
python-colourlovers Documentation

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This module provides access to the ColourLovers API, a web service that allows users to publish colour themes and rate them. The API of this webservice allows to search for users (Lovers) and their posted contents (Colours, Patterns, Palettes).

Accessing the API requires an instance of *ColourLovers* which provides the methods to access the different content types: *Colour*, *Palette*, *Pattern*, *Lover*. Sending a request to ColourLovers is as easy as calling the corresponding method such as *ColourLovers.palettes()* to search for palettes. Additionally, the following arguments can be specified *new*, *top*, *random* with additional parameters. Please refer to the ColourLovers API documentation to find out more about the specific parameters and their restrictions at <http://www.colourlovers.com/api>.

You find the ColourLovers website at: <http://www.colourlovers.com>

Usage example:

```
>>> from colourlovers import ColourLovers
>>> cl = ColourLovers()
>>> cl.color('#37cbff')
[<Colour id='4767129' title='i feel pretty' rgb=(55, 203, 255)>]
>>> cl.palettes('new', keywords='funky', numResults=3)
[<Palette id='1940972' title='"Funky President"'>,
 <Palette id='1936394' title='Barbie Doll Blonde'>,
 <Palette id='1936247' title='Lily's Rainbow'>]
```

Another example:

```
>>> cl.patterns('random')
[<Pattern id='391644' title='acanalado'>]
>>> cl.colors('top', numResults=3)
[<Colour id='14' title='Black' rgb=(0, 0, 0)>,
 <Colour id='16' title='white' rgb=(255, 255, 255)>,
 <Colour id='1086335' title='dutch teal' rgb=(22, 147, 165)>]
```


class colourlovers.ColourLovers

color (*argument*, ****kwargs**)

colors (*argument=None*, ****kwargs**)

lover	Restrict results to specific COLOURlover by providing their user name.
hue_range	Hue range of the colour: 12, 68. Values must be in range [0,359] and the left value must be less than the right value.
bri_range	Brightness range of the colours: 2, 88. Values must be in range [0, 99] and the left value must be less than the right value.
keywords	String of keywords to search for in patterns.
keyword_exact	Perform an exact search for the keywords passed if set to 1. Default: 0.
order_col	dateCreated, score, name`, ``numVotes or numViews
sort_by	Sorting in ascending (ASC) or descending (DESC) order. Defaults to (ASC)
num_results	Number of results to be returned. Maximum: 100. Default: 20.
result_offset	Result offset, for paging. Default: 0.

palette (*argument*, ****kwargs**)

palettes (*argument=None*, ****kwargs**)

lover	Restrict results to specific COLOURlover by providing their user name.
hue_option	yellow, orange, red or green, violet or blue
hex	Restrict results to patterns with a specific colour given as any valid 6-char hex value without preceding #.
keywords	String of keywords to search for in patterns.
keyword_exact	Perform an exact search for the keywords passed if set to 1. Default: 0.
order_col	dateCreated, score, name`, ``numVotes or numViews
sort_by	Sorting in ascending (ASC) or descending (DESC) order. Defaults to (ASC)
num_results	Number of results to be returned. Maximum: 100. Default: 20.
result_offset	Result offset, for paging. Default: 0.
show_palette_width	Shows palette's colour's widths if set to 1. Default: 0

pattern (*argument*, ****kwargs**)

patterns (*argument=None*, ****kwargs**)

lover	Restrict results to specific COLOURlover by providing their user name.
hue_option	yellow, orange, red or green, violet or blue
hex	Restrict results to patterns with a specific colour given as any valid 6-char hex value without preceding #.
keywords	String of keywords to search for in patterns.
keyword_exact	Perform an exact search for the keywords passed if set to 1. Default: 0.
order_col	dateCreated, score, name`, ``numVotes or numViews
sort_by	Sorting in ascending (ASC) or descending (DESC) order. Defaults to (ASC)
num_results	Number of results to be returned. Maximum: 100. Default: 20.
result_offset	Result offset, for paging. Default: 0.

