<https://www.tutorialrepublic.com/php-tutorial/php-regular-expressions.php>

Regular Expression:

**Character Classes:**

A character class always matches a single character out of a list of specified characters that means the expression [abc] matches only a, b or c character.

Negated character classes can also be defined that match any character except those contained within the brackets. A negated character class is defined by placing a caret (^) symbol immediately after the opening bracket, like this [^abc]

**Predefined Character Classes:**

|  |  |
| --- | --- |
| . | Matches any single character except newline \n. |
| \d | matches any digit character. Same as [0-9] |
| \D | Matches any non-digit character. Same as [^0-9] |
| \s | Matches any whitespace character (space, tab, newline or carriage return character). Same as [ \t\n\r] |
| \S | Matches any non-whitespace character. Same as [^ \t\n\r] |
| \w | Matches any word character (definned as a to z, A to Z,0 to 9, and the underscore). Same as [a-zA-Z\_0-9] |
| \W | Matches any non-word character. Same as [^a-zA-Z\_0-9] |

Boundaries:

|  |  |
| --- | --- |
| ^ | Matches beginning of input. If the multiline flag is set to true, also matches immediately after a line break character. For example, /^A/ does not match the "A" in "an A", but does match the first "A" in "An A". |
| $ | Matches end of input. If the multiline flag is set to true, also matches immediately before a line break character. For example, /t$/does not match the "t" in "eater", but does match it in "eat". |
| \b | A **word boundary** character ( \b) helps you search for the words that begins and/or ends with a pattern. For example, the regexp /\bcar/ matches the words beginning with the pattern car, and would match cart, carrot, or cartoon, but would not match oscar.  Similarly, the regexp /car\b/ matches the words ending with the pattern car, and would match scar, oscar, or supercar, but would not match cart. Likewise, the /\bcar\b/ matches the words beginning and ending with the pattern car, and would match only the word car. |
| \B |  |

Modifier:

|  |  |
| --- | --- |
| g | Global match |
| i | Case-insensitive search |
| m | Multi-line search |
| s | Allows . to match newline characters. |
|  |  |
|  |  |

**Quantifier:** Indicates number of characters or expressions to match

**Assertions:** Indicates in some way that a match is possible. Assertions include look-ahead, look-behind, and conditional expressions.