REST API Usage

- Due Jan 21 by 11:59pm
- Points 10
- Submitting a file upload

For this assignment you will work with Gists on GitHub. These are easily shareable code snippets that can be created and modified on GitHub. Incidentally they are also relatively straight forward to work on using the GitHub REST API.

You will make a series of tests to prove that GitHub Gists API works correctly.

You should write tests that confirm the following things:

- 1. Getting public Gists returns 30 Gists (you can get more via pagination, but you just need to get the first 30 and confirm that there are 30)
- 2. Confirm that the user `wolfordj` has at least one public Gist
- 3. Confirm that when you create a Gist the number of Gists associated to your account increases by 1
- 4. Confirm that the contents of the Gist you created match the contents you sent
- 5. Confirm that you are able to edit the contents of a Gist (this will require editing it and proving the edits worked)
- 6. Confirm that you can add a star to a Gist
- 7. Confirm that your list of Starred gists is correct
- 8. Confirm you can remove a star from a Gist
- 9. Confirm you can delete a Gist

Deliverables:

You should create a set of tests that can be run as a single unit that demonstrate the above functionality. Due to the requirement to use OAuth you will likely want to use a tool like Postman (https://www.getpostman.com/">Postman (https://www.getpostman.com/) to write your tests. It allows you to use basic JavaScript to write tests and has OAuth authentication built in. If you want to write your test script in something like Python that would be OK as well, but it will be somewhat more involved because you will need to handle the OAuth authentication.

This link (http://blog.getpostman.com/2014/03/07/writing-automated-tests-for-apis-using-postman/). is a two part post on the use of Postman to write basic tests.

<u>The documentation (https://www.getpostman.com/docs/).</u> has info on using the tool.

You can see a video of how to set up Postman and GitHub OAuth https://media.oregonstate.edu/media/t/0_ott3qs1e).

You will almost certainly need more than one 'test' per item above. For example, to check that a value incremented, you will need to get the value prior to the test call to increment, make the call that would cause the increment and check the value afterwards. These would likely be 3 separate HTTP requests.

If you are submitting Postman tests, zip up the tests, results and environment files and submit that as a zip.

In addition you should include a PDF that has a short (one or two paragraph) explanation of if the GitHub API is in fact restful or not. If it is, explain why, if some parts or all of it is not, explain why.