JavaScript Regular Expression (Regex) Cheat Sheet

# 📘 Basic Regex Syntax

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| --- | --- | --- | --- |
| Syntax | Meaning | Example | Matches |
| . | Any character except newline (\n) | a.c | "abc", "a1c" |
| \w | Word character (letters, digits, \_) | \w+ | "word", "hello123" |
| \W | Non-word character | \W+ | "!", " " |
| \d | Digit (0-9) | \d+ | "123", "42" |
| \D | Non-digit | \D+ | "abc", "!" |
| \s | Whitespace (space, tab, newline) | \s+ | " ", "\t", "\n" |
| \S | Non-whitespace | \S+ | "hello", "42" |
| \b | Word boundary | \bcat\b | "cat" in "a cat is here" |
| \B | Not a word boundary | \Bcat\B | "cat" in "scattered" |
| ^ | Start of string or line | ^Hello | "Hello world" |
| $ | End of string or line | world$ | "Hello world" |
| [...] | Character set | [aeiou] | "a", "e" |
| [^...] | Negated character set | [^aeiou] | "b", "z" |
| (a|b) | Alternation (a or b) | (yes|no) | "yes", "no" |
| (...) | Capturing group | (\d+)-(\d+) | "12-34" as 12, 34 |
| (?:...) | Non-capturing group | (?:foo|bar) | "foo", "bar" |
| (?=...) | Positive lookahead | \w+(?=\d) | "word1" in "word1" |
| (?!...) | Negative lookahead | \w+(?!\d) | "word" not followed by digit |
| (?<=...) | Positive lookbehind | (?<=\$)\d+ | "50" in "$50" |
| (?<!...) | Negative lookbehind | (?<!\$)\d+ | "50" not preceded by "$" |

# 🔁 Quantifiers

|  |  |  |  |
| --- | --- | --- | --- |
| Syntax | Meaning | Example | Matches |
| \* | 0 or more times | a\* | "" , "a", "aaaa" |
| + | 1 or more times | a+ | "a", "aaa" |
| ? | 0 or 1 time | a? | "" , "a" |
| {n} | Exactly n times | a{3} | "aaa" |
| {n,} | At least n times | a{2,} | "aa", "aaaa" |
| {n,m} | Between n and m times | a{2,4} | "aa", "aaa", "aaaa" |
| \*? | Lazy 0+ (fewest possible) | a\*? | "" , "a" |
| +? | Lazy 1+ (fewest possible) | a+? | "a" |

# 🌍 Unicode & Escaping

|  |  |  |
| --- | --- | --- |
| Syntax | Meaning | Example |
| \p{L} | Any kind of letter (Unicode) | /\p{L}+/u |
| \P{L} | Not a letter (Unicode) | /\P{L}/u |
| \\ | Literal backslash | /\\\\/ |
| \n | Newline | \n |
| \t | Tab | \t |
| . | Any character except newline | /./ |

# 🎌 Flags

|  |  |  |
| --- | --- | --- |
| Flag | Name | Effect |
| g | global | Match all occurrences |
| i | ignoreCase | Case-insensitive matching |
| m | multiline | ^ and $ match line start/end |
| u | unicode | Enables Unicode mode (e.g., \p{L}) |
| s | dotAll | . matches newline too |
| y | sticky | Match must start at lastIndex |