lover (*argument*, ****kwargs**)

comments	0 or 1: if 1, will show last 10 comments for given Lover
----------	--

lovers (*argument=None*, ****kwargs**)

order_col	Order in which the colours will be shown. Possible values are: dateCreated, score, name`, ``numVotes or numViews.
sort_by	Sorting in ascending (ASC) or descending (DESC) order. Defaults to (ASC)
num_results	Number of results to be returned. Maximum: 100. Default: 20.
result_offset	Result offset, for paging. Default: 0.

stats (*stats_type*)

Return the stats for *stat_type*. *stat_type* refers to one of the content types on ColourLovers and can be colors, lovers, patterns, palettes. A ColourLoversError is raised when an invalid type is requested.

Args: *stat_type* (*str*): content type to request stats for.

Returns: The requested stats as *Stat* object.

Request the statistical value (total number) for *stats_type*. *stats_type* is a string that can be either of the following: colors, patterns, palettes, lovers.

Args: stats_type (str): Content type to retrieve statistics for.

Returns: Total number of the requested content type on ColourLovers.com.

class colourlovers.**Colour** (**kwargs)

This class defines a ColourLovers colour in the RGB and HSV colour spaces. The colour values can be accessed through the `rgb` and `hsv` respectively and are of type *RGB* and *HSV*.

id

Unique id for this Color as `int`.

title

Title / Name of the Color.

user_name

Username of the Color's creator.

num_views

Number of views this Color has received as `int`.

num_votes

Number of votes this Color has received as `int`.

num_comments

Number of comments this Color has received as `int`.

num_hearts

Number of hearts this Color has in the range of [0,5] as `float`.

rank

This Color's rank on COLOURlovers.com as `int`.

date_created

Date this Color was created as a `datetime` object.

description

This Color's description.

url

This Color's COLOURlovers.com URL.

image_url

Link to a PNG version of this Color.

badge_url

Link to a COLOURlovers.com badge for this Color.

api_url

This Color's COLOURlovers.com API URL.

classmethod from_xml (*xml*)

Create a new colour instance from *xml*. *xml* is a DOM element with the root element name `color`.

Args: *xml* (Element): `color` DOM element.

Returns: New instance of *Colour*.

classmethod tag ()

Returns the name of the XML tag for a colour object.

```
class colourlovers.Palette (**kwargs)
```

id

Unique id for this Palette as *int*.

title

Title / Name of the Palette.

user_name

Username of the Palette's creator.

num_views

Number of views this Palette has received as *int*.

num_votes

Number of votes this Palette has received as *int*.

num_comments

Number of comments this Palette has received as *int*.

num_hearts

Number of hearts this Palette has in the range [0,5] as *float*.

rank

This Palette's rank on COLOURlovers.com as *int*.

date_created

Date this Palette was created as *datetime* object.

colors

List of Colors within this Palette as hex values

color_widths

This Palette's Color's widths in the range [0.0, 1.0] as *float*.

Note: this attribute is optional and might not be present if not returned by the API response.

description

This Palette's description

url

This Palette's COLOURlovers.com URL.

image_url

Link to a png version of this Palette.

badge_url

Link to a COLOURlovers.com badge for this Palette.

api_url

This Palette's COLOURlovers.com API URL.

classmethod from_xml (*xml*)

Parse *xml* and generate class attributes for each immediate child of the root element without children of their own.

Args: *xml* ('*Element*'): xml element of content type.

