

A Project Report On  
**JobZee**  
Post-Graduation  
Integrated M. Sc. IT  
**Silver Oak College of Computer Application**  
**Submitted To**



**Department of Masters**  
**Silver Oak College of Computer Application**  
**Silver Oak University**

**Submitted By:**

Daxesh Chauhan  
200405021047

**Under the Guidance of**  
**Sadik Lakhani**  
**Asst. Prof.**  
**Department of Masters**  
**College of Computer Application**

## Preface

To address this problem, we propose to create a job hiring website that streamlines the job seeking and management process. The website will provide a centralized platform for organizations to post job opportunities and for job seekers to search and apply for relevant jobs.

## User Access and Functionality

This guide outlines the different functionalities available to users based on their account roles. We have two user roles: "Employer" and "Job Seeker". Each role has specific features they can access and actions they can perform.

## Account Roles

- Employer: Users with the Employer role can log in to access all jobs on the platform, view resumes and job details of potential candidates, post new jobs, manage their posted jobs, and edit or delete jobs.
- Job Seeker: Users with the Job Seeker role can log in to access all jobs on the platform, view job posting details, manage their applications, and view the resumes and job details of the jobs they have applied for.

## Account Management

- If a user has an account with the Employer role, they can log in for Employer role access.
- If a user has an account with the Job Seeker role, they can log in for Job Seeker role access.
- If a user does not have an account, they can register by providing their name, role, email, and password.

## Acknowledgement

We acknowledge the challenges faced by organizations in generating and managing job opportunities, as well as the difficulties job seekers encounter in finding and applying for suitable positions. Our job hiring website aims to address these issues by providing a centralized platform that streamlines the job seeking and management process. By offering a more efficient and organized approach, we hope to facilitate better connections between organizations and job seekers, ultimately leading to increased job opportunities and a more productive workforce.

## **Index**

## Problem Definition

Many organizations struggle to effectively generate and manage job opportunities, often due to a lack of streamlined processes for job seeking management. This can result in missed opportunities, inefficient use of resources, and ultimately, a reduction in job opportunities. Our job hiring website aims to provide a solution to this problem by offering a centralized platform that streamlines the job seeking and management process, making it easier for organizations to connect with qualified candidates and for job seekers to find and apply for relevant opportunities.

In today's job market, organizations face numerous challenges when it comes to generating and managing job opportunities. With the rise of online job boards and social media, the volume of job applications has increased exponentially, making it difficult for organizations to manage the influx of resumes and applications.

At the same time, job seekers are often overwhelmed by the sheer number of job postings available online, making it challenging to find relevant opportunities that match their skills and qualifications. As a result, many job seekers end up applying to positions that are not a good fit, wasting both their time and the organization's time.

Moreover, the lack of streamlined processes for job seeking management can result in missed opportunities and inefficient use of resources. Organizations may miss out on qualified candidates because they are unable to process applications in a timely manner, or because they are not effectively promoting their job openings to the right audience.

Additionally, the manual process of reviewing resumes and applications can be time-consuming and prone to errors, leading to delays in the hiring process and potentially impacting the quality of hires.

## **Need Of Project**

To address this problem, we propose to create a job hiring website that streamlines the job seeking and management process. The website will provide a centralized platform for organizations to post job opportunities and for job seekers to search and apply for relevant jobs.

## **Current System and its Drawbacks**

The current system for job hiring in many organizations involves a manual and decentralized process for generating and managing job opportunities. This process often includes posting job openings on various job boards and career websites, manually reviewing resumes and applications, scheduling and conducting interviews, and managing candidate communications.

### **Drawbacks:-**

**Lack of Centralization:** The decentralized nature of the current system can lead to missed opportunities and inefficient use of resources. Job openings may be posted on multiple job boards, leading to confusion and duplication of efforts. Similarly, candidate resumes and applications may be managed in different systems, making it difficult to track and compare applicants.

**Manual Review:** Manually reviewing resumes and applications can be time-consuming and prone to errors. This process can also lead to biases and inconsistencies in candidate evaluation.

