## **Features**

For job information, we use APIs from Indeed.com and LinkedIn.com to collect job information and display these information on the website. For user information, we use program-generated "fake" user information (including employers, employees and guests) or user input and store all these information in MongoDB.

We have four different roles in this project: employer, employee, guest and administrator.

- Employee users can create their own profiles and search for job positions
- Employer users can manage candidates for a job position, send messages, emails and have interviews with candidates
- Guest users can only browse (simple query) job positions, but cannot view details of job description
- Administrators can manage all the user information and job information

We allow users use third-party authentication to log in, including Google account and Facebook account.

Employee users can have a live chat with employer users.

We have recommendation function. We match skills in user profiles with those required by job positions and then recommend suitable job positions to employee users. We send recommendation information through emails.

Employer users can organize interviews with candidates. We provide shared screen on the same document during the interview. We use service from Google Hangout to support instant message function (audio and video communication) between employee users and employer users.

# **Technology**

We will build a full stack web application with MVEN stack. MVEN stands for MongoDB, Vue, Express, and Node.js. MongoDB is our top choice for the database. There are two reasons why we pick MongoDB. First, MongoDB can store unstructured data. Therefore, user profiles in our application have many unstructured data, such as skills and users' preference. Second, because we only have two weeks to design and implement the application, we can try new things and develop fast. Vue.js is our choice for UI framework. In this project, we will focus on how to decompose the project into multiple components, and improve the performance by lifting the state. Express.js will be our choice for backend server. The reason why we choose Express is that Express can help us in creating server-side web applications faster and smarter. We will also utilize NPM to manage our dependencies and libraries.

Besides using these core technologies, this project will also use multiple Node.js middlewares, such as Passport.js, and Body-parse.js. Passport.js allowed us to authenticate the users, and we can use some of its extensions, like passport-facebook, to build the third party authentication. The body-parer.js is used to parse HTTP request body. Moreover, this project will utilize Bootstrap4 in order to build the responsive and mobile-first application. Lastly, because the project has live chat functionality, we will use Socket.io to implement this functionality.

# Example data

As we mentioned above, the dataset we are going to use are provided by some job searching and posting website like indeed, glassdoor, etc. From the api provided on the website, when I send a query with different filter information, I will get information like company name, locations, job descriptions, contact information/application urls.



## Job Search API

Seamlessly integrate relevant, high quality jobs into your search results using our job search API. Filter by location, industries, salary ranges and more in an effort to provide the most relevant jobs for your audience. Each click to an Indeed sponsored job will generate immediate revenue for you. We provide you with easy-to-read reports for your traffic and earnings.

I have not get approved on the api key. Therefore, I am going to post a screenshot on what is possibly contained in the json file returned by Indeed.

## **Software Engineer**

Robert Half Technology ★★★★☆ 350 reviews - Raleigh, NC 27612

Are you a software engineer who is searching for the place to take your skills to the next level? RHT is working with a high level healthcare development company doing unbelievable things with prenatal care! This technology is revolutionizing the way that infants are being brought into this world. The small team is looking for people who want to great for the long term. The leadership and mentorship is there, they simply need someone looking to use it to grow themselves.

#### Day to Day:

### Primary responsibilities:

- Provide support for Web Applications and in hospital applications
- Use skill, business knowledge, and packaged solution expertise to effectively integrate packaged technology into the client's business environment in order to achieve the expected business results
- Perform business requirements analysis and design
- Ability to analyze and interpret business processes and requirements
- Involved in installations, configuration, development, test and production environments Required Experience

## Minimum Requirements:

- At least one year professional experience developing ASP.Net applications. 3+ years' experience preferred.
- Bachelor's degree in computer science or electrical engineering
- Experience with SQL, preferably in either MS SQL Server or Oracle RDMS
- C#
- Javascript
- Web Services

### Preferred Experience:

- 3-5 years' experience developing ASP.Net applications
- 1-3 years' experience working with Microsoft CRM Dynamics
- Experience working with a Dynamics consulting company greatly valuable
- SQL Server Reporting Services
- Customer-facing applications

30+ days ago - Save Job - Original Job

## **Apply Now**

Please review all application instructions before applying to Robert Half Technology.

Apply Now