

CS4593 Course Project

In this course project, you are required to develop web services based on Google App Engine and Google Search API.

Basic Requirements (80% points)

- ✓ Develop a web service based on Google Search API to follow the weekly trends of keywords on a certain topic
- ✓ Search one or multiple websites each day with Google Search API free quota and record the query results during a period of time (hopefully more than a week)
- ✓ Perform statistics on the recorded query results to provide the keywords frequency of each day and the trends of the week
- ✓ Provide at least two web services: one for the keyword frequency of each day, and the other for trend of the week
- ✓ Provide output as either JSON or XML
- ✓ The developed web service should be deployed on Google App Engine

Advanced Requirements

- ✓ You are going to choose the topic and the website to search, but the results should be meaningful (searching a static website for a week will not give you any different results)
- ✓ Provide HTML presentation for the web services

Other Information

- ✓ Feel free to use additional free web services to support your task
- ✓ Searching a more volatile website often provides you more interesting results, e.g., searching "Obama" in CNN or NY Times.

Deliverables

You are going to give a demo on Monday of the last week of my portion, and submit your code (with proper comments and a readme file of your service) to the blackboard

Evaluation Criterion

The course project accounts for 12.5 points in total.

Evaluation will be based on the coverage of basic features (10 points), and the coverage of advanced features (2.5 points). For the basic features, the points are distributed to:

- fetching and recording Google Search API results (2.5 points)
- extracting keywords (2.5 points)
- presentation of daily results (2.5 points)
- presentation of weekly results (2.5 points)

The advanced features will be evaluated by quality.

Due Date

The due date for submission of code and supportive documents is Oct. 4th (23:59).
The demo data will be Oct. 5th.

References

Google App Engine

<https://cloud.google.com/appengine/docs>

Google Custom Search API

<https://developers.google.com/custom-search/json-api/v1/overview>