

PROJECT REPORT

Job Board Platform

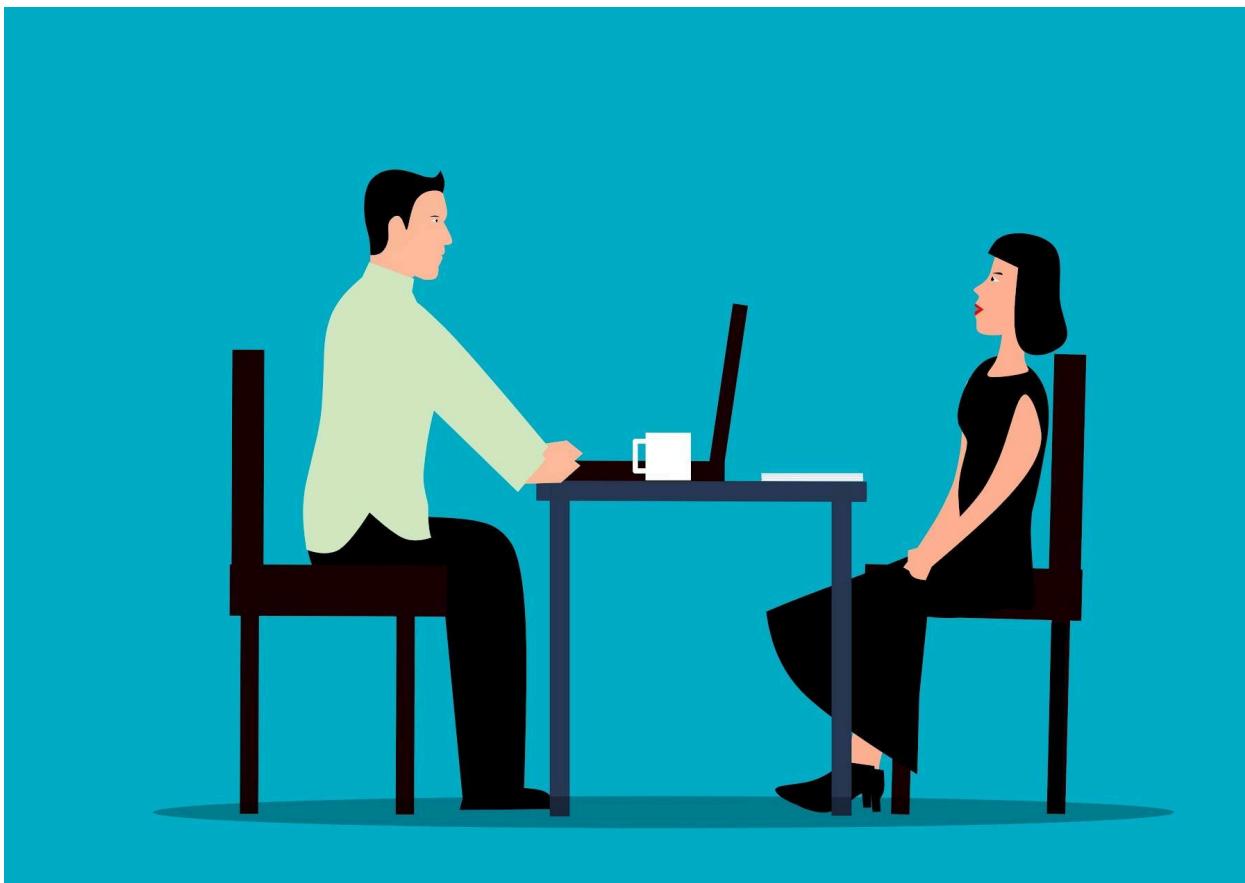


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ABSTRACT

This report details the development and implementation of the "Job Board" project, a digital platform that makes it easier for people to find jobs and for companies to hire the right candidates. It's like a matchmaking service for jobs and job seekers. We created features like job postings for companies, advanced search options for job seekers, and tools to manage applications efficiently.

