CSSE1001

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Assignment 3 - TumblrServ - Reflection

Overall, TumblrServ could have definitely benefited from extra development time. A major deficiency in the code is the level of input checking. While it exists, I feel that it would not be adequate for a released product. This leads into my main missing feature: unit tests. This project is a perfect application for unit testing but given my commitments outside CSSE1001, I was not able to allocate enough time to write them.

One would notice the number of helper functions in support.py. Although I still add comments, I like to write self-documenting code that could be understood without them. For this reason, I used pseudo-English function names.

I was surprised which sections of code I found difficult. In particular, the highly OO nature of the post classes and the contextual time ("1 day ago", "3 minutes ago", etc) function. I had never used python time deltas before, so this was potentially the most time consuming feature to add. Although it was difficult, the modularity of the post classes meant that I wrote what I believe to be the smallest amount of code possible.

I made the mistake of not doing research before writing the theme publishing code. I used Wireshark to watch the HTTP transactions to see what data was being POSTed. When the code became unwieldy, I discovered the ClientForm library which already implemented the functionality I required. Needless to say, it simplified my code considerably.

I attempted to make the code as efficient as possible as the server could potentially have several refreshes per second. On top of this, I added a configuration option that disables the rendering of <embed> and <img> tags in order to speed up the page loads.

I would very much like to generate some documentation using PyDoc or Sphinx, but I felt that time was better spent on ensuring the stability of the current code.

My git commit logs can be seen on the github page for TumblrServ:
http://github.com/jeremyherbert/TumblrServ/tree/master

Known Bugs/Missing Features
• If the user is missing any of the libraries, they will be met with a potentially cryptic message
• If the user has no data in the yaml file, the yaml parsing engine breaks
• The maximum number of posts available to serve locally is 50. This is a limit imposed by the Tumblr API and requires a workaround
• Several undocumented tags exist and thus may be rendering incorrectly
• ReBlog, Group and Following tags are not currently rendered. This was a conscious decision because Tumblr does not expose this data through their API.
• Submitting the theme via a multipart POST request can be unreliable.
• If there are not enough custom colours in the current theme, publishing the theme can have issues
• Quotes are all assumed to be medium length. Tumblr provides no data on what constitutes a long, medium or short quote.
• Images from the static folder should have been uploaded to a remote server via FTP. While this would not take long to implement, it would be very difficult to test it under the time constraints
• More command line flags and greater documentation of them should be added.