# **Proposed System and Features**

## **Proposed System**

- To provide a user-friendly platform for employers to post job vacancies and manage job applications.
- To enable job seekers to search and apply for jobs that match their skills, qualifications, and career goals.
- To ensure the security and privacy of user data, including passwords and job seeker resumes.
- To facilitate easy communication between employers and job seekers.
- To provide a centralized database of job listings and applications for easy access and management.
- To offer a seamless login and authentication process for both employers and job seekers.

## **Features**

- Employer and JobSeeker can login and register with their respective roles.
- Both user passwords are encrypted for security purposes.
- Both users are authenticated upon login.
- Both users can view all available jobs.
- JobSeeker's resume is stored in Cloudinary.
- Employers can access the applications for the jobs they've posted.
- JobSeekers can apply for specific jobs that match their skills and interests.
- Employers can post new jobs.
- Employers can manage the jobs they've posted.
- Both users can logout from their respective roles.

# **Requirement**

## **Hardware Requirement**

### **Client-side Hardware Requirements:**

- Processor: Intel Core i5 or equivalent
- Memory: 8 GB RAM
- Storage: 256 GB SSD
- Display: 13-inch display with a resolution of 1080p or higher
- Operating System: Windows 10 or macOS Mojave or later
- Browser: Google Chrome, Mozilla Firefox, or Safari

### **Server-side Hardware Requirements:**

- Processor: Intel Core i3 or equivalent
- Memory: 4 GB RAM
- Storage: 128 GB HDD or SSD
- Display: 11-inch display with a resolution of 720p or higher
- Operating System: Windows 10 or Linux or macOS Mojave or later
- Browser: Google Chrome, Mozilla Firefox, or Safari

## **Software Requirement:-**

### **Client-Site Software requirements:-**

- Display: 11-inch display with a resolution of 720p or higher
- Operating System: Windows 10 or Linux or macOS Mojave or later
- Browser: Google Chrome, Mozilla Firefox, or Safari

### **Server Site Software requirements:-**

- Browser: Google Chrome, Mozilla Firefox, or Safari
- Operating System: Windows Server 2016 or Ubuntu Server 18.04 or later
- Database: MongoDB
- Web Server: Node.js
- API Testing: Postman
- Code Editor: VSCode
- Cloud Storage: Cloudinary

## **Time Duration**

## TECHNOLOGY USED

- **Front-end:**
  - React.js
  - CSS
- **Back-end:**
  - Node.js
  - Express.js
- **Database:**
  - MongoDB
- **Cloud Storage:**
  - Cloudinary
- **API Testing:**
  - Postman
- **Code Editor:**
  - VS Code
- **Authentication:**
  - JSON Web Tokens (JWT)
- **Encryption:**
  - bcrypt

## FUNCTIONAL AND NON- FUNCTIONAL DEPENDENCY

### Functional Dependency

- If the user has an account with the "Employer" role, then they can log in for Employer role
- If the user has an account with the “Job Seeker” role,then they can login for Job Seeker role.
- If the user does not have an account, then they can register by providing their name, role, email, and password.
- If the user is an employer, then they can access all the jobs on the platform.
- If the user is a job seeker, then they can access all the jobs on the platform.
- If the user is Job Seeker,so clicks on a job posting, then they can view the details of the job posting.
- If the user is an employer, then they can view the resumes and job details of potential candidates.
- If the user is an employer, then they can post a new job on the platform.
- If the user is an employer, then they can access the jobs they have posted and view the details of each job.
- If the user is an employer, then they can edit and delete the jobs they have posted.
- If the user is a job seeker, then they can view which jobs they have applied for.
- If the user is a job seeker, then they can view the resumes and job details of the jobs they have applied for.
- If the user is a job seeker, then they can delete their applications where they have applied.