We explain how we put the website together, including the different parts we used to make it work. It took a team effort, with lots of people pitching in to make sure everything ran smoothly. We also talked about how we listened to what people had to say about the website and made changes based on their feedback.

The report covers what the website can do, like letting companies post job openings and helping job seekers search for them easily. We even share some ideas for making the website even better in the future, like using smart technology to suggest jobs that match a person's skills and interests.

Looking ahead, we plan to make the platform even smarter with features like personalized job recommendations. Overall, the "Job Board" project aims to make the job market more accessible and efficient for everyone involved.

PROBLEM STATEMENT

Both employers and job seekers face significant challenges in the recruitment process. Employers struggle to attract suitable candidates for their vacancies, often inundated with applications that do not match the job requirements. This makes the hiring process time-consuming and inefficient. On the other hand, job seekers find it difficult to discover opportunities that align with their skills and career aspirations, leading to a prolonged and disheartening job search experience. The absence of a centralized platform that facilitates efficient matching of job vacancies with the right candidates exacerbates these issues, resulting in missed opportunities for both employers and job seekers.

The "Job Board" project aims to address these problems by providing a comprehensive platform where companies can post job openings, and users can easily apply for positions that match their qualifications and interests. By streamlining the job search and application process, the platform seeks to enhance the efficiency of the recruitment process, reduce the time to hire for employers and improve the job search experience for candidates.

INTRODUCTION

The **Job Board** platform provides a way to connect job seekers with employers.

At its core, the "Job Board" project is a digital hub designed to simplify the job search process for both job seekers and companies. It provides a user-friendly interface where job seekers can explore various job opportunities and companies can effortlessly post job openings.

The project boasts a range of features, including:

- Easy job search: Job seekers can search for jobs based on their preferences, such as industry, salary range, and location.
- User-friendly interface: The platform offers a simple and intuitive interface for users to navigate and interact with.
- Job posting: Companies can easily post job openings, providing detailed information about the positions available.
- Applicant management: Employers can efficiently manage job applications received through the platform.
- User profiles: Job seekers can create profiles to showcase their skills, experience, and qualifications.
- Company profiles: Companies can create profiles to provide information about their organization and the positions they offer.

Overall, the "Job Board" project aims to streamline the job search and recruitment process, making it easier for job seekers to find suitable opportunities and for companies to connect with talented individuals.

ARCHITECTURE

The architecture of this project is broadly divided into 3 divisions:

