

- **Project Title:**
Job Search
- **Name for the Website:**
Job Search
- **Project Description:**
 - A simple Job Search Website, allows any guest users to search for jobs according to the job title, location and job types.
 - Once the guests sign up and then sign in, they can put job links into their wish lists or remove their favorite job links from wish lists. In the job page, users can click the button and apply directly.
 - Admin can edit and remove the jobs. Besides, admin can post a new job into system. Once admin removes the job, the users can not see the deleted job in the search page and the wish lists page. Those deleted jobs are stored in database, which is a soft delete.

■ Database Design

In MongoDB, we have two collections, which are users and jobs.

Users:

```
{
  "_id" : ObjectId("5cc6ff325cc2170374d44e68"),
  "FirstName" : "YI",
  "LastName" : "ZHENG",
  "email" : "user1@user.com",
  "password" : "sha1$0b6ad706$1$f9cde6f710ca2ef6f8dbaf93f468353688c9757d",
  "jobid" : [
    "5cb915664ed714c3f176e056",
    "5cc7ab1305e848045e0c4322",
    "5cc89404201cb503c5916049"
  ]
}
```

Jobs:

```
[{"_id": ObjectId("5cb915664ed714c3f176e056"), "title": "Software Engineer, PhD University Graduate", "description": "Google's software engineers develop the next-generation technologies that change how billions of users connect, explore, and interact with information every day.", "type": "full-time", "role": "software engineer", "skills": "PhD degree in Computer Science or related technical discipline, or equivalent practical experience. Programming experience in one or more of the following areas: Java, C/C++, Python, Go, JavaScript, and/or machine learning.", "work_experience": "0", "location": "Cambridge, MA", "link": "https://careers.google.com/jobs/results/5766749120954368-software-engineer-phd-university-graduate/?category=DATA_CENTER_OPERATIONS&category=DEVELOPER_RELATIONSHIP_ENGINEERING&category=MANUFACTURING&category=MANUFACTURING_OPERATION", "company_name": "Google", "logo": "google.png", "website": "https://careers.google.com/", "is_delete": 0, "work_experience": null}]
```

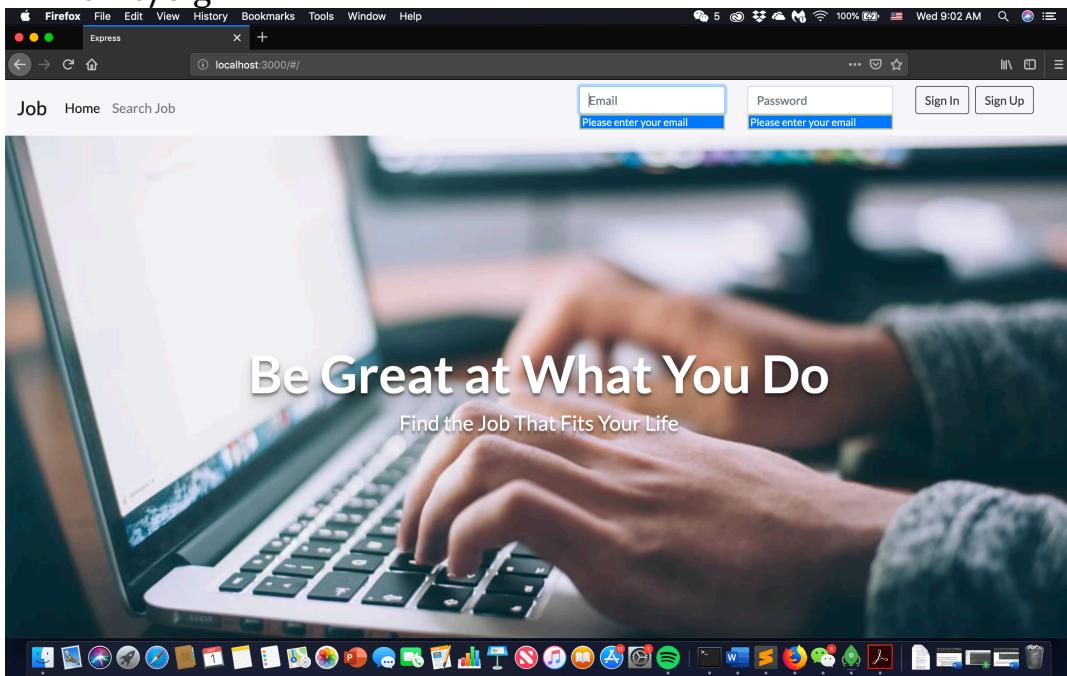
■ Languages/frameworks used for implementation:

Languages: JavaScript, HTML, CSS, jQuery, Angular-JS

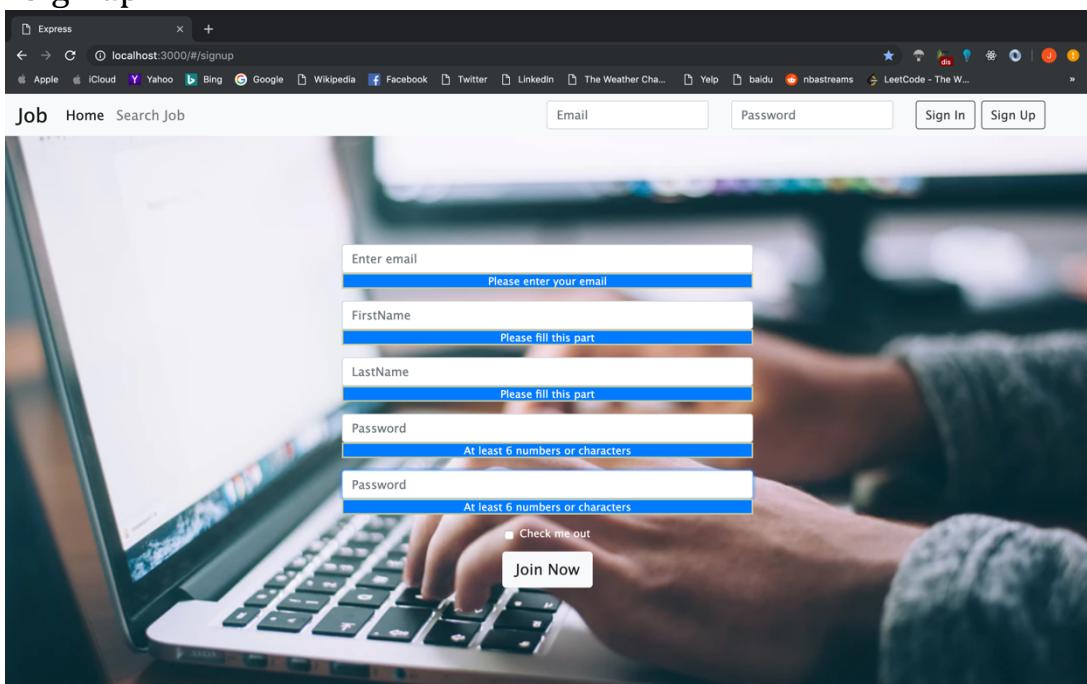
Framework: MongoDB, Express, Node.js, Bootstrap 4

■ Screenshots for main functionalities:

Home/sign in:



Sign up:



Browserall:

A screenshot of a Firefox browser window displaying a job search interface. The top navigation bar includes 'Job', 'Home', 'Search Job', 'Wish List', and 'Log out'. The main search area features input fields for 'Job title, Employers or Key Words' and 'City, State, Zip Code or Address', along with buttons for 'Full Time', 'Part Time', 'Internship', and 'Search'. Below this, a specific job listing for 'Software Engineer, PhD University Graduate' at 'Google' in 'Cambridge, MA' is shown. The listing includes a 'full-time' status, a green heart icon for favoriting, and a 'Job description' section. The description highlights Google's software engineers developing next-generation technologies and their focus on distributed computing, large-scale system design, networking, and data storage. It also mentions their work on AI, natural language processing, UI design, and mobile. The 'Job requirement' section lists a PhD in Computer Science, programming experience in C/C++, Java, or Python, research experience in various fields, and experience in Object Oriented programming. A scroll bar on the right indicates more content is available below the visible area.

