My Project

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Chapter 1

Hierarchical Index

1.1 Class Hierarchy

This inheritance list is sorted roughly, but not completely, alphabetically:

randomorg_documentation.Client.Client	5
Exception	
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2 Hierarchical Index

Chapter 2

Class Index

2.1 Class List

Here are the classes, structs, unions and interfaces with brief descriptions:

randomorg_documentation.Client.Client	
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4 Class Index

Chapter 3

Class Documentation

3.1 randomorg_documentation.Client.Client Class Reference

Client object holding all methods for the api.

Public Member Functions

```
• def init (self, str token)
```

def getToken (self)

Get the stored api token.

• def setToken (self, str token)

Set the stored api token.

• def getId (self)

Get the stored id.

• def setId (self, int ident)

Set a new id.

• def genInt (self, int n, int minimum, int maximum, **kwargs)

Generate Integers.

• def genIntSeq (self, int n, int length, int minimum, int maximum, **kwargs)

Generate Integer Sequences.

• def genDecFrac (self, int n, int decimalPlaces, **kwargs)

Generate Decimal Fractions.

• def genGauss (self, int n, int mean, int standardDeviation, int significantDigits, **kwargs)

Generate Gaussian Distribution Numbers.

def genStr (self, int n, int length, str characters, **kwargs)

Generate random strings.

def genUUID (self, int n, **kwargs)

Generate random UUIDs.

• def genBlob (self, int n, int size, **kwargs)

Generate random BLOBs.

def getUsage (self, **kwargs)

Get usage statistics.

• def __str__ (self)

Public Attributes

- token
- id

Static Public Attributes

• string **url** = "https://api.random.org/json-rpc/4/invoke"

3.1.1 Detailed Description

Client object holding all methods for the api.

This class is the Client object, which contains all methods that are used for the api. It also stores the api key (token) and an id (id)

Author

Felix Hune

Version

0.1

Date

2024-06-14

3.1.2 Constructor & Destructor Documentation

```
3.1.2.1 __init__()
```

Parameters

token The api key / token for the random.org api

Author

Felix Hune

Date

2024-06-14

3.1.3 Member Function Documentation

3.1.3.1 genBlob()

Generate random BLOBs.

Generate a given number of BLOBs of given size in bits

Parameters

n	Count of BLOBs to generate (1 to 100)
size	The size of each blob (1 to 1048576 bits, must be divisible by 8). Additionally, the total size must not
	exceed 1048576 bits.
form	Keyword Argument This defines the format of the response. Must be one of (base64, hex). Defaults
	to base64.
simple	Keyword Argument This defines wether the response should be simple styled or the full response.
	Defaults to False.

Returns

Either a dict in json style or a list

Author

Felix Hune

Version

0.1

Date

2024-06-14

3.1.3.2 genDecFrac()

Generate Decimal Fractions.

Generate a given number of decimal fractions between 0 and 1 with a given number of decimal places

Parameters

n	Count of numbers to generate (1 to 10000)	
decimalPlaces	Count of decimal places for each number (1 to 14)	
replacement	Keyword Argument This defines wether values are allowed to occure multiple times or not.	
	Defaults to True.	
simple	Keyword Argument This defines wether the response should be simple styled or the full	
	response. Defaults to False.	

Returns

Either a dict in json format or a list

Author

Felix Hune

Version

0.1

Date

2024-06-14

3.1.3.3 genGauss()

Generate Gaussian Distribution Numbers.

Generate a given number of random numbers from a Gaussian distribution with given mean and standard deviation values.

Parameters

n	Count of numbers to generate (1 to 10000)		
mean	Mean value of the Gaussian distribution (-1E6 to 1E6)		
standardDeviation	Standard deviation value of the Gaussian distribution (-1E6 to 1E6)		
significantDigits	Count of significant digits (2 to 14)		
simple	Keyword Argument This defines wether the response should be simple styled or the full response. Defaults to False.		

Returns

Either a dict in json style or a list

Author

Felix Hune

Version

0.1

Date

2024-06-14

3.1.3.4 genInt()

Generate Integers.

Generate a given number of integers within given borders

Parameters

п	Count of numbers to generate (1 to 10000)
minimum	The minimum for each number (-1E9 to 1E9)
maximum	The maximum for each number (-1E9 to 1E9)
base	Keyword Argument This defines the base the numbers should be in (one of $(2,8,10,16)$). Default is 10.
replacement	Keyword Argument This defines wether values are allowed to occure multiple times or not. Defaults to True.
simple	Keyword Argument This defines wether the response should be simple styled or the full response. Defaults to False.

Returns

Either a dict in json format or a list

Author

Felix Hune

Version

0.1

Date

2024-06-14

3.1.3.5 genIntSeq()

Generate Integer Sequences.