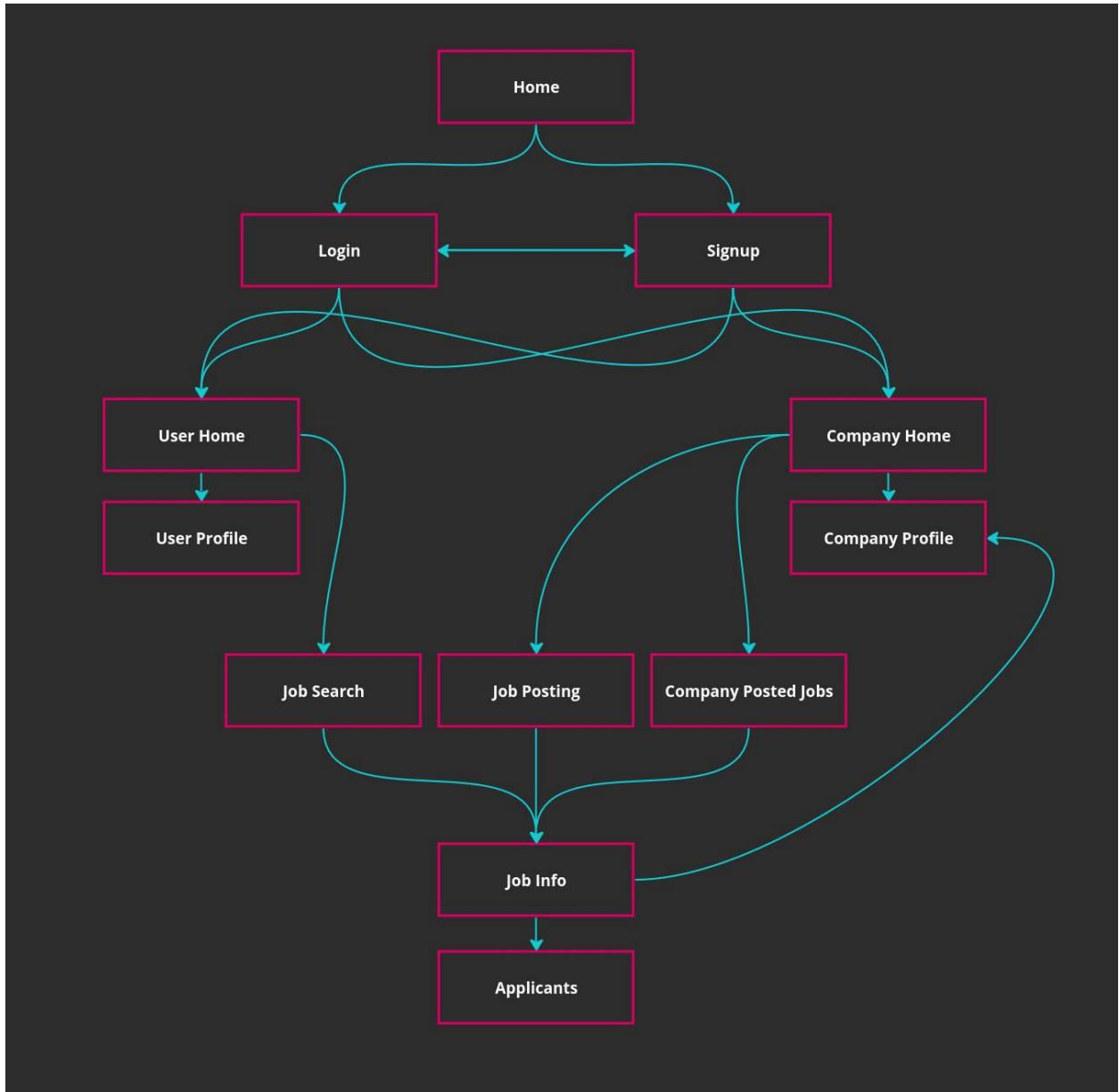
1. Frontend
2. Backend
3. Database

FRONTEND

This division contains the endpoint the user will interact with. Following is the list of pages that are present in the frontend.

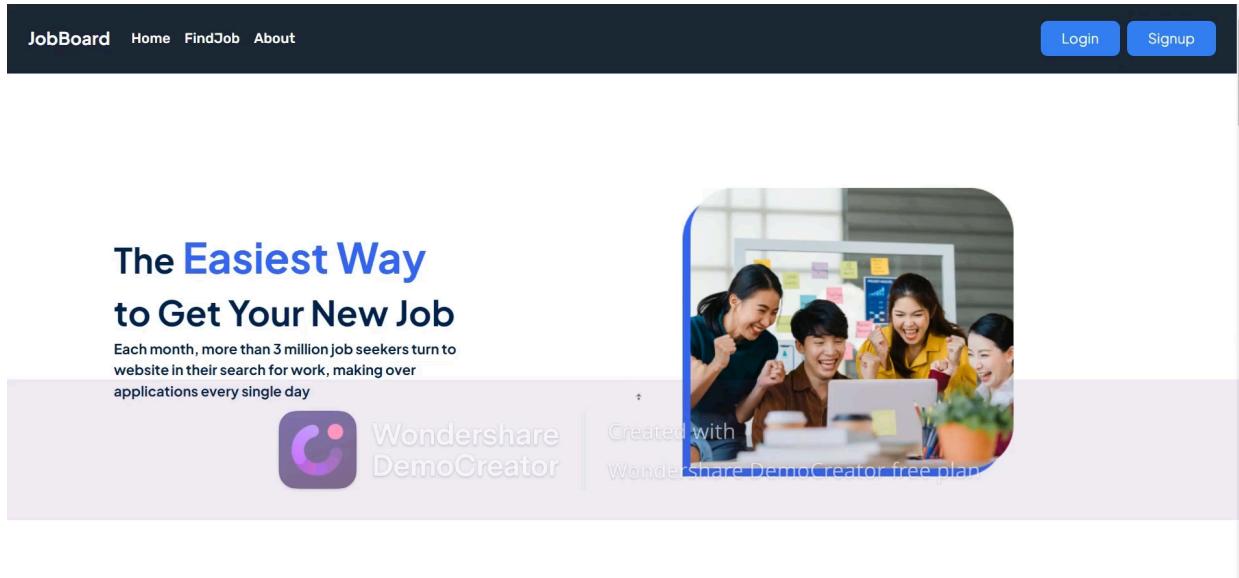
1. Home Page
2. About Page
3. Signup Page
4. Login Page
5. User Home Page
6. User Profile Page
7. Find Job Page
8. Company Home Page
9. Job Posting Page
10. Job Info Page
11. Applicants Page