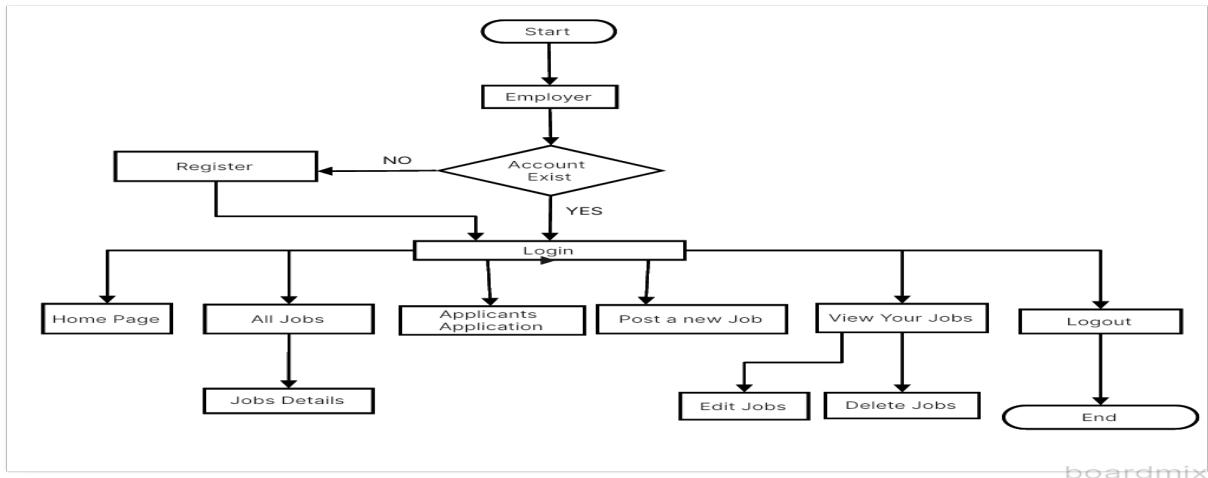
## **Non-Functional Dependency**

- The system should be able to handle a large number of users and jobs without any significant performance degradation.
- The system should ensure that the user's personal information is securely stored and transmitted.
- The system should be easy to use and navigate for both employers and job seekers.
- The system should be available 24/7 for both employers and job seekers.
- The system should be able to scale up

