

BASICS

- .** matches any character
- []** matches any character between the []
E.g. **[123]** matches 1 or 2 or 3
- [-]** matches any character from the range
E.g. **[a-f]** is the same as **[abcdef]**
- |** means “or” E.g. June|July

EXAMPLES

- reali[sz]e** matches British and USA spelling
- [a-fA-F0-9]** matches a hexadecimal character
- [<wind]** matches wind and window, but not whirlwind.
- ^[a-zA-Z0-9_-]{3,16}\$** username 3 to 16 characters in length. Numbers, letters and dashes only.

ANCHORS

- ^** matches at beginning of string/line
- \$** matches at end of string/line
- \<** matches at beginning of a word
- \>** matches at end of a word
- \b** matches at beginning or end of a word

REGULAR EXPRESSIONS CHEAT SHEET

CLASSES of CHARACTERS - Used within bracket expressions

- [:alnum:]** matches letters and numbers
- [:alpha:]** matches just letters
- [:digit:]** matches just numbers
- [:lower:]** or **[:upper:]** matches lower/uppercase letters
- [:punct:]** matches punctuation !"#\$%&'()*+,-./:;<=>?@ etc

E.g. **[[[:digit:]][:alpha:]]** matches any digit followed by any letter

REPETITION

- ?** Preceding item is optional and matched at most once.
 - *** Preceding item will be matched zero or more times.
 - +** Preceding item will be matched one or more times.
 - {n}** Preceding item is matched exactly n times.
 - {n,}** Preceding item is matched n or more times.
 - {n,m}** Preceding item is matched $\geq n$ times, but $< m$ times.
- E.g. **[[[:digit:]]{4}]** matches four digits like 1901 or 9876

DIFFERENT FLAVORS

There are different versions of regular expression syntax: “basic” (BRE), “extended” (ERE) and “perl” (PRCE).

In basic regular expressions the meta-characters **?**, **+**, **{**, **|**, **(**, and **)** lose their special meaning; instead use the backslashed versions **\?**, **\+**, **\{**, **\|**, **\(**, and **\)**.

E.g. **|** means “or” in ERE and BRE, but in BRE you need to use **\|**