Here is an overview of how these pages are connected.



Home Page

This is the home page of our website. **User** and **Company** both will start from this page. It presents a basic overview of the platform, which contains an intro, some recently posted jobs, and available tags.



It contains **Signup** and **Login** buttons which redirect to their relevant pages, and an **About** button which navigates you to the **About** page, discussed below. It also contains a **FindJob** button.

About Page

This page contains information about the **JobBoard** platform itself,

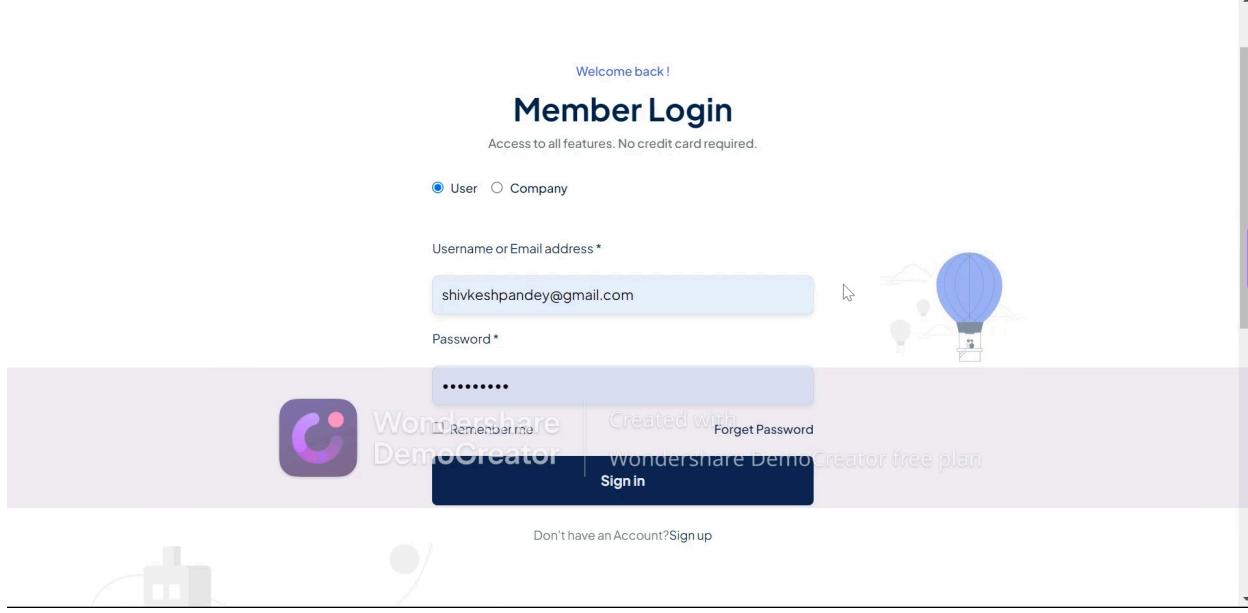
Signup Page

This page handles signup for both the **Company** and the **User**. Most of the information like email, password, resume, location, and description is asked at this point.

