# **Regular Expressions**

# [] - Square Brackets:

Indicate to include whatever symbol(s) are inside of the brackets:

[wW] : The woodchuck named Walter drank water.
[0-9] : He went jogging 13 times in the last 42 days.
[A-Z] : A man named John Carter was a legend.
[a-z] : A man named John Carter was a legend.

# ^ - Carat:

Indicate negation only when first in square brackets

[^A-Z] : NOT A-Z [^Ss] : NOT S OR s [^e^] : NOT e OR ^

At beginning of line when used outside square brackets, indicates the first character in a line

^[A-Z] : Palo Alto ^[^A] : Everybody

# | - Pipe:

Indicates an 'Or' operation

groundhog | woodchuck : Groundhog or woodchuck a|b|c : a or b or c

#### ? - Question Mark:

Indicates the previous character is optional

[Cc]olou?r: color, colour, Color, Colour

# \* - Star:

Matches 0 or more of the previous character

Oo\*h : Oh, Ooh, Oooh, ....

#### + - Plus:

Indicates 1 or more of the previous character

o+h : oh, ooh, oooh, ...

#### . - Period:

indicates any character

beg.n: begin, begun, began, beg2n, begtn ...

# \$ - Dollar Sign:

Indicates to match previous character with the last character in the expression

\.\$ : The end.

[a-z]\$: The fox ambushed the rabbit

.\$ : The end?

# \ - Backslash:

Used as an escape character to indicate the symbol within an expression rather than the Reg-Ex command

 $\cdot$ .\$ : The end.

? : Did you know? How did you find out?

# **Generating Accurate Reg-Ex:**

# **Common Errors:**

1) False positives (Type 1)

[tT]he : theology, other
[cC]at : Catastrophe, Cataclysm
[iI] : igloo, ideology, mississippi

2) False negatives (Type 2)

the : The cat : Cat

When generating regular expressions, be sure to go through a phase of checking the accuracy of your regular expression. There are various tools available online to assist you in checking your reg-ex strings, such as: www.regexpal.com