

PCRE Regex Cheatsheet

Regular Expression Basics

| | |
|-----|------------------------------|
| . | Any character except newline |
| a | The character a |
| ab | The string ab |
| a b | a or b |
| a* | 0 or more a's |
| \ | Escapes a special character |

Regular Expression Quantifiers

| | |
|--------|-----------------|
| * | 0 or more |
| + | 1 or more |
| ? | 0 or 1 |
| {2} | Exactly 2 |
| {2, 5} | Between 2 and 5 |
| {2,} | 2 or more |

Default is greedy. Append ? for reluctant.

Regular Expression Groups

| | |
|------------|--|
| (...) | Capturing group |
| (?P<Y>...) | Capturing group named Y |
| (?:...) | Non-capturing group |
| (?>...) | Atomic group |
| (? ...) | Duplicate group numbers |
| \Y | Match the Y'th captured group |
| (?P=Y) | Match the named group Y |
| (?R) | Recurse into entire pattern |
| (?Y) | Recurse into numbered group Y |
| (?&Y) | Recurse into named group Y |
| \g{Y} | Match the named or numbered group Y |
| \g<Y> | Recurse into named or numbered group Y |
| (?#...) | Comment |

Regular Expression Character Classes

| | |
|---------|----------------------------------|
| [ab-d] | One character of: a, b, c, d |
| [^ab-d] | One character except: a, b, c, d |
| [\b] | Backspace character |
| \d | One digit |
| \D | One non-digit |
| \s | One whitespace |
| \S | One non-whitespace |
| \w | One word character |
| \W | One non-word character |

Regular Expression Assertions

| | |
|----------|---------------------------------|
| ^ | Start of string |
| \A | Start of string, ignores m flag |
| \$ | End of string |
| \Z | End of string, ignores m flag |
| \b | Word boundary |
| \B | Non-word boundary |
| \G | Start of match |
| (?=...) | Positive lookahead |
| (?!...) | Negative lookahead |
| (?<=...) | Positive lookbehind |
| (?<!...) | Negative lookbehind |
| (?()) | Conditional |

Regular Expression Escapes

| | |
|-------|------------------------|
| \Q..E | Remove special meaning |
|-------|------------------------|

Regular Expression Flags

| | |
|-----------|--------------------------------------|
| i | Ignore case |
| m | ^ and \$ match start and end of line |
| s | . matches newline as well |
| x | Allow spaces and comments |
| J | Duplicate group names allowed |
| U | Ungreedy quantifiers |
| (?iLmsux) | Set flags within regex |

Regular Expression Special Characters

| | |
|--------|---------------------------|
| \n | Newline |
| \r | Carriage return |
| \t | Tab |
| \0 | Null character |
| \YYY | Octal character YYY |
| \xYY | Hexadecimal character YY |
| \x{YY} | Hexadecimeal character YY |
| \cY | Control character Y |

Regular Expression Posix Classes

| | |
|------------|----------------------------------|
| [:alnum:] | Letters and digits |
| [:alpha:] | Letters |
| [:ascii:] | Ascii codes 0 - 127 |
| [:blank:] | Space or tab only |
| [:cntrl:] | Control characters |
| [:digit:] | Decimal digits |
| [:graph:] | Visible characters, except space |
| [:lower:] | Lowercase letters |
| [:print:] | Visible characters |
| [:punct:] | Visible punctuation characters |
| [:space:] | Whitespace |
| [:upper:] | Uppercase letters |
| [:word:] | Word characters |
| [:xdigit:] | Hexadecimal digits |