For the description field, we provide both the **User** and **Company** with options to format their description to help them stand out in the competition.

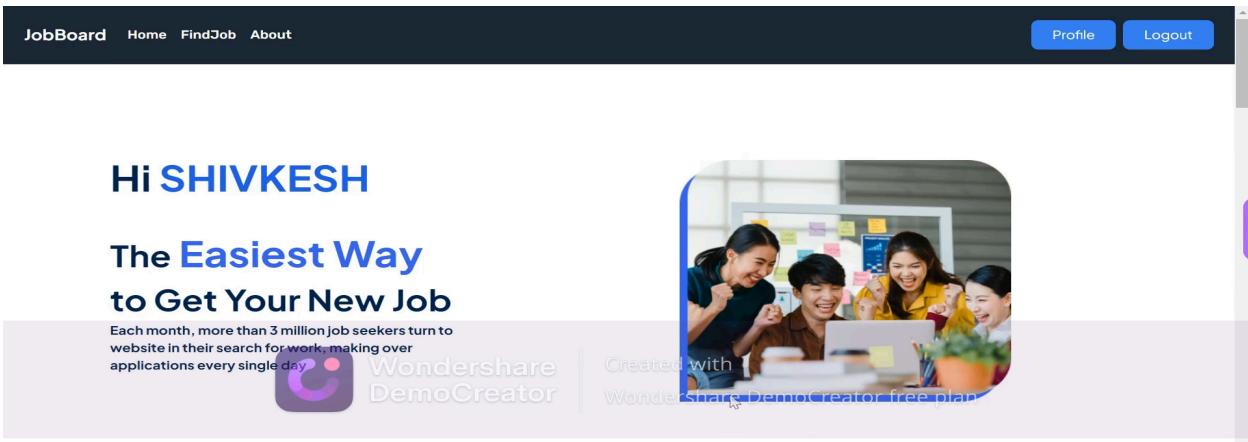
Login Page

This page handles login for both the **Company** and the **User**. Both the **Company** and the **User** provide their email and password. Relevant notifications are shown in case of incorrect or empty information to improve user experience.



User Home Page

The User Home Page is similar to the Home Page except it's slightly modified for the user. This is done to avoid many transitions and make it easy for the User to use the platform.



User Profile Page

This page contains information about the user, like the user's image, email, contact info, description, and resume. It also presents the user with a button to download the resume in

`pdf` format.

The screenshot shows a resume builder interface for a user named Shivkesh Pandey. At the top right is a blue button labeled "Download Resume". Below it is a section titled "About Me" containing a bio and a photo placeholder. To the right is an "Overview" section with fields for Language (Hindi, English), Skills (c++, Data Structures, DBMS, OS, Postgres, Sequelize), Location (Uttar pradesh), Phone (7317360361), and Email (shivkeshpandey@gmail.com). A "Edit Profile" button is at the bottom right of this section. The main content area has a heading "Wondershare DemoCreator" and a bio about the user's professional journey as an Azure intern at Microsoft.

Find Job Page

This page allows users to search through jobs according to their needs. To achieve this there are various filter options available like **industry**, **salary range**, **location**, and **skills required**.

The job cards contain a button to navigate to the **Job Info** page which provides more information and functionalities described below.

The screenshot shows the JobBoard application interface. At the top left is a navigation bar with "JobBoard", "Home", "FindJob", and "About". On the right are "Profile" and "Logout" buttons. The main area features a "New Jobs Available Now" banner with a call to action: "Unlock your potential, seize the opportunity, and build your future with JobBoard." Below this are two search filters: "Advance Filter" and "Industry". The "Industry" filter includes checkboxes for All, Software, Management, Finance, Human Resource, Marketing, and Technology. The "Salary Range" filter includes checkboxes for All, UpTo 5LPA, 5LPA - 10LPA, and 10LPA +. To the right, several job cards are displayed for companies like Mastercard, TCS, Amazon, PEGO, Flipkart, Accenture, and Microsoft, each with details like location, experience level, and salary.

Company Home Page

Contains details about the company like, email, contact email, recently posted jobs, location, owner.