# UML Diagram

## System Flow Diagram(Employer)

boardmix

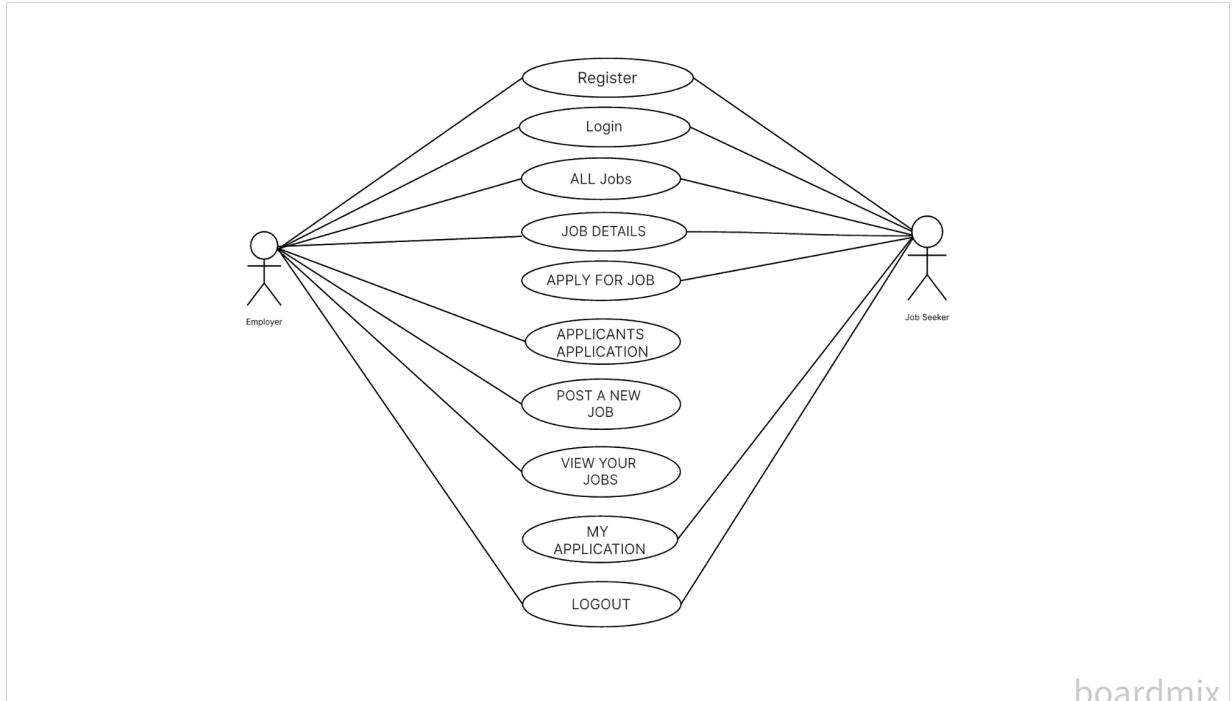


boardmix

## **System Flow Diagram(Job Seeker)**