Returns: Instance of calling class.

classmethod tag ()

Abstract method to be overwritten in subclasses. Should return the tag used in the XML response to identify the corresponding content type.

```
class colourlovers.Pattern (**kwargs)

    id
        Unique id for this Pattern as int.

    title
        Title / Name of the Pattern.

    user_name
        Username of the Pattern's creator.

    num_views
        Number of views this Pattern has received as int.

    num_votes
        Number of votes this Pattern has received as int.

    num_comments
        Number of comments this Pattern has received as int.

    num_hearts
        Number of Hearts this Pattern has in the range [0,5] as float.

    rank
        This Pattern's rank on COLOURlovers.com as int.

    date_created
        Date this Pattern was created as datetime object.

    colors
        List of colors within this Pattern as hex code.

    description
        This Pattern's description.

    url
        This Pattern's COLOURlovers.com URL
```

image_url

Link to a PNG version of this Pattern.

badge_url

Link to a COLOURlovers.com badge for this Pattern.

api_url

This Pattern's COLOURlovers.com API URL.

classmethod from_xml (*xml*)

Parse *xml* and generate class attributes for each immediate child of the root element without children of their own.

Args: *xml* ('*Element*'): xml element of content type.

Returns: Instance of calling class.

classmethod tag ()

Abstract method to be overwritten in subclasses. Should return the tag used in the XML response to identify the corresponding content type.


```
class colourlovers.Lover (**kwargs)

    id
        Unique id for this Lover as int.

    user_name
        This Lover's Username.

    date_registered
        Date this Lover registered with COLOURlovers.com as datetime object.

    date_last_active
        Date this Lover was last active on COLOURlovers.com as datetime object.

    rating
        This Lover's rating

    location
        This Lover's location.

    num_colors
        Number of Colors this Lover has made as int.

    num_palettes
        Number of Palettes this Lover has made as int.

    num_patterns
        Number of Patterns this Lover has made as int.

    num_comments_made
        Number of comments this Lover has made as int.

    num_lovers
        Number of Lovers [friends] this Lover has as int.

    num_comments_on_profile
        Number of comments this Lover has on their profile as int.
```

comments

Last 10 comments made on this Lover's profile as list of `Comment` instances.

Note: this attribute is optional. It is only returned when sending the parameter `comments=1` in the request.

url

This Lover's COLOURlovers.com URL.

api_url

This Lover's COLOURlovers.com API URL.

classmethod from_xml (*xml*)

Parse *xml* and generate class attributes for each immediate child of the root element without children of their own.

Args: *xml* (*'Element'*): xml element of content type.

Returns: Instance of calling class.

classmethod tag ()

Abstract method to be overwritten in subclasses. Should return the tag used in the XML response to identify the corresponding content type.

```
class colourlovers.Stat (total, **kwargs)
```

total

Total number of colors, palettes, patterns or lovers in the COLOURlovers system.

classmethod from_xml (*xml*)

Parse *xml* and generate class attributes for each immediate child of the root element without children of their own.

Args: *xml* (*“Element“*): xml element of content type.

Returns: Instance of calling class.

The RGB and HSV colour classes

class colourlovers.**RGB** (*red, green, blue*)

Define a RGB colour as a triple of integers in the range from 0 to 255. The colour channels are stored in attributes *red, green, blue*.

classmethod **from_xml** (*xml*)

Create an instance of *RGB* from *xml*.

Args: *xml* (*Element*): rgb element from API response.

Returns: Instance of *RGB*.

red

Red colour channel in range [0, 255]

green

Green colour channel in range [0, 255]

blue

Blue colour channel in range [0, 255]

hex

Return hex colour code corresponding to the RGB value.

class colourlovers.**HSV** (*hue, saturation, value*)

Define a HSV colour instance from *hue, saturation* and *value*. The three values have to be integer values with *hue* in range [0, 360] and *saturation, value* in range [0, 255].

classmethod **from_xml** (*xml*)

Create an instance of *HSV* from *xml*.

Args: *xml* (*Element*): hsv element from API response.

Returns: Instance of *HSV*.

hue

HSV hue channel in range [0, 360]

saturation

HSV saturation channel in range [0, 255]

value

HSV value channel in range [0, 255]

CHAPTER 8

Indices and tables

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