This page also acts as Company Profile Page when user wants to see the details of the company.

JobBoard Home PostJob About Logout



Mastercard  **Wondershare DemoCreator** Created with Wondershare DemoCreator free plan [Post New Job](#)

About Us
Mastercard is a global technology company in the payments industry. Our mission is to connect and power an inclusive, digital economy that benefits everyone, everywhere by making transactions safe, simple, smart and accessible. Using secure data and networks, partnerships and passion, our innovations and solutions help individuals, financial institutions, governments and businesses realize their greatest potential. Our decency quotient, or DQ, drives our culture and

Company Information
Name Mastercard

Recently posted Jobs

Job Title	Location	Skills	Description	Details
Specialist-1	Gurgaon, Haryana, India	Full Time, SQL, Python, Hadoop, powerpoint	Experience in data analytics, data management, data mining, data reporting, data product development, and quantitative analysis Strong analytical skills with a track record of translating data into compelling insights and developing a storyline for internal and external presentations Strong knowledge of the payment industry, digital commerce strategies, best practices, and trends related to authorization, authentication, transaction routing, fraud, and chargebacks Proficiency in SQL, Python, Hadoop, Tableau, Excel, PowerPoint, and related analytics tools and experience running analysis on large datasets	Member Since March 2024 Address: 4th Plaza Tower, Phase-1 DLF City Gurgaon Haryana HRIN122002 Phone: 1234567890 Email: mastercard@mastercard.com
			Strong communication & presentation skills Self-motivated with a proven track record of delivering success while operating in a team environment.	

Job Posting Page

This page is only available to companies and not to users. Companies can enter the job details in the relevant fields, and if the company needs to provide job details for which no relevant field exists, that information can be entered into the description box. The description box provides various formatting tools to handle large information with good formatting.

The screenshot shows the 'Post The Job' page of the JobBoard application. At the top, there is a dark header bar with the 'JobBoard' logo, 'Home', 'PostJob', and 'About' links, and a 'Logout' button on the right. Below the header, the main title 'Post The Job' is displayed, followed by a large bold heading 'Make Hiring Effortless'. A sub-instruction 'Access to all features. No credit card required.' is shown below the heading. The form starts with 'Job Title' and 'Location' fields, both containing placeholder text ('Full Stack Developer' and 'New York, US'). Below these are two sections: 'Experience' (with a 'Wondershare DemoCreator' watermark) and 'Job Type' (also with a watermark). Further down are 'Industry' and 'Salary' fields, both with placeholder text ('Select Industry' and 'Write in LPA'). At the bottom left, a URL 'localhost:3000/postnewjob' is visible.

Job Info Page

This page contains detailed information about the job. Both user and company can see this page to get detailed information about the job.

When the company who posted this job is viewing this page. It will be provided with an option to see the applicants, and if the user is viewing the job, then an apply button will be presented to the user.



Support Engineer

Part Time

[Apply now](#)

Employment Information		Wondershare DemoCreator	Created with
Company	Amazon	Industry	Software
Salary	23 L.P.A	Experience	Entry Level
Job type	Part Time	Deadline	2024-04-10
Skills	problem solving, scripting,	Location	Chennai, Tamil Nadu, India

Address: Seattle, Washington
Phone: 1234567890
Email: amazon@amazon.com

Applicants Page

This page lists all applicants who applied for the job. This page is accessible only to companies through the job info page. The user name acts as link, which redirects the company to the **User Profile** page where the company can see more about its detail and can download the resume. A download resume button is also provided in the applicants page itself for easy downloading of the resume.

JobBoard [Home](#) [PostJob](#) [About](#) [Logout](#)

Mastercard
Gurgaon, Haryana, India

Specialist-1

Full Time
SQL Python Hadoop powerpoint

Experience in data analytics, data management, data mining, data reporting, data product development, and quantitative analysis

Strong analytical skills with a track record of translating data into compelling insights and developing a storyline for internal and external presentations

Strong knowledge of the payment industry, digital commerce strategies, best practices, and trends related to authorization, authentication, transaction routing, fraud, and chargebacks

Proficiency in SQL, Python, Tableau, Excel, PowerPoint, and related analytics tools and experience running analysis on large datasets

Strong communication & presentation skills

Self-motivated with a proven track record of delivering success while operating in a team environment.

Ability to deliver results in a fast-paced environment with a sense of urgency and accuracy

₹ 40 L.P.A

routing, fraud, and chargebacks

Proficiency in SQL, Python, Hadoop, Tableau, Excel, PowerPoint, and related analytics tools and experience running analysis on large datasets

Strong communication & presentation skills

Self-motivated with a proven track record of delivering success while operating in a team environment.

Ability to deliver results in a fast-paced environment with a sense of urgency and accuracy

₹ 40 L.P.A

Job Applicants

#	Full Name	Email	Contact No	Resume
1	SHIVKESH PANDEY	shivkeshpandey@gmail.com	7317360361	 Resume



Wondershare
DemoCreator

Created with
Wondershare DemoCreator free plan

JobBoard

JobBox Is The Heart Of The Design Community And The Best Resource To Discover And Connect With Designers And Jobs Worldwide.

BACKEND

The API is designed according to the **REST API** and follows the best practices and guide

The server is stateless and the api is divided by the resources as specified by the REST API conventions. For example, this will create a user with the specified details.

```
POST https://domain/api/user
{
    "email": "...",
    "password": "...",
    "first_name": "...",
    "last_name": "...",
    ...
}
```

For instance, following is the list of APIs available for the **user** resource.

```
# Creates a new user
POST "https://domain/api/user/signup"

# Login for user
POST "https://domain/api/user/login"

# Get requested user details specified by query params
GET "https://domain/api/user/:id"

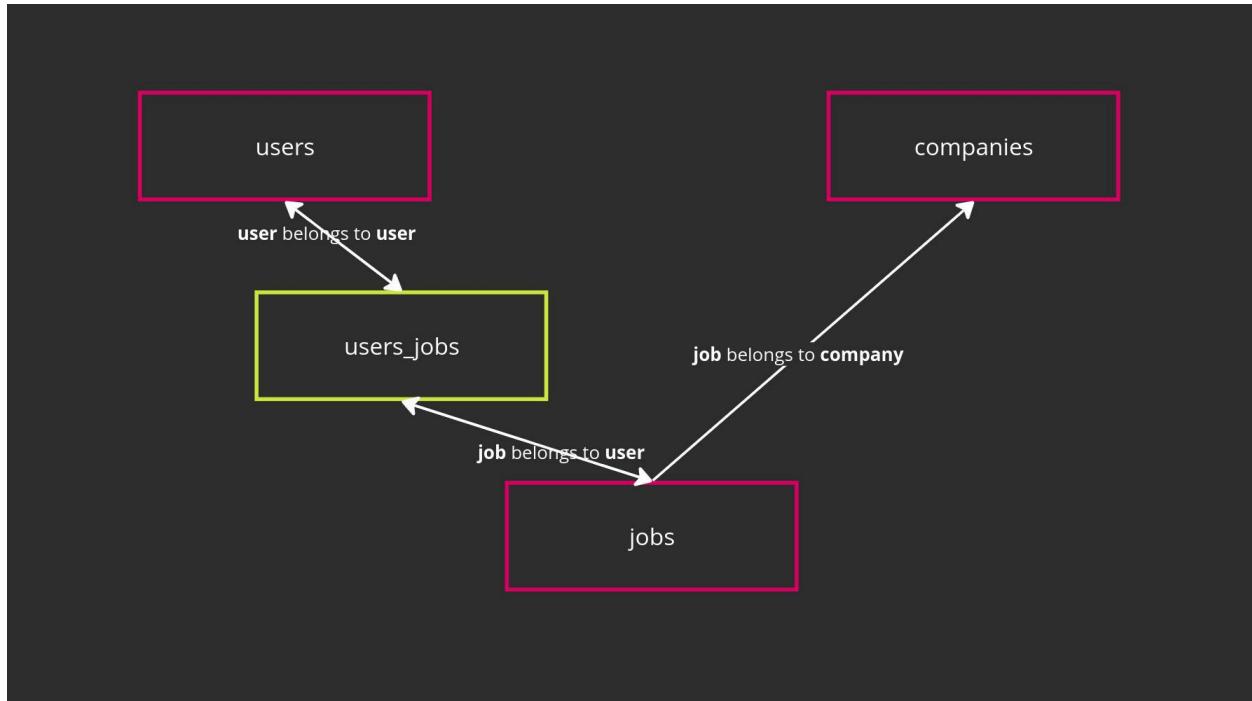
# Add and get user image
POST "https://domain/api/user/image/:id"
GET "https://domain/api/user/image/:id"

# Add and get user resume
POST "https://domain/api/user/resume/:id"
GET "https://domain/api/user/resume/:id"
```

