Example: (\w\*)

Meaning, password can only contain alphanumeric (A-Z,a-z,0-9) characters.

Example:  $(?=^.{1,30})$ .\*\$

Meaning, password must have no more than 30 characters.

Example:  $(?=^.{8,30})$ .\*\$

Meaning, password must have  ${\bf 8}$  characters and no more than  ${\bf 30}$ 

Example:  $(?=.*[A-Z])(\w*)$ \$

Meaning ,password can only contain alphanumeric characters including one uppercase letter.

Example:  $(?=^.{8,})$ )  $(?=.*\W).*$ \$

Meaning, password must have at least 8 characters, and one special character.

Example:  $(?=^.{8,}))(?=.*[A-Z])(?=.*W).*$ 

Meaning, password must have at least  ${\bf 8}$  characters including one uppercase letter, and one special character.

Example:  $(?=^.{8,}))(?=.*[A-Z])(\w*)$ 

Meaning, password must have at least  $\bf 8$  characters including one uppercase letter. These characters can only be alphanumeric (A-Z,a-z,0-9)

Example:  $(?=^.{1,30}$) (?=.*\d) (?![.\n]) (?=.*[A-Z]) (?=.*[a-z]).*$ \$

Meaning, password must have no more than 30 characters including one uppercase letter, one lowercase letter, and one number. The password can not start with a "."

Example:  $(?=^.{8,30})$   $(?=.*\d)$   $(?![.\n])$  (?=.\*[A-Z]) (?=.\*[a-z]).\*\$

Meaning, password must have at least 8 characters and no more than 30 including one uppercase letter, one lowercase letter, and one number. The password can not start with a "."

Example:  $(?=^.\{1,30\})((?=.*\d)|(?=.*\d)|(?=.*\d)(?![.\n])(?=.*[A-Z])(?=.*[a-z]).*$ 

Meaning, password must have no more than 30 including one uppercase letter, one lowercase letter, and one number or one special character. The password can not start with a "."

```
Example: (?=^.{1,30})) (?=.*\d) (?=.*\d) (?![.\n]) (?=.*[A-Z]) (?=.*[a-z]).*$
```

Meaning, password must have no more than 30 characters including one uppercase letter, one lowercase letter, one number, and one special character. The password can not start with a "."

```
Example: (?=^.{8,30})((?=.*\d)(?=.*\d)(?![.\n])(?=.*[A-Z])(?=.*[a-z]).*
```

Meaning, password must have at least 8 characters and no more than 30 including one uppercase letter, one lowercase letter, one number or one special character. The password also can not start with a "."

```
Example: (?=^.{8,30}$) (?=.*\d) (?=.*\W) (?![.\n]) (?=.*[A-Z]) (?=.*[a-z]).*$
```

Meaning, password must have at least 8 characters and no more than 30 including one uppercase letter, one lowercase letter, one number, and one special character. The password can not start with a "."

## Quick Cheat Sheet:

 $(?=^{.}\{x,y\}$ \$) : x is the minimum number of characters requirement, y is the maximum number of characters requirement

 $(?=^{\cdot}.\{x,\}^{\circ})$  : x is the minimum number of characters requirement, with no character limit

 $(?=^{1}, y)$  : No minimum character requirement, y is the maximum number of characters

 $(?=.*\d)$  : **Must** contain a number

(?=.\*\W) : Must contain a special character

 $(?![.\n])$  : Must not start with a . or a newline character

 $(?=.*[A-Z]) \; : \; \textbf{Must} \; \texttt{contain} \; \texttt{an uppercase character}$ 

(?=.\*[a-z]) : Must contain a lowercase character

(\w\*) : **Must** be an alphanumeric character(A- $\mathbb{Z}$ ,a- $\mathbb{Z}$ ,0-9). You must put this at the end of the Regex right before the \$

## \*NOTE:Always put the .\*\$ at the end of the Regex, unless you want it to be only alphanumeric characters, then put (\w\*)\$ at the end of the Regex

For more information on how to create your own Regex:

Guide Link & Cheat Sheet:

https://www.rexegg.com/regex-quickstart.html

 $\frac{\texttt{https://docs.microsoft.com/en-us/dotnet/standard/base-types/regular-expression-language-quick-reference}$ 

Regex Builder: http://www.ultrapico.com/Expresso.htm