MY API Reference

This API reference describes resources created in a Spring Boot Web services application running locally. It is a REST API web service with simple resources to use as the basis for sample API Reference Documentation.

Note: The environment and code, and the actual reference documentation are works in progress.

About the API

- uses resource URIs and standard HTTP requests
- is Java Spring Boot project on the backend
- uses working Java methods tested with Postman and cURL requests with Git Bash

About the Documentation

The documentation was created and designed using various public API References as a guide. While reviewing the public API references, the primary aspects considered were content and format.

Contents

Authentication

Authentication was implemented with Spring Web Security API keys and secrets.

Needles

Send up to five different words (needles) and a single text block (haystack). See how many needles are in the haystack.

POST /needles

Request

Parameter	Type	Example
haystack	String *required*	"haystack":"Like finding a needle in a haystack"
needles	String[] *required*	"needles":["finding","needle","a", "haystack"]

```
curl -L 'http://localhost:8080/api/post/needles' \
-H 'Content-Type: application/json' \
-X-API-KEY:
-d '{"haystack":"Like finding a needle in a
haystack","needles":["finding","needle","a","haystack"
,"needles"]}'
```

Response

200 400 404 500

Field	Description	Example
needle	a word in the set	“needle”: “finding”
total	match count	"total": 2

If more than 5 needles are sent in the request, the response will return the following message:

"The maximum number of needles allowed is 5."

```
200 OK

{"needles":[
  {"count":"1","needle":"finding"},
  {"count":"1","needle":"needle"},
  {"count":"2","needle":"a"},
  {"count":"1","needle":"haystack"},
  {"count":"0","needle":"needles"}
]}

200 OK

"The maximum number of needles allowed is 5."
```

Numbers

Send a lottery game type and receive a set of random numbers for that game.

GET /numbers

Request

Note: The *game* parameter can only have one of three values: pick4, pick5, lotto

Parameter	Type	Example
game	String *required*	game=(pick4 | pick5 | lotto)

```
curl -L
'http://localhost:8080/api/numbers?api_key={}&game={}'
```

Response

200 400 404 500

Field	Description	Example
pick4	the set of four random numbers	“pick4”: [3,21,5,15]
pick5	the set of five random numbers	“pick5”: [17,5,22,40,46]
lotto	the set of six random numbers	“lotto”: [17,3,19,20,4,43]

If an invalid game is sent in the request The response will return the following message:

<<game>> is not a valid game type. Value must be pick4, pick5, or lotto.

```
200 OK

{"pick4": [3,21,5,15]}


{"pick5": [17,5,22,40,46]}


{"lotto": [17,3,19,20,4,43]}


200 OK

<<game>> is not a valid game type. Value must be pick4,
pick5, or lotto.
```

Responses

200

Standard response for a successful HTTP request. The actual response will depend on the actual request method used. Detailed responses can be found in the resource descriptions.

400

The request cannot be filled due to bad syntax.

Field	Example
timestamp	YYYY-MM-DDT00:00:00.000+00:00
status	400
error	Bad Request
path	/api/example

```
400 Bad Request

{
    "timestamp": "2024-08-15T00:03:04.554+00:00",
    "status": 400,
    "error": "Bad Request",
    "path": "/api/numbers"
}
```

404

The requested resource could not be found but may be available again in the future. Subsequent requests by the client are permissible.

Field	Example
timestamp	YYYY-MM-DDT00:00:00.000+00:00
status	404
error	Not Found
path	/

```
404 Not Found

{
    "timestamp": "2024-08-16T12:24:11.041+00:00",
    "status": 404,
    "error": "Not Found",
    "message": "No static resource .",
    "path": "/"
}
```

500

A generic error message given when no more specific message is suitable. When it is an authentication error, the following message will be displayed.

“Missing API Key or Secret”

Field	Example
timestamp	YYYY-MM-DDT00:00:00.000+00:00
status	500
error	Internal Server Error
path	/api/example

```
500 Internal Server Error

{
    "timestamp": "2024-08-16T13:18:45.511+00:00",
    "status": 500,
    "error": "Internal Server Error",
    "message": "Missing API Key or Secret",
    "path": "/api/data"
}
```