Class: CS 496

Assignment: REST API Usage Name: Peter Moldenhauer

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Give a short explanation of if the GitHub API is in fact restful or not. If it is, explain way, if some parts or all of it is not, explain why:

From the class lecture material, I learned that for something to be "restful" it means that every single URL represents a resource. A resource is a "thing" (or noun), it is not a verb (action). Similarly, for something to be restful, it must be stateless. This means that it does not store any data about the current state of a client. The client sends ALL of the information needed with each request.

Based on these main factors which determine is something is restful or not, I can say that the GitHub API is indeed restful. Simply by looking over the documentation for the GitHub API, I can see that all of the URL's represent resources. This is the first main factor to be restful. Some of these resources in the GitHub API are Gists, Gists of users and Gists that are starred. There are no verbs or actions in these URL's, only resources. Additionally, before using any verbs (put, get, post, delete, patch), there is an authentication mechanism in place. This shows that the GitHub API is stateless. This is the other big factor to be restful. The client (who is using the GitHub API) has to identify itself each time it wants to use any of the actions. The GitHub API does not remember if the client authenticated itself in the past. This makes the GitHub API stateless.

Overall, because the GitHub API uses URL's that represents resources and because it is stateless, the API is indeed restful.