

Terminal string styling done right



See what's new in Chalk 2

bolddim italicunderlineinversestrikethroughblackredgreenyellowbluemagentacyanwhitegraybgBlackbgRedbgGreenbgYellowbgMagentabgCyanbgWhite

Highlights

- Expressive API
- Highly performant
- Ability to nest styles
- <u>256/Truecolor color support</u>
- Auto-detects color support
- Doesn't extend String.prototype
- Clean and focused
- · Actively maintained
- <u>Used by ~23,000 packages</u> as of December 31, 2017

Install

\$ npm install chalk



Usage

```
const chalk = require('chalk');
console.log(chalk.blue('Hello world!'));
```

Chalk comes with an easy to use composable API where you just chain and nest the styles you want.

```
const chalk = require('chalk');
const log = console.log;
// Combine styled and normal strings
log(chalk.blue('Hello') + ' World' + chalk.red('!'));
// Compose multiple styles using the chainable API
log(chalk.blue.bgRed.bold('Hello world!'));
// Pass in multiple arguments
log(chalk.blue('Hello', 'World!', 'Foo', 'bar', 'biz', 'baz'));
// Nest styles
log(chalk.red('Hello', chalk.underline.bgBlue('world') + '!'));
// Nest styles of the same type even (color, underline, background)
log(chalk.green(
    'I am a green line ' +
    chalk.blue.underline.bold('with a blue substring') +
    ' that becomes green again!'
));
// ES2015 template literal
log(`
CPU: ${chalk.red('90%')}
RAM: ${chalk.green('40%')}
DISK: ${chalk.yellow('70%')}
`);
// ES2015 tagged template literal
log(chalk`
CPU: {red ${cpu.totalPercent}%}
RAM: {green ${ram.used / ram.total * 100}%}
DISK: {rgb(255,131,0) ${disk.used / disk.total * 100}%}
`);
// Use RGB colors in terminal emulators that support it.
log(chalk.keyword('orange')('Yay for orange colored text!'));
log(chalk.rgb(123, 45, 67).underline('Underlined reddish color'));
log(chalk.hex('#DEADED').bold('Bold gray!'));
```

Easily define your own themes:

```
const chalk = require('chalk');

const error = chalk.bold.red;
const warning = chalk.keyword('orange');

console.log(error('Error!'));
console.log(warning('Warning!'));
```

Take advantage of console.log string substitution:

```
const name = 'Sindre';
console.log(chalk.green('Hello %s'), name);
//=> 'Hello Sindre'
```

API

```
chalk. <style>[.<style>...] (string, [string...])
```

```
Example: chalk.red.bold.underline('Hello', 'world');
```

Chain <u>styles</u> and call the last one as a method with a string argument. Order doesn't matter, and later styles take precedent in case of a conflict. This simply means that <code>chalk.red.yellow.green</code> is equivalent to <code>chalk.green</code>.

Multiple arguments will be separated by space.

chalk.enabled

Color support is automatically detected, as is the level (see chalk.level). However, if you'd like to simply enable/disable Chalk, you can do so via the .enabled property.

Chalk is enabled by default unless explicitly disabled via the constructor or chalk.level is 0.

If you need to change this in a reusable module, create a new instance:

```
const ctx = new chalk.constructor({enabled: false});
```

chalk.level

Color support is automatically detected, but you can override it by setting the level property. You should however only do this in your own code as it applies globally to all Chalk consumers.

If you need to change this in a reusable module, create a new instance:

```
const ctx = new chalk.constructor({level: 0});
```

Levels are as follows:

- 0. All colors disabled
- 1. Basic color support (16 colors)
- 2. 256 color support

3. Truecolor support (16 million colors)

chalk.supportsColor

Detect whether the terminal supports color. Used internally and handled for you, but exposed for convenience.

Can be overridden by the user with the flags --color and --no-color. For situations where using --color is not possible, add the environment variable FORCE_COLOR=1 to forcefully enable color or FORCE_COLOR=0 to forcefully disable. The use of FORCE COLOR overrides all other color support checks.

Explicit 256/Truecolor mode can be enabled using the --color=256 and --color=16m flags, respectively.