Generate a given number of integer sequences of given length within given borders

Parameters

n	Count of sequences to generate (1 to 1000)
length	Count of numbers per sequence (1 to 10000)
minimum	The minimum for each number (-1E9 to 1E9)
maximum	The maximum for each number (-1E9 to 1E9)
base	Keyword Argument This defines the base the numbers should be in (one of (2,8,10,16)).
	Default is 10.
replacement	Keyword Argument This defines wether values are allowed to occure multiple times or not.
	Defaults to True.
simple	Keyword Argument This defines wether the response should be simple styled or the full response. Defaults to False.

Returns

Either a dict in json format or a list of lists

Author

Felix Hune

Version

0.1

Date

2024-06-14

3.1.3.6 genStr()

Generate random strings.

Generate a given number of strings with given length consisting of given chars

Parameters

n	Count of strings to generate (1 to 10000)		
length	The length of the strings (1 to 32)		
characters	A string containing the characters to include in generation (max 128)		
replacement	Keyword Argument This defines wether values are allowed to occure multiple times or not.		
	Defaults to True.		
simple	Keyword Argument This defines wether the response should be simple styled or the full		
	response. Defaults to False.		

Returns

Either a dict in json style or a list

Author

Felix Hune

Version

0.1

Date

2024-06-14

3.1.3.7 genUUID()

Generate random UUIDs.

Generate a given number of UUIDs

Parameters

n	Count of UUIDs to generate (1 to 1000)
simple	Keyword Argument This defines wether the response should be simple styled or the full response.
	Defaults to False.

Returns

Either a dict in json style or a list

Author

Felix Hune

Version

0.1

Date

2024-06-14

3.1.3.8 getId()

```
\begin{tabular}{ll} $\operatorname{def randomorg\_documentation.Client.Client.getId} & ( \\ & self \end{tabular} \label{eq:client.getId}
```

Get the stored id.

Returns

int

3.1.3.9 getToken()

```
\label{lem:client.client.getToken} $$ \text{def randomorg\_documentation.Client.Client.getToken (} $$ self )
```

Get the stored api token.

Returns

str

3.1.3.10 getUsage()

Get usage statistics.

Get the usage statistics for this api key

Parameters

simple Keyword Argument This defines wether the response should be simple styled or the full response.

Defaults to False.

Returns

A dict in json style

Author

Felix Hune

Version

0.1

Date

2024-06-14

3.1.3.11 setId()

Set a new id.

Parameters

id A new id

3.1.3.12 setToken()

Set the stored api token.

Parameters

token A new api key / token for the	e api
-------------------------------------	-------

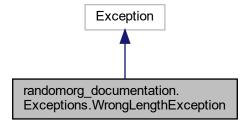
The documentation for this class was generated from the following file:

· Client.py

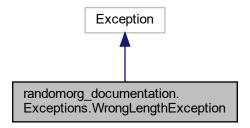
3.2 randomorg_documentation.Exceptions.WrongLengthException Class Reference

Exception class for values exceeding length.

Inheritance diagram for randomorg_documentation.Exceptions.WrongLengthException:



 $Collaboration\ diagram\ for\ randomorg_documentation. Exceptions. WrongLength Exception:$



Public Member Functions

• def __init__ (self, length, minimum, maximum)

Public Attributes

- · length
- message

3.2.1 Detailed Description

Exception class for values exceeding length.

Exception used if a values length exceeds limits

Author

Felix Hune

Version

0.1

Date

2024-06-14

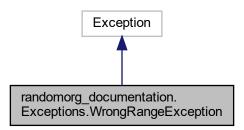
The documentation for this class was generated from the following file:

· Exceptions.py

3.3 randomorg_documentation.Exceptions.WrongRangeException Class Reference

Exception class for values exceeding range.

Inheritance diagram for randomorg_documentation.Exceptions.WrongRangeException:



Collaboration diagram for randomorg_documentation.Exceptions.WrongRangeException:



Public Member Functions

• def __init__ (self, value, minimum, maximum)

Public Attributes

- value
- message

3.3.1 Detailed Description

Exception class for values exceeding range.

Exception used if a value exceeds a range

Author

Felix Hune

Version

0.1

Date

2024-06-14

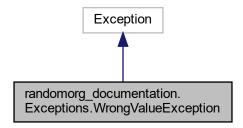
The documentation for this class was generated from the following file:

· Exceptions.py

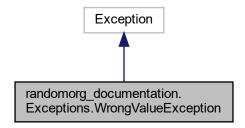
3.4 randomorg_documentation.Exceptions.WrongValueException Class Reference

Exception class for invalid values.

 $Inheritance\ diagram\ for\ randomorg_documentation. Exceptions. Wrong Value Exception:$



 $Collaboration\ diagram\ for\ randomorg_documentation. Exceptions. Wrong Value Exception:$



Public Member Functions

• def __init__ (self, base, rang)

Public Attributes

- base
- message

3.4.1 Detailed Description

Exception class for invalid values.

Exception used if a value has to be one of a specific list.

Author

Felix Hune

Version

0.1

Date

2024-06-14

The documentation for this class was generated from the following file:

Exceptions.py

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