

## Week 7- Regular Expressions (regex)

regexes - A pattern.

re - A library in Python for regular expressions

↳ Find, check for, and or replace Patterns

Common (Versatile) re function

↳ re.search(pattern, string, flags=0)

Explained ↓

re.search - name of function

Pattern - (argument) pattern that you want to search for

String - The string you pass in for the Pattern to search in

Flags - Allows you to modify the behavior of the regular expression

↳ i.e. flags = { re.IGNORECASE # ignore case insensitive  
                  { re.I # same as but abbreviated  
                  { re.M or MULTILINE #  
                  { re.DOTALL #

Pattern Special Symbols

period →

\*. - Any character except a newline

\* - 0 or more repetitions

+ - 1 or more repetitions

? - 0 or 1 repetition

{ m } - m repetitions

{ m, n } - m through n repetitions

^ - Matches the start of the string

\$ - matches the end of the string or just before the newline at the end of the string

[ ] - set of characters to be allowed

[ ^ ] - Complementing the set, set of characters NOT allowed

\w - Any word character

\* more on next page



`\d` - decimal digit

`\b` - boundary between a `\w` and a `\w` character.

`\D` - **Not** a decimal digit

`\s` - whitespace characters

`\S` - **Not** a whitespace character

`\w` - word characters, numbers, and underscores

`\W` - **Not** a word character

`A|B` - either A or B

`(...)` - a group

`(?:...)` - non-capturing version # Group without assigning to a group

`(?P<name>...)` - Give group a name # Call with **variable** `group("name")`

Substitute / Replace

`re.sub(pattern, repl, string, count=0, flags=0)`

Split

`re.split(pattern, string, maxsplit=0, flags=0)`

Find

`re.findall(pattern, string, flags=0)`