

NSRegularExpression Cheat Sheet and Quick Reference

Special Characters

| * ? - | + [| () | { } | ^ \$ | \ . | / |
|-------|-----|-----|-----|------|-----|---|
|-------|-----|-----|-----|------|-----|---|

Operators

| | Or | | |
|---------------------|--|--|--|
| * | 0 or more times. Match as many times as possible. | | |
| + | 1 or more times. Match as many times as possible. | | |
| ? | 0 or 1 times. Prefer 1. | | |
| *? | 0 or more times. Match as few times as possible. | | |
| +? | 1 or more times. Match as few times as possible. | | |
| ?? | 0 or 1 times. Prefer 0. | | |
| *+ | 0 or more times. Match as many times as possible when first encountered, do not retry with fewer even if overall match fails (Possessive Match). | | |
| ++ | 1 or more times. Possessive match. | | |
| ?+ | 0 or 1 times. Possessive match. | | |
| {n} {n}? {n}+ | Exactly n times. | | |
| {n,} | n or more. | | |
| {n,}? | At least n times, but no more than required for an overall pattern match. | | |
| {n,m} | Between n and m times. | | |
| {n,m}? | Between n and m times. Match as few times as possible, but not less than n. | | |

Anchors

| ^ | Beginning of a line. | | |
|----|---|--|--|
| \$ | End of a line. | | |
| \A | Beginning of an input. Doesn't match after a new line within the input. | | |
| \z | End of input. | | |
| \z | End of input, but before the final line terminator, if one exists. | | |
| • | Any character. | | |
| \ | Quote (escape) following character. | | |

Others

| \$n | n is a digit. Back referencing to a capture group. n must be >= 0 and not greater than the number of capture groups. \$ not followed by a digit has no special meaning. |
|-----|---|
| \ | Treat the following character as a literal, suppressing any special meaning. |

Character Classes

| \b | Word boundary, if outside of a [Set]. BACKSPACE, if within a [Set]. | |
|----|---|--|
| \B | Not word boundary. | |
| \s | White space character. | |
| \s | Non-white space character. | |
| \d | Digit character. | |
| \D | Non-digit character. | |
| \w | Word character. | |
| \W | Non-word character. | |

Groups and Ranges

| () | Capturing parentheses (capturing group). | |
|------|---|--|
| (?:) | Non-capturing parentheses. Matches but doesn't capture. | |
| | Somewhat more efficient than capturing parentheses. | |
| (?!) | Negative look-ahead. True if the parenthesized pattern does | |
| | not match at the current input position. | |
| [] | Any one character in the set. | |
| [^] | Negated set. Not any one in the set. | |

Useful Examples

| m[^o] matches any "m" followed by anything other than "o" |
|---|
| m(?!o) matches any "m" (and only "m") not followed by "o" |
| $(? <=, ^{})([^{},] *)(, 1)+(?=, $)$ matches consecutive duplicates from a comma-delimited list ¹ |
| $<([a-z][a-z0-9]*)\b[^>]*>(.*?) matches any HTML or XML tags1$ |
| ¹ From http://www.regular-expressions.info/duplicatelines.html by Jan Goyvaerts. |