:

{

"source" : "#include <iostream>\nusing namespace std;\n\nint main() {\nint y;\ncin >> y;\ncout << y + 1;\nreturn 0; }"

}

Sample response:

{

"response" : {

"submission\_id" : "88"

},

"response\_code" : 0

}

Other response codes:

1 - Set code must contain only letters, numbers, whitespaces, dashes and underscores.

2 - Problem id (letter) must contain only letters, numbers, whitespaces, dashes and underscores.

3 - Failed to retrieve contest.

4 - Failed to retrieve problem.

5 - Contest directory does not exist on file system.

6 - Problem directory does not exist on file system.

7 - Unsupported language.

20 - Unauthorized access.

99 - Other error.

**GET** http://localhost/spoj0/api/contests/trivial/problems/g/submissions

Sample request:

<<empty>>

Sample response:

{

"response" : [

{

"status" : "ok",

"submit\_time" : "2013-10-15 10:30:17",

"run\_id" : "88",

"user\_id" : "13",

"about" : ""

},

{

"status" : "ce",

"submit\_time" : "2013-10-15 10:48:25",

"run\_id" : "89",

"log" : "…",

"user\_id" : "13",

"about" : ""

}

],

"response\_code" : 0

}

Other response codes:

1 - Set code must contain only letters, numbers, whitespaces, dashes and underscores.

2 - Problem id (letter) must contain only letters, numbers, whitespaces, dashes and underscores.

3 - Failed to retrieve contest.

4 - Failed to retrieve problem.

5 - Contest directory does not exist on file system.

6 - Problem directory does not exist on file system.

20 - Unauthorized access.

99 - Other error.

**GET** http://localhost/spoj0/api/contests/trivial/problems/g/submissions/88

Sample request:

<<empty>>

Sample response:

{

"response" : {

"status" : "ok",

"submit\_time" : "2013-10-15 10:30:17",

"run\_id" : "88",

"user\_id" : "13",

"about" : ""

},

"response\_code" : 0

}

Other response codes:

1 - Set code must contain only letters, numbers, whitespaces, dashes and underscores.

2 - Problem id (letter) must contain only letters, numbers, whitespaces, dashes and underscores.

3 - Failed to retrieve contest.

4 - Failed to retrieve problem.

5 - Contest directory does not exist on file system.

6 - Problem directory does not exist on file system.

7 - Submission id must be a number.

8 - No submission with given id in the specified problem.

20 - Unauthorized access.

99 - Other error.

**PUT** http://localhost/spoj0/api/contests/trivial/problems/g/submissions/rejudge

Sample request:

<<empty>>

Sample response:

{

"response" : "All submissions for problem with id '37' rejudged.",

"response\_code" : 0

}

Other response codes:

1 - Set code must contain only letters, numbers, whitespaces, dashes and underscores.

2 - Problem id (letter) must contain only letters, numbers, whitespaces, dashes and underscores.

3 - Failed to retrieve contest.

4 - Failed to retrieve problem.

5 - Contest directory does not exist on file system.

6 - Problem directory does not exist on file system.

20 - Unauthorized access.

99 - Other error.

Additonal query parameters:

**failedOnly** – If **true** then only submissions with status **wa** are rejudged.

**PUT** http://localhost/spoj0/api/submissions/88/rejudge

Sample request:

<<empty>>

Sample response:

{

"response" : "Submissions with id '88' rejudged.",

"response\_code" : 0

}

Other response codes:

1 - Submission id must be a number.

2 - No submission with given id.

20 - Unauthorized access.

99 - Other error.

**GET** http://localhost/spoj0/api/users

Sample request:

<<empty>>

Sample response:

{

"response" : [

{

"admin" : "0",

"pass\_md5" : "0f0bf2567ec111697671d2fd76af0d6c",

"name" : "test1",

"hidden" : "1",

"about" : "test user",

"user\_id" : "1",

"display\_name" : "Test 1"

},

{

"admin" : "1",

"pass\_md5" : "400ef6afd2d9247adf141fc650c1a376",

"name" : "adm",

"hidden" : "0",

"about" : "",

"user\_id" : "13",

"display\_name" : "admin admin"

},

],

"response\_code" : 0

}

Other response codes:

20 - Unauthorized access.

99 - Other error.

**GET** http://localhost/spoj0/api/users/1

Sample request:

<<empty>>

Sample response:

{

"response" : {

"admin" : "0",

"pass\_md5" : "0f0bf2567ec111697671d2fd76af0d6c",

"name" : "test1",

"hidden" : "1",

"about" : "test user",

"user\_id" : "1",

"display\_name" : "Test 1"

},

"response\_code" : 0

}

Other response codes:

1 - User id must be a number.

2 - No user with given id.

20 - Unauthorized access.

99 - Other error.

**PUT** http://localhost/spoj0/api/users

Sample request

{

"username" : "usr",

"password" : "usrpass",

"display\_name" : "sample user",

"hidden" : 1,

"admin" : 1,

"city" : "Sofia",

"instritution" : "FMI",

"fn" : "22222",

"email" : "fn22222@fmi.uni-sofia.bg",

"icq": "icquser",

"skype" : "skypeuser",

"other" : "CS-group1"

}

Sample response:

{

"response" : {

"admin" : "1",

"pass\_md5" : "9b4045343f10cfdc3713689bcb586a72",

"name" : "usr",

"hidden" : "1",

"about" : " city:Sofia fn:22222 email:fn22222@fmi.uni-sofia.bg icq:icquser skype:skypeuser other:CS-group1",

"user\_id" : "18",

"display\_name" : "sample user"

},

"response\_code" : 0

}

Other response codes:

1 - No username provided.

