

## 2. SIMPLE MATCHING

### More Details on the Period

#### Introduction

We will remember that the period metacharacter represents any other single character, which can be a letter, number, or symbol. Now let's look at more advanced uses of the period when searching for patterns in a String (i.e. in a text).

#### More than One Period

Sometimes when people are emailing me, instead of "Damian" they type "Damain", so they swap around the "l" and the "a". An easy way to describe this is as follows:

```
Regex_Pattern = "Dam. n"
```

So, we can read this Regular Expression as to search for a String with the following pattern: "D", "a", "m", any character, any character, and "n". So we would get the following matches:

Test_Message = "Damian"	MATCH ✓
Test_Message = "Damain"	MATCH ✓

However, we know this will also match other Strings including any of the following:

Test_Message = "Damxxn"	MATCH ✓
Test_Message = "Dam35n"	MATCH ✓
Test_Message = "Dam&=n"	MATCH ✓
Test_Message = "Dam n"	MATCH ✓

So, we might match to more things than we want.

But it will not match to these (as the pattern must be six characters long):

Test_Message = "Damn"	NO MATCH ✗
Test_Message = "Dami an"	NO MATCH ✗

#### Matching the Period Character

Finding the actual period character (not the metacharacter) in a String is a bit tricky. So, if we wanted to find something easy like the letter "D" in a String, we could simply set the Regular Expression to be equal to the literal character "D" as follows:

```
Regex_Pattern = "D"
```

However, if we wanted to find the period character ".", the following won't work:

```
Regex_Pattern = "." ✗ ✗ ✗
```

As it would match any character in the String. So, we use a specific code to represent the actual period character. Mathematically we can represent it as follows: \.

However, most programming languages typically prefer we state it as follows:

```
Regex_Pattern = "\\."
```

And this will allow us to locate a period character (".") in a String, e.g. in an email.

#RegExThursday © Damian Gordon