

# REST- API

*(Numbers Game)*

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# Methods

## 1. Range - POST

**POST** the range of the numbers to be used and the correct value to guess later (minimum, maximum and correct value)

### Request

Method	URL
POST	<pre>/curl -i -H "Content-Type: application/json" -X POST -d '{"minimum":23,"maximum":27,"correct":24}'</pre> <a href="http://localhost:5000/range">http://localhost:5000/range</a>

Type	Params	Values
POST	minimum	Integer
POST	maximum	Integer
POST	correct	Integer

### Response:

Status	Response
201	<pre>{   "correct": 24,   "maximum": 27,   "minimum": 23 }</pre>
400	Responses for POST: <pre>{   "error": "Bad Request" }</pre>

## Range – GET

Get the values of max, min range to guess the correct value in that range.

### Request

Method	URL
GET	curl -i <a href="http://localhost:5000/range">http://localhost:5000/range</a>

### Response

Status	Response
200	<p><b>Response will be an object containing minimum and maximum values of the range</b></p> <pre>{   "maximum": 27,   "minimum": 23 }</pre>
404	<p><b>Response for GET - If the range is not posted earlier</b></p> <pre>{   "error": "Not found" }</pre>

## 2. Guess - POST

Post the values of guesses to be tested against the true value.

### Request

Method	URL
POST	<code>curl -i -H "Content-Type: application/json" -X POST -d '{"guess": 24}' http://localhost:5000/guesses</code>

Type	Params	Values
POST	guess	Integer

### Response

Status	Response
201	<p>Guesses:</p> <p>If the guessed value is lower than the correct value</p> <pre>{   "guess": 23,   "result": "lower than correct value" }</pre> <p>If the guessed value is higher than the correct value</p> <pre>{   "guess": 25,   "result": "higher than correct value" }</pre> <p>If the guessed value == correct value</p> <pre>{   "guess": 24,   "result": "correct" }</pre> <p>If the guess value is outside the range</p> <pre>{   "guess": 28,   "result": "outside range" }</pre>
400	<p><b>Response for POST - If the range is None or there is no Guess parameter in the request:</b></p> <pre>{   "error": "Bad Request" }</pre>

	}
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## Guess – GET

Get guess history – If there is none then returns empty list, when we make a few guesses and can have the entire history of our guesses in one place.

### Request

Method	URL
GET	curl -i http://localhost:5000/guesses

### Response

Status	Response
200	<p>Initially:</p> <pre>{   "guesses": [] }</pre> <p>After Guessing:</p> <pre>{   "guesses": [     {       "guess": 25,       "result": "higher than correct value"     },     {       "guess": 23,       "result": "lower than correct value"     },     {       "guess": 24,       "result": "correct"     },     {       "guess": 28,       "result": "outside range"     }   ] }</pre>

# Glossary

## Conventions

- **Client** - Client application.
- **Status** - HTTP status code of response.
- All the possible responses are listed under 'Responses' for each method. Only one of them is issued per request server.
- All response are in JSON format.

## Status Codes

All status codes are standard HTTP status codes. The below ones are used in this API.

**2XX** - Success of some kind

**4XX** - Error occurred in client's part

**5XX** - Error occurred in server's part

Status Code	Description
200	OK
201	Created
400	Bad request
404	Resource not found