5. QUALIFICATIONS

Using the Wildcard Star

Introduction

Another "qualification metacharacter" is the Wildcard Star ("*"), which is commonly also known as the Kleene Star, or the Asterisk. it is similar to the Question Mark metacharacter but looks for zero or more instances of a character or group of characters. ***The Wildcard Star metacharacter is matched if there is zero or more instances of the preceding character (or grouping) in a Regular Expression***.

Why Use the Wildcard?

If we are trying to match with either "colour" and "color", just for fun, we could do by placing the wildcard after the letter 'u', as follows:

```
RegEx_Pattern = "colou*r"
```

So, this would match with either "colour" and "color", but it would also match with "colouur", "colouuur", "colouuuur", "colouuuuur", etc.

If I get an email with good news, I will reply with the phrase "Yippeeeeee", the number of e's varies, depending on how good the news is, so if I had a collection of emails that we needed to search for these, we could do so as follows:

```
RegEx_Pattern = "Yippee*"
```

And this would match with "Y", "I", "p", "p", "e", and zero or more "e"'s.

If we had an online form, and one of the fields in the form could be left blank, or it could be filled in with any number of characters, we could that as follows:

```
RegEx_Pattern = ".*"
```

Which means any character (period), any number of times (wildcard star).

If we wanted the field to be either blank or any amount of lowercase characters:

```
RegEx_Pattern = "[a-z]*"
```

Which means any lowercase character ([a-z]), any number of times (wildcard star).

If we wanted the field to be either blank or any amount of uppercase characters:

```
RegEx_Pattern = "[A-Z]*"
```

Which means any uppercase character ([A-Z]), any number of times (wildcard star).

And if we wanted the field to be either blank or any amount of numerical characters:

```
RegEx_Pattern = "[0-9]*"
```

Which means any numerical character ([0-9]), any number of times (wildcard star).

Matching the Wildcard Star Character

If we are searching for the actual star character (not the metacharacter), then mathematically we represent it as follows: \ *

However, most programming languages prefer we state the star as:

```
RegEx_Pattern = "\\*"
```

And this will allow us to locate the star character in a String.

#RegExThursday © Damian Gordon