Scalable Computing - CS7NS1
Supplemental Task

VARNIT GOEL

August 14, 2018

1 Question:

You are required to deliver a REST service, that provides an interface for submitting a set of GitHub repositories (identified as a list of strings of the form "username/repositoryname"). You service should identify the set of GitHub developers who have contributed to any of these repositories in 2018, and for this user set, provide an ordering that ranks these users according to each of the following criteria:

1. Total number of commit contributions to any project to which a user has a contributed.
2. Total number of commit contributions as above, but restricted to projects that are members of the original submitted set.
3. The number of known programming languages for each user (presuming that the languages of any repository committed to are known to the user)
4. The weekly commit rate of users (provide a weekly rank ordering) for the submitted project set, for 2018.
5. The average commit rate of each user to any project, for 2018.
6. The total number of collaborators in 2018 (ie. a count of other users who have contributed to any project that the user has contributed to).

Your rest service should email the results of calculation to the submitter once complete.

2 Introduction

We're using FLASK to build the RESTFull API for our program. Flask is a Python-based micro-framework that enables you to quickly build web applications. REST, REpresentational State Transfer is an architectural style, and an approach to communications that is often used in the development of Web services.

3 Use of different commands in the program and why?

3.1 The use of 'GET' command in the declaration of each criteria

GET
The browser tells the server to just get the information stored on that page and send it. This is probably the most common method.

3.2 How to include Figures

References

[1] http://flask.pocoo.org/docs/0.12/quickstart/

[2]