MIT AITI Mobile, Python, Software Development



Django Blog Project Part 3: URLs and Views

You will now be adding views to your Blog app!

If you get stuck, take a look at these resources:

- 1. Lecture slides
- 2. Previous labs
- 3. Other group members
- 4. Django documentation
 - a. Making Queries: https://docs.djangoproject.com/en/1.4/topics/db/queries/
 - b. QuerySets: https://docs.djangoproject.com/en/dev/ref/models/querysets/
 - c. Views: https://docs.djangoproject.com/en/1.4/topics/http/views/
 - d. Urls: https://docs.djangoproject.com/en/1.4/topics/http/urls/
- 5. Google
- 6. Instructors

Steps:

1. Add a url to the urls.py file (that is in the same folder as settings.py) that will send any url starting with 'blog/' to a file called urls.py inside of the blog app

Try to figure this out... but answer is at the end of this file

- 2. Go to your blog app (just cd to the directory)
- 3. Create a file called urls.py. Copy the code from "instructions/part 3 instructor code/blog urls.py" into the file.
- 4. Now add another url that will match a url that follows the pattern:

"posts/search/" and then anything.

Make sure you capture the *anything*, and pass it to the function blog.views.post_search

For example, blog/posts/search/gorilla should capture "gorilla" and call the view function post_search with "gorilla" as the first parameter.

Hint: Use regexs! and the other urls should help you figure out what to do.

- 5. Now edit the views.py file. Copy the code from "instructions/part_3_instructor_code/blog_views.py" and paste it in to "blog/views.py"
- 6. You need to implement three views: post_list, post_detail, and post_search.
 - a) For post_list, you should return an HttpResponse containing a textual representation of all of the posts
 - b) For post_detail, get a single post (identified by the id parameter) and return a textual representation of it as an HttpResponse. **If** showComments is not False, get the comments associated with the current blog (the current blog is the blog with the id), and make them part of the HttpResponse as well.
 - c) For post_search, return an HttpResponse with a textual representation of all the blogs that contain the search term.

By the way, when I say "textual representation", I just mean a string

- 10. Run your server (python manage.py runserver), and go to the admin interface
- 11. Add some blog posts and comments associated with them
- 12. Load the following pages, making sure they work:
 - a) blog/
 - b) blog/posts
 - c) blog/posts/1
 - d) blog/posts/1/true
 - e) blog/posts/search/<your term here>
- 13. If they look like they are working, but everything is all jammed together and you want it to look more like terminal output, read the **Note on HTML** below.
- 14. If everything looks good, push to heroku.
- 15. By the way you **should be pushing to github, too, every 2 hours or so**

Answers:

1. Add the line url(r'^blog/', include('myblog.blog.urls')) to the list of patterns being assigned to the variable urlpatterns

Note on HTML:

The reason that everything is jumbled together is that your browser is trying to *render* the text that you provide as HTML (a language that describes how a webpage is structured).

There are ways around this, here are two easy ones:

First, you can view the **source** of the page that is rendered. Every browser has a way to do this, in firefox you should right-click the page and then click "View Page Source".

Second, and a way that will only work with this django project, is to use a tool that has been provided by the instructors that will adjust your output so that the browser *does not* attempt to render it as HTML, so it will appear exactly as you intend it to. To activate this tool, add the line:

'instructors.tools.RawResponseMiddleware',

to the tuple called MIDDLEWARE_CLASSES in your settings.py file.