

Program 1: DireWolf Job Portal

Due Friday, September 26, 2015

Description

Winter ... er, Graduation ... is Coming and it's time to find a job. You are tasked with creating the DireWolf Job Portal to help students find jobs. The DireWolf will help job seekers to look for jobs and employers to find suitable candidates for open positions.

User Stories

The basic flow of the Job Portal is as follows—

- There are one or more Admins who manage the site (an Admin can add more Admins).
- An Admin can register one or more Employers.
- An Employer can post one or more Jobs.
- Each Job is under a certain Field (CS, Botany, etc.).
- A JobSeeker can register her/himself with the Job Portal (anyone can be a JobSeeker)
- A JobSeeker can apply to one or more jobs with a Job Application
- An Employer can see the Job Applications for each of the Jobs and the JobSeekers who made the application.
- An Employer can add Tags to Jobs.
- JobSeekers can search for Jobs based on their name, content, by Employer, and/or by Tags
- DireWolf can recommend Jobs to a JobSeeker based on Tags. Thus, if the JobSeeker has already applied for a Job, then DireWolf will recommend Jobs with similar Tags. You are free to come up with your own similarity algorithm (the effectiveness of the algorithm is not important as long as some sort of Jobs list is presented using an algorithm).

Entities

Each of the above entities should have the following attributes.

- Admins (one will be pre-registered in the system) will each have a name, e-mail address, and a password. An Admin can create other Admins.
- An Employer will have a company name, name of contact person, e-mail, password. Employers are added by the Admins.
- A JobSeeker will have a name, e-mail, phone number, a list of skills and a resumé. The resumé can just be plaintext.
- The Admin will create multiple Fields under which jobs will be displayed.
- A Job will have a title, a description, and tags. It will be under one of many Categories. A Job is associated with a single Employer and multiple Tags. It will also have an

application deadline after which it is no longer possible to apply for that job. A Job will be created by an Employer and associated to that Employer.

- A JobApplication will have a particular Job, a JobSeeker, and an optional cover letter (plaintext), the date of the application, and a status. A JobApplication can be in one of three states: Pending, Not A Fit and FutureInterview
- An Employer can view all the Jobs (s)he has created, see the JobApplications made to Jobs these jobs, and change the status of the JobApplications and view the details of the JobSeekers who have made the application.
- An Employer can edit and remove Jobs already posted.
- A JobSeeker can search for Jobs and make a JobApplication for a particular Job. (S)he can withdraw a JobApplication (s)he has made.
- JobSeekers cannot apply to the same Job more than once. They can view and update their profile. A JobSeeker cannot apply for a Job till he logs in.

Miscellaneous

- Login for Admins, JobSeekers, Employers - (they cannot view any of the above without authentication except Jobs which can be publicly viewed)
- A View Profile feature for Admins, JobSeekers and Employers (with a change password feature)

Technical Specifications

- Please use Rails 4.0 and above (you can specify the Rails version in your Gemfile)
- Please do not create tables or modify table schemas in your db using SQL (all tables and alterations to them are to be done using Migrations
<http://guides.rubyonrails.org/migrations.html>)
- Each model and controller should have at least one unit test (Ruby Unit test or Rspec)
- Add Step definitions specific to your views for the cucumber feature files provided (which will pass). We will send out information on cucumber shortly(<http://cukes.info/>)
- Deploy your application on a free PaaS (Platform as a Service) like Heroku, or you can use AWS or you can use VCL.

Final Submission

- Use a private repository on github.ncsu.edu (visible only to your team). Before submitting it, make it public and submit the repo URL (any commits after the due date will be ignored)
- Submit the URL to your application (where it is hosted and accessible)
- Only **one** team member should submit the project to Expertiza.

Bonus

- An Email is sent to the Employer who posted the Job when an Job Application is created.
- An Email is sent to the JobSeeker who created a JobApplication when the the Job Application status is updated.
- Note: The Email does not have to work on the deployed version

Questions?

- Post any quetions you have to Piazza with the appropriate tag