2 - No password provided.

3 - User with provided credentials already exists.

4 - Display name must be at least 5 characters long.

20 - Unauthorized access.

99 - Other error.

**DEL** http://localhost/spoj0/api/users/17

Sample request:

<<empty>>

Sample response:

{

"response" : "User with id '17' deleted.",

"response\_code" : 0

}

Other response codes:

1 - User id must be a number.

20 - Unauthorized access.

99 - Other error.

**GET** http://localhost/spoj0/api/users/13/submissions

Sample request:

<<empty>>

Sample response:

{

"response" : [

{

"source\_code" : "#include <iostream>\nusing namespace std;\n\nint main() {\nint y;\ncin >> y;\ncout << y + 1;\nreturn 0; }",

"language" : "cpp",

"status" : "ok",

"submit\_time" : "2013-10-15 10:30:17",

"run\_id" : "88",

"log" : "…",

"user\_id" : "13",

"about" : ""

},

{

"source\_code" : "#include <iostream>\nusing namespace std;\n\nint main() {\nint y;\ncin >> y;\ncout << y + 1;\nreturn 0; }",

"language" : "java",

"status" : "ce",

"submit\_time" : "2013-10-15 10:48:25",

"run\_id" : "89",

"log" : "…",

"user\_id" : "13",

"about" : ""

}

],

"response\_code" : 0

}

Other response codes:

1 - User id must be a number.

20 - Unauthorized access.

99 - Other error.

**GET** http://localhost/spoj0/api/users/13/submissions/89

Sample request:

<<empty>>

Sample response:

{

"response" : {

"source\_code" : "#include <iostream>\nusing namespace std;\n\nint main() {\nint y;\ncin >> y;\ncout << y + 1;\nreturn 0; }",

"language" : "java",

"status" : "ce",

"submit\_time" : "2013-10-15 10:48:25",

"run\_id" : "89",

"log" : "…",

"user\_id" : "13",

"about" : ""

},

"response\_code" : 0

}

Other response codes:  
1 - User id must be a number.

2 - Submission id must be a number.

3 - No submission with given id for given user.

20 - Unauthorized access.

99 - Other error.

**GET** http://localhost/spoj0/api/news

Sample request:

<<empty>>

Sample response:

{

"response" : [

{

"topic" : "C++\n",

"content" : "Текущата версия на c++ компилатора на системата е g++ (GCC) 4.1.2 20061115 (prerelease) (Debian 4.1.1-21).\n",

"file" : "002gxx.new",

"new\_time" : "2013-09-27 15:36:23",

"new\_id" : "3"

},

{

"topic" : "Първа новина\n",

"content" : "Ако виждате това, значи модулите за пускане на новини (можеби) работят. Тази новина би трябвало да е най-ранна (и добра).\n",

"file" : "000first.new",

"new\_time" : "2013-09-27 15:36:23",

"new\_id" : "1"

}

],

"response\_code" : 0

}

Other response codes:

20 - Unauthorized access.

99 - Other error.

**GET** http://localhost/spoj0/api/news/1

Sample request:

<<empty>>

Sample response:

{

"response" : {

"topic" : "Първа новина\n",

"content" : "Ако виждате това, значи модулите за пускане на новини (можеби) работят. Тази новина би трябвало да е най-ранна (и добра).\n",

"file" : "000first.new",

"new\_time" : "2013-09-27 15:36:23",

"new\_id" : "1"

},

"response\_code" : 0

}

Other response codes:

1 - News item must be an integer.

2 - No news item with given id.

20 - Unauthorized access.

99 - Other error.

**PUT** http://localhost/spoj0/api/news/

Sample request:

{

"filename" : "20130606",

"topic" : "System upgrade",

"content" : "Spoj0 will be updated with new web service extensions"

}

Sample response:

{

"response" : {

"topic" : "System upgrade",

"content" : "Spoj0 will be updated with new web service extensions",

"file" : "20130606.new",

"new\_time" : "2013-10-15 14:52:48",

"new\_id" : "5"

},

"response\_code" : 0

}

Other response codes:

1 - No filename provided.

2 - No topic provided.

3 - No content provided.

4 - News file already exists on file system.

5 - News with specified filename already exists in system.

20 - Unauthorized access.

99 - Other error.

**POST** http://localhost/spoj0/api/news/

Sample request:

{

"new\_id" : "6",

"topic" : "New system upgrade",

"content" : "Spoj0 will be updated with new web service extensions"

}

Sample response:

{

"response" : {

"topic" : "New system upgrade",

"content" : "Spoj0 will be updated with new web service extensions",

"file" : "20130606.new",

"new\_time" : "2013-10-15 14:56:25",

"new\_id" : "6"

},

"response\_code" : 0

}

Other response codes:

1 - No news item provided.

2 - News item with given id does not exist in system.

20 - Unauthorized access.

99 - Other error.

**DELETE** http://localhost/spoj0/api/news/7

Sample request:

<<empty>>

Sample response:

{

"response" : "News with id: '7' deleted.",

"response\_code" : 0

}

Other response codes:

1 - News item id must be an integer.

20 - Unauthorized access.

99 - Other error.

## Maycamp Arena