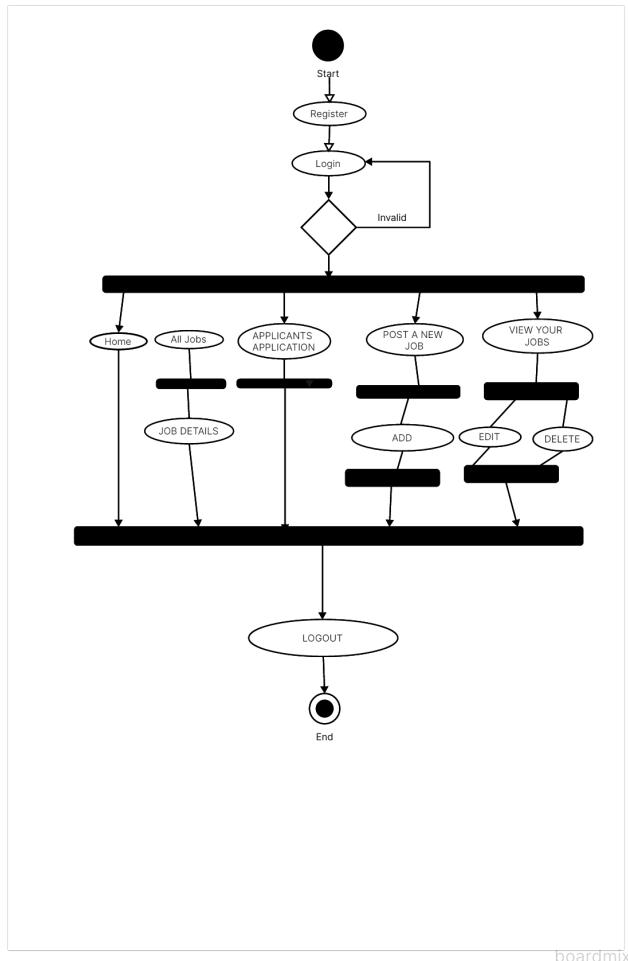
## Use Case Diagram

boardmix



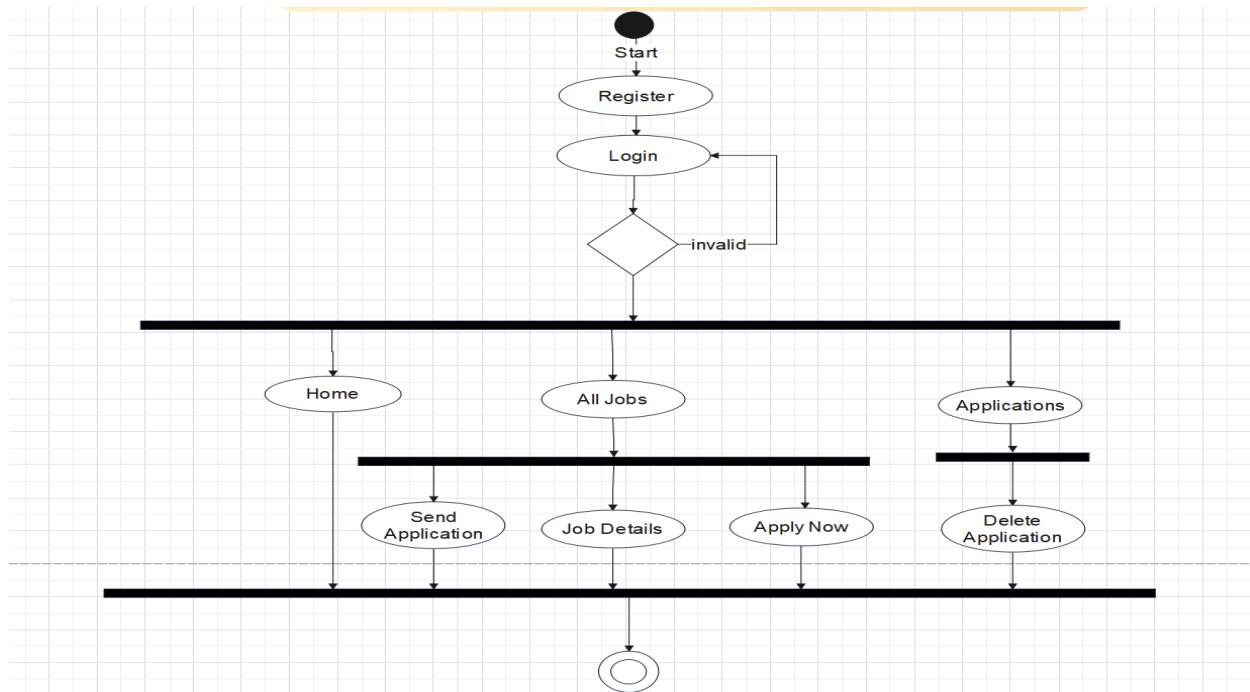
# Activity Diagram(Employer)

