**Regular Expression**

A regular expression is an object that describes a pattern of characters.

**Modifiers**

Modifiers are used to perform case-insensitive and global searches:

**Modifier Description**

* g Perform a global match (find all matches rather than stopping after the first match)
* i Perform case-insensitive matching
* m Perform multiline matching

**Brackets**

Brackets are used to find a range of characters:

**Expression Description**

* [abc] Find any character between the brackets
* [^abc] Find any character NOT between the brackets
* [0-9] Find any character between the brackets (any digit)
* [^0-9] Find any character NOT between the brackets (any non-digit)
* (x|y) Find any of the alternatives specified

**Metacharacters**

Metacharacters are characters with a special meaning:

**Metacharacter Description**

* . Find a single character, except newline or line terminator
* \w Find a word character
* \W Find a non-word character
* \d Find a digit
* \D Find a non-digit character
* \s Find a whitespace character
* \S Find a non-whitespace character
* \b Find a match at the beginning/end of a word, beginning like this: \bHI, end like this: HI\b
* \B Find a match, but not at the beginning/end of a word
* \0 Find a NULL character
* \n Find a new line character
* \f Find a form feed character
* \r Find a carriage return character
* \t Find a tab character
* \v Find a vertical tab character
* \xxx Find the character specified by an octal number xxx
* \xdd Find the character specified by a hexadecimal number dd
* \udddd Find the Unicode character specified by a hexadecimal number dddd

**Quantifiers**

**Quantifier Description**

* n+ Matches any string that contains at least one n
* n\* Matches any string that contains zero or more occurrences of n
* n? Matches any string that contains zero or one occurrences of n
* n{X} Matches any string that contains a sequence of X n's
* n{X,Y} Matches any string that contains a sequence of X to Y n's
* n{X,} Matches any string that contains a sequence of at least X n's
* n$ Matches any string with n at the end of it
* ^n Matches any string with n at the beginning of it
* ?=n Matches any string that is followed by a specific string n
* ?!n Matches any string that is not followed by a specific string n

**RegExp Object Properties**

**Property Description**

* constructor Returns the function that created the RegExp object's prototype
* global Checks whether the "g" modifier is set
* ignoreCase Checks whether the "i" modifier is set
* lastIndex Specifies the index at which to start the next match
* multiline Checks whether the "m" modifier is set
* source Returns the text of the RegExp pattern

**RegExp Object Methods**

* exec() Tests for a match in a string. Returns the first match
* test() Tests for a match in a string. Returns true or false
* toString() Returns the string value of the regular expression