University of Southern California

CSCI 548 Information Integration on the Web

Class Project Proposal

JobQuest

Team members:

- 1) Monil Parikh
- 2) Neeraj Kumar

Problem statement

Too much irritated by the hassle of finding jobs over a number of available job portals? JobQuest is a unique tool which will integrate jobs from different portals in a single place. The various pieces of information, for instance, rating, job salaries, company info, etc are few elements that we will be merging together from different portals and give the user convenience of finding all the related data at the same place. Adding on top of it, JobQuest will provide a location intelligent view of the job listings along with basic filtering operations that a user often may require.

Approach

The architecture will mainly constitute of below mentioned parts:

Data endpoints:

- 1) Glassdoor Jobs: It will pick job title, company name/logo, location, date, etc and integrate it with the second data source mentioned below.
- 2) Glassdoor Companies: This will provide information about the company ratings, salaries and company CEO, etc.
- 3) Dice Jobs: We will extract job title, company name, location and date. As it doesn't provide information about salaries and rating, we will use the same information from Glassdoor for that matter, hence providing integration.

Data format:

The APIs and program we will use can fetch the data in JSON format and store that in a datastore, which will be refined and refreshed at regular intervals. We are expecting to keep around 20,000 records from each data source – Glassdoor & Dice - that we have.

View:

The integrated data will be displayed on Google Map, providing another layer of integration based on the location of job. It will show the job locations coming up in the result listings as well as on the map and highlight the jobs based on user specified criteria of salary, rating or proximity etc.

Platform

- Web Application
- Google Map APIs
- Facebook share
- Java
- Tomcat
- Oracle 11g

Expected Outcomes

- Integrated Job listings and showing them up on Google Map.
- Filter search based on parameters like Internship, Fulltime, Job domain, etc
- Highlighting local results based on rating, salary, proximity, etc.

Schedule

Estimated Time	Target Task
Week 1	Data gathering
Week 2	Extract, Transform and Loading data
Week 3	Search functionality
Week 4	Refining search results (Filter, etc)
Week 5	Front end – Google Map View
Week 6	Testing and Deployment on SCF

Novelty

- 1) Location Intelligent view of the job search which is currently not seen in any of the other job portals.
- 2) Providing much more data about the jobs in a region than provided by any other job portal.