Styles

Modifiers

- reset
- bold
- dim
- italic (Not widely supported)
- underline
- inverse
- hidden
- strikethrough (Not widely supported)
- visible (Text is emitted only if enabled)

Colors

- black
- red
- green
- yellow
- blue (On Windows the bright version is used since normal blue is illegible)
- magenta
- cyan
- white
- gray ("bright black")
- redBright
- greenBright
- yellowBright
- blueBright
- magentaBright
- cyanBright
- whiteBright

Background colors

- bgBlack
- bgRed
- bgGreen
- bgYellow

- bgBlue
- bgMagenta
- bgCyan
- bgWhite
- bgBlackBright
- bgRedBright
- bgGreenBright
- bgYellowBright
- bgBlueBright
- bgMagentaBright
- bgCyanBright
- bgWhiteBright

Tagged template literal

Chalk can be used as a tagged template literal.

```
const chalk = require('chalk');

const miles = 18;
const calculateFeet = miles => miles * 5280;

console.log(chalk`
  There are {bold 5280 feet} in a mile.
  In {bold ${miles} miles}, there are {green.bold ${calculateFeet(miles)} feet}.
  `);
```

Blocks are delimited by an opening curly brace ({), a style, some content, and a closing curly brace (}).

Template styles are chained exactly like normal Chalk styles. The following two statements are equivalent:

```
console.log(chalk.bold.rgb(10, 100, 200)('Hello!'));
console.log(chalk`{bold.rgb(10,100,200) Hello!}`);
```

Note that function styles (rgb() , hsl() , keyword() , etc.) may not contain spaces between parameters.

All interpolated values ($chalk \S\{foo\}\)$) are converted to strings via the .toString() method. All curly braces ({ and }) in interpolated value strings are escaped.

256 and Truecolor color support

Chalk supports 256 colors and <u>Truecolor</u> (16 million colors) on supported terminal apps.

Colors are downsampled from 16 million RGB values to an ANSI color format that is supported by the terminal emulator (or by specifying {level: n} as a Chalk option). For example, Chalk configured to run at level 1 (basic color support) will downsample an RGB value of #FF0000 (red) to 31 (ANSI escape for red).

Examples:

• chalk.hex('#DEADED').underline('Hello, world!')

```
• chalk.keyword('orange')('Some orange text')
```

```
chalk.rgb(15, 100, 204).inverse('Hello!')
```

Background versions of these models are prefixed with bg and the first level of the module capitalized (e.g. keyword for foreground colors and bgKeyword for background colors).

```
• chalk.bgHex('#DEADED').underline('Hello, world!')
```

- chalk.bgKeyword('orange')('Some orange text')
- chalk.bgRgb(15, 100, 204).inverse('Hello!')

The following color models can be used:

```
• rgb - Example: chalk.rgb(255, 136, 0).bold('Orange!')
• hex - Example: chalk.hex('#FF8800').bold('Orange!')
• keyword (CSS keywords) - Example: chalk.keyword('orange!').bold('Orange!')
• hsl - Example: chalk.hsl(32, 100, 50).bold('Orange!')
• hsv - Example: chalk.hsv(32, 100, 100).bold('Orange!')
• hwb - Example: chalk.hwb(32, 0, 50).bold('Orange!')
• ansi16
• ansi256
```

Windows

If you're on Windows, do yourself a favor and use cmder instead of cmder instead of cmder.

Origin story

colors.js used to be the most popular string styling module, but it has serious deficiencies like extending String.prototype which causes all kinds of <u>problems</u> and the package is unmaintained. Although there are other packages, they either do too much or not enough. Chalk is a clean and focused alternative.

Related

- chalk-cli CLI for this module
- ansi-styles ANSI escape codes for styling strings in the terminal
- <u>supports-color</u> Detect whether a terminal supports color
- strip-ansi Strip ANSI escape codes
- strip-ansi-stream Strip ANSI escape codes from a stream
- has-ansi Check if a string has ANSI escape codes
- <u>ansi-regex</u> Regular expression for matching ANSI escape codes
- wrap-ansi Wordwrap a string with ANSI escape codes
- slice-ansi Slice a string with ANSI escape codes
- color-convert Converts colors between different models
- <u>chalk-animation</u> Animate strings in the terminal
- gradient-string Apply color gradients to strings
- chalk-pipe Create chalk style schemes with simpler style strings
- terminal-link Create clickable links in the terminal

Maintainers

- Sindre Sorhus
- Josh Junon

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