

# Regular expression that uses an "OR" conditional

Asked 16 years, 2 months ago   Modified 15 years, 5 months ago   Viewed 12k times



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I could use some help writing a regular expression. In my Django application, users can hit the following URL:

```
http://www.example.com/A1/B2/C3
```

I'd like to create a regular expression that allows accepts any of the following as a valid URL:

```
http://www.example.com/A1
http://www.example.com/A1/B2
http://www.example.com/A1/B2/C3
```

I'm guessing I need to use the "OR" conditional, but I'm having trouble getting my regex to validate. Any thoughts?

**UPDATE:** Here is the regex so far. Note that I have not included the "<http://www.example.com>" portion -- Django handles that for me. I'm just concerned with validating 1,2, or 3 subdirectories.

```
^(\w{1,20})|((\w{1,20})/(\w{1,20}))|((\w{1,20})/(\w{1,20})/(\w{1,20}))$
```

regex   django   django-urls

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edited Oct 10, 2008 at 15:10



Tanktalus

22.3k ● 5 ● 43 ● 70

asked Oct 9, 2008 at 13:48



Huuuzze

16.3k ● 26 ● 75 ● 91

Just to clarify: You want it to accept the three examples but reject anything else? I.E. [somewebsite.com/A1/B1](http://somewebsite.com/A1/B1) would be unacceptable? – Dave Costa Oct 9, 2008 at 13:50

[somewebsite.com/A1/B1](http://somewebsite.com/A1/B1) would be fine. I'm just looking for something that will validate three different sub-directories. – Huuuzze Oct 9, 2008 at 13:52

Can you post the regex you have so far? – ine Oct 9, 2008 at 13:56

6 Answers

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Skip the `|`, use the `?` and `()`

6



And if you replace the A1-C3 with a pattern:

```
http://www\example\.com/[^/]*(/[^/]*(/[^/]*)?)?
```



Explanation:



- it matches every string that starts with `http://www.example.com/A1`
- it can match an additional `/B2` and even an additional `/C3`, but `/C3` is only matched, when there is a `/B2`
- `[^/]*` (as many non slashes as possible)
- if you need the A1-C3 in special capture groups, you can use this:

```
http://www\example\.com/([^\s]*)((/([^\s]*)/([^\s]*)?)?)?
```

Will give ( groupnumber: content ):

```
matches: 0: (http://www.example.com/dir1/dir2/dir3)
1: (dir1)
2: (/dir2/dir3)
3: (dir2)
4: (/dir3)
5: (dir3)
```

You can check it out online [here](#) or get this [tool](#) (yes it's free, and it's even written in Lisp...).

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edited Oct 9, 2008 at 14:15

answered Oct 9, 2008 at 14:02

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**Andre Bossard**

6,281 ● 37 ● 53

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Out of curiosity, if you wanted to test whether a URL ends with .html or .pdf, but didn't care about what it began with, what would the regex expression look like? – [GobiasKoffi](#) Feb 13, 2011 at 18:13



There's a much more Django way to do this:

3



```
urlpatterns = patterns('',
    url(r'^(?P<object_slug1>\w{2})/(?P<object_slug2>\w{2})/(?P<object_slug3>\w{2})$', direct_to_template, {"template": "two_levels_deep.html"}), name="two_deep"),
    url(r'^(?P<object_slug1>\w{2})/(?P<object_slug2>\w{2})$',
```



```
direct_to_template, {"template": "one_level_deep.html"}, name="one_deep"),
    url(r'^(?P<object_slug1>\w{2})$', direct_to_template, {"template":
"homepage.html"}, name="home"),
)
```

The other methods don't take advantage of Django's power to pass variables.

Edit: I switched the order of the urlpattern to be more obvious for the parser (i.e. bottom up is more defined than top down).

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answered Jul 22, 2009 at 19:52



**Adam Nelson**

8,090 ● 11 ● 47 ● 65



```
http://www\example\.com/A1(/B2(/C3)?)?
```

1

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answered Oct 9, 2008 at 14:01



**James Curran**

103k ● 37 ● 185 ● 262



```
^(\w{1,20})(/\w{1,20})*
```

1

this is for as many subdirectories as you like if you only want 2:



```
^(\w{1,20})(/\w{1,20}){0,2}
```



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answered Oct 9, 2008 at 14:03



**Epaga**

39k ● 59 ● 162 ● 246



If I'm understanding, I think you just need another set of parens around the whole OR statement:

1



```
^((\w{1,20})|((\w{1,20})/(\w{1,20}))|((\w{1,20})/(\w{1,20})/(\w{1,20})))$
```



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answered Oct 9, 2008 at 14:04



Lucas Oman

15.9k ● 2 ● 46 ● 45



Be aware that Django's [reverse URL matching](#) (permalinks, `reverse()` and `{% url %}`) can handle a limited subset of regular expressions. To be able to use them, it's sometimes necessary to split complex regexes into separate URL dispatcher rules.

1



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answered Oct 15, 2008 at 19:39



akaihola

26.8k ● 7 ● 63 ● 74