DATABASE

For the database we have used **Postgres** as it is an open source and cross-platform package which offers the most features and control than its competitors.

Database is implemented using the following schema. The **users_jobs** table is used to maintain **many-to-many** relationship between **users** and **jobs** without causing redundancy.



To connect backend with the database, we used **sequelize**. **Sequelize** is javascript package which hides the physical database under an **ORM** layer and provides object oriented approach to access the database. This also allows to change the database without changing the source code.

COLLABORATION

Collaboration was a big challenge, considering the diversity in region and timing. To resolve these we used various tools to help track and contribute to the project.

For source code collaboration, we used to **git** and **github**, a well renowned combination in the software development field. For task management we used the **trello board**, and for visual representation of the components and structure of the project and the inter connection between them, we used **miro**, which is a very easy to use diagram tool.

Following are the links to the project status for these tools.

GitHub: <https://github.com/HariRaj-tech/JobBoard>

Miro: https://miro.com/app/board/uXjVNt0WDcM=/?share_link_id=479016140617

Trello:

<https://trello.com/invite/b/18uFkzGw/ATTIe567dcf463bdeee5f8ca84b83eb327ffA0C3C473/job-board-platform>

TECHNOLOGY STACK

FRONTEND

- HTML
- CSS
- JavaScript
- ReactJs

BACKEND

- NodeJs
- ExpressJs
- Sequelize

DATABASE

- Postgres

MANAGEMENT & COLLABORATION

- Git and GitHub
- Trello
- Miro

FUTURE WORK

While the "Job Board" project has made significant strides in revolutionizing the job search and recruitment process, there are several areas identified for further enhancement and improvement. Below are some key ideas for future work:

- **Simplified Signup UI:**
Revamp signup interface for smoother registration, reducing mandatory fields and providing clearer instructions.
- **GitHub Actions Integration:**
Automate testing and deployment using GitHub Actions to improve development workflow efficiency and code reliability.
- **Job Deletion Feature:**
Enable companies to delete outdated job postings, ensuring job listings remain up-to-date for users.
- **Enhanced Loading UI:**
Implement loading indicators like spinners or progress bars to keep users informed during data loading processes.
- **Reduced Signup Requirements:**
Minimize mandatory fields in signup forms to simplify the signup process for all users.
- **Session Management:**
Enhance security and user experience with robust session management functionalities.

TEAM MEMBERS

- **Chetan Singh Sajwan**
Backend, Database
- **Shivkesh Pandey**
Frontend, Database
- **Lovish Malhotra**
Frontend, Backend
- **Sai Vikas Reddy**
Frontend
- **Suresh Kumar**
Frontend
- **Hari Raj**
Frontend
- **Santosh S**
Frontend

CONCLUSION

The "Job Board" project is all about making it easier for people to find jobs and for companies to find the right employees. We've built a place where job seekers and employers can meet up, making the whole process of getting a job or hiring someone a lot simpler.

We're proud of what we've achieved, but we know there's always room to do even better. We plan to keep improving, adding new features, and listening to what our users need.

In short, our project uses tech to solve real-world job search problems, making the process smoother for everyone involved. We're excited to keep growing and helping more people find their perfect job match.