boardmix

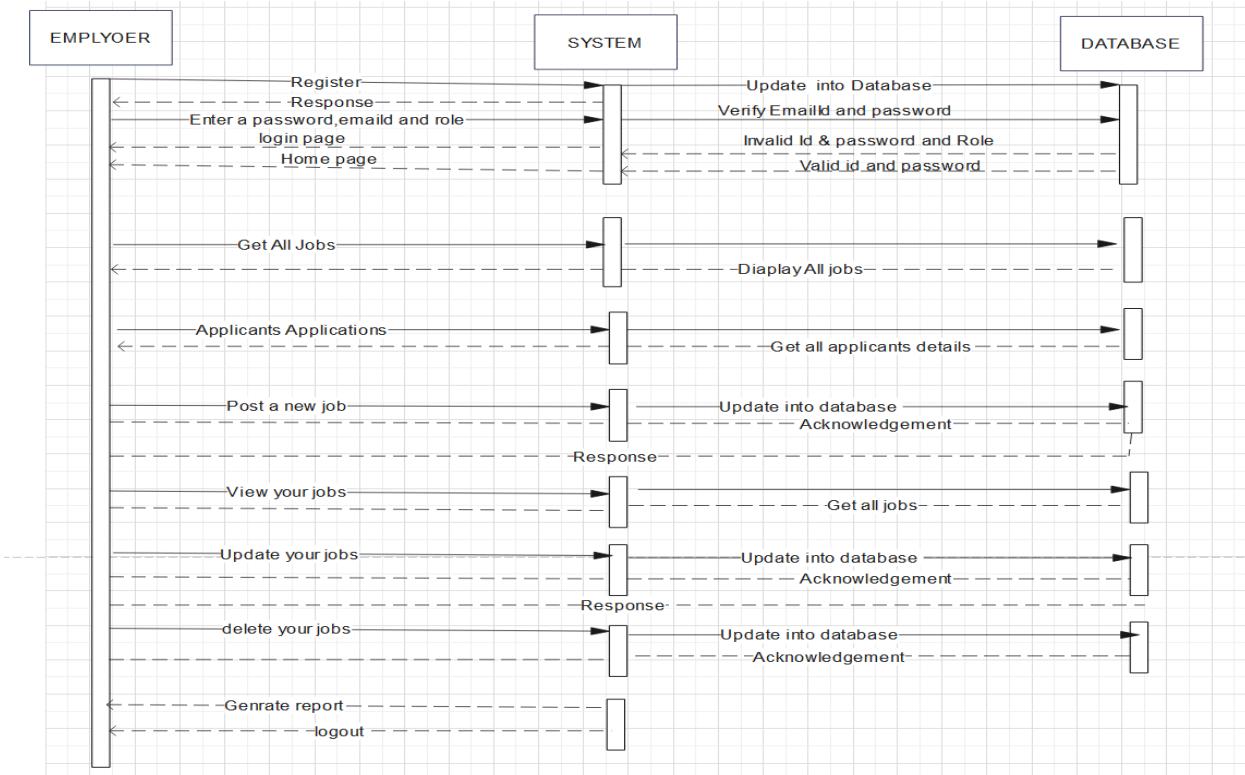


boardmix

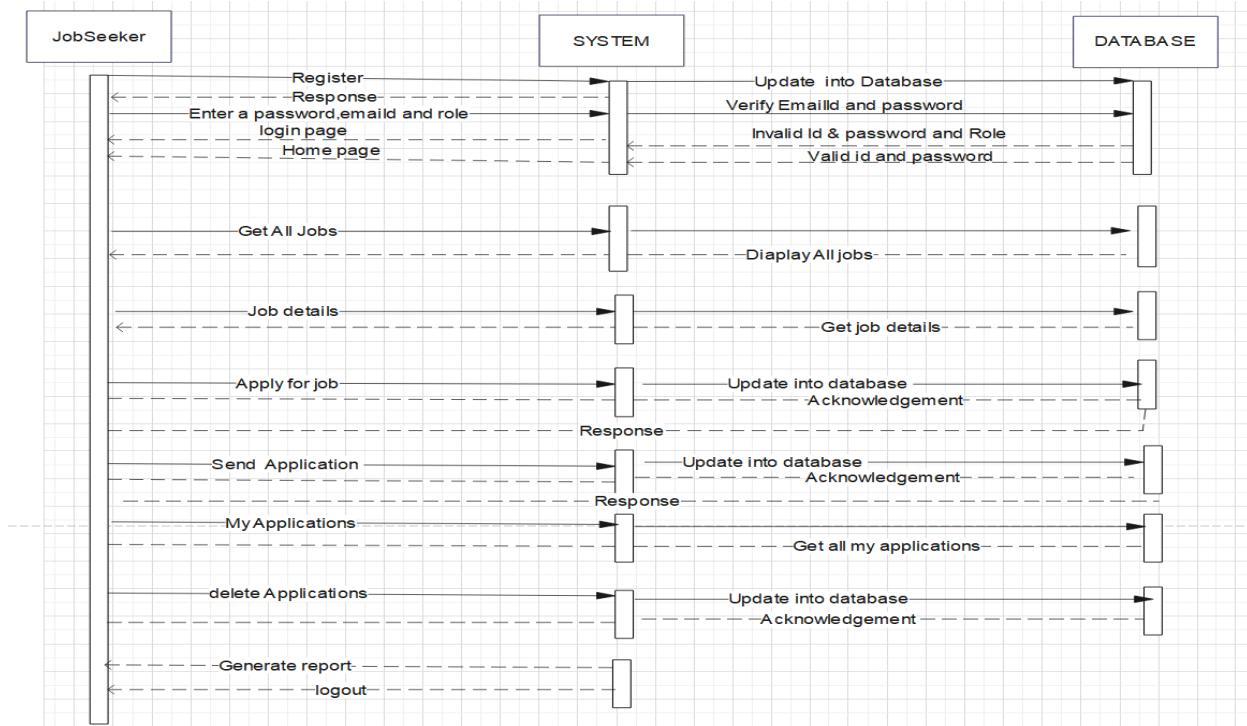
## