Project Proposal

**Subject:**

Job Search and Analysis

**Team Member:**

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**Objective:**

Our team wants to establish a database collecting and maintaining up-to-date job opportunities in the United States for students. Students can search for open positions or specific industries that they are interested in and suitable for from the database. Our job will make job-haunting process more convenient and smooth for students.

**Database:**

We want to establish two databases. First, we want to design a web crawler that can collect open positions from some big-name firms including EY and Bloomberg etc. In the second one, more opportunities will be provided by gathering employment advertising from job-hunting websites like indeed and monster.

We want to categorize our database based on different industries and positions. For each position in our database, we will try to collect information including its description, responsibilities, requirements, payment, location and application deadline. Moreover, some analysis will be conducted by our program. For instance, if a user is looking for a position in sales and trading, we can analyze the most-valued characteristics that a potential candidate should have based on all advertising. We can also analyze the correlation between job opportunities in different industries and different locations and visualize the result in a geographical map.

**Software Tool:**

Python and Git

**Possible Resources:**

Career or student opportunities website of targeted companies.

https://www.monster.com/

<https://www.indeed.com/>