Search and Filter

A screenshot of a Firefox browser window displaying a job search interface. The URL is `localhost:3000/#/browse`. The search bar contains "Software" and "California". Below the search bar are buttons for "Full Time", "Part Time", "Internship", and "Search". The results section shows two job listings:

- Senior Software Engineer – Cloud Data Programming Infrastructure**
Netflix
Los Gatos, California
full-time
- Senior Software Engineer – Cloud Data Programming Infrastructure**
Netflix
Los Gatos, California
full-time

Each listing has a green heart icon to its right. The browser's toolbar and Mac OS X dock are visible at the bottom.

Wish List:

A screenshot of a Firefox browser window displaying a wish list interface. The URL is `localhost:3000/#/star`. The search bar contains "Job title, Employers or Key Words" and "City, State, Zip Code or Address". Below the search bar are buttons for "Full Time", "Part Time", "Internship", and "Search". The results section shows two job listings:

- Software Engineer, PhD University Graduate**
Google
Cambridge, MA
full-time
- Customer Experience Specialist – Dallas**
Tesla
Dallas, Texas
full-time

Each listing has a green heart icon to its right. The browser's toolbar and Mac OS X dock are visible at the bottom. A page number indicator "1" is centered at the bottom of the results area.

Admin: Delete/Edit Jobs.

A screenshot of a Firefox browser window showing the 'Delete/Edit Jobs' page. The URL is `localhost:3000/#/browse`. The page has a search bar at the top with fields for 'Job title, Employers or Key Words' and 'City, State, Zip Code or Address', and buttons for 'Full Time', 'Part Time', 'Internship', and 'Search'. Below the search bar are two job listings:

- Software Engineer, PhD University Graduate**
Google
Cambridge, MA
full-time
- Senior Software Engineer – Cloud Data Programming Infrastructure**
Netflix
Los Gatos, California
full-time

Each listing includes edit and delete icons. The browser's toolbar and menu bar are visible at the top, and the Mac OS X dock is visible at the bottom.

Post Job:

A screenshot of a Firefox browser window showing the 'Post Job' page. The URL is `localhost:3000/#/add-job`. The page title is 'Post a job'. It contains several input fields for job details:

- Title
- Description
- Type
- Role
- Skills
- Work Experience
- location

The browser's toolbar and menu bar are visible at the top, and the Mac OS X dock is visible at the bottom.

- Team Members:

XINJIE GU: xxg170730

WENJUN ZHAO: wxz170000

YI ZHENG: yxz180009

- Work division among team members:

XINJIE GU

Front-End

Design the browseAll.html page.

The page contains filter module which allows users to search specific type of positions and provides plenty of job listings posted by the Admin users.

Back-End

Complete the filter function on browseAll.html page.

Filter the results based on the title of the job, the location of the company and the type of the job (internship, part-time, full-time).

Database

Maintain the “jobs” collection

Insert related data in the “jobs” collection

WENJUN ZHAO

Front-End

Design the home.html page.

Design the job-delete.html page.

Design the per-edit.html page.

Design the job-form.html page.

Design the narbar.jade page.

Back-End

Complete the Admin module in job.js and jobSearch.js
View all the posted positions on the website.(browseAll.html)
Admin user have the same interface with regular users.
Perform update actions on specific positions.(browseAll.html and job-form.html)
Post new positions function.(job-form.html)
Delete the inapposite positions by soft-delete.(browseAll.html)

Database

Design and maintain the “jobs” collection
Create the “jobs” collection and insert related data in the “jobs” collection.
Use mongoose to implement soft delete

YI ZHENG

Front-End

Design the register.html page.
Check the new email address if it's already registered to the system using AJAX.
Form validation for register and login.
hash password for Web security
Design the logout.html page.
paging functionality for listing all jobs.

Back-End

Building the RESTful API for user, (i.e. : get all users, get a specific user(sign in), create a new user(sign up) add a favorite job for a user, delete the favorite job for the user.) (browserAll.html)
Back-end User validation by using 'express-validator' module to keep the database safer.
Check if a job is in the user's favorite list and decide to show it or not.

Database

Design “users” schema and maintain it.