
Pigment
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Pigment is a set of Python utilities for colors.

```
>>> red = Color(255, 0, 0)
>>> blue = Color(0, 0, 255)
>>> blend(red, blue).hsv
(300, 100, 50)
```

**CHAPTER
ONE**

INSTALLATION

Pigment is available on PyPI:

```
$ python -m pip install pigment
```

Pigment officially supports Python 3.5+.

DOCUMENTATION CONTENTS

2.1 Reference

Python utilities for colors

class `pigment.Color(red: int, green: int, blue: int)`

Represents a color

Parameters

- **red** (int) – The color's red RGB component (0-255)
- **green** (int) – The color's green RGB component (0-255)
- **blue** (int) – The color's blue RGB component (0-255)

Note: The `cmyk`, `hex_code`, `hls`, `hsv`, and `rgb` properties can be set to update the color object.

property `cmyk`

The color as a CMYK tuple

- Cyan (0-100)
- Magenta (0-100)
- Yellow (0-100)
- Key/Black (0-100)

classmethod `from_css_name(css_color: str)`

Gets a color from a CSS color name

Parameters `css_color` (str) – The name of the CSS color

Returns `Color`

property `hex_code`

The color's hex code

property `hls`

The color as an HLS tuple

- Hue: color (0-360)
- Lightness: amount of white vs. color (0-100)
- Saturation: amount of gray vs. color (0-100)

property `hsv`

The color as an HSV tuple

- Hue: color (0-360)
- Saturation: amount of gray vs. color (0-100)
- Value: amount of black vs. color (0-100)

property `hue`

The color's hue (0-360)

classmethod `random(red: tuple = (0, 255), green: tuple = (0, 255), blue: tuple = (0, 255))`

Generates a random color

This works by generating random red, green, and blue values using `random.randint()` from the standard library using the min/max values specified if any

Parameters

- `red` (tuple) – The two arguments to pass for the red value
- `green` (tuple) – The two arguments to pass for the green value
- `blue` (tuple) – The two arguments to pass for the blue value

Returns `Color`

property `rgb`

The color as an RGB tuple

- Red (0-255)
- Green (0-255)
- Blue (0-255)

`pigment.blend(color1: pigment.Color, color2: pigment.Color) → pigment.Color`

Blends two colors together

Parameters

- `color1` (`Color`) – The first color
- `color2` (`Color`) – The second color

Returns `Color`

`pigment.normalize_hex(hex_code: str) → str`

Normalizes a hex color code

Removes the leading # if there is one, expands 3-character hex codes, and lowercases the hex code

Parameters `hex_code` (str) – A hex code to normalize

Returns The normalized hex code

Return type str

Raises `WrongLengthError` – The provided hex code had the wrong length

2.2 Exceptions

```
exception pigment.exceptions.PigmentError
```

The base class for all Pigment exceptions

```
exception pigment.exceptions.InvalidRGBValue
```

A value was invalid when converting or saving a color in RGB form

Note: Also a subclass of ValueError

```
exception pigment.exceptions.WrongLengthError(argument: Optional[str] = None)
```

The argument provided had an invalid length

Note: Also a subclass of ValueError

argument

The name of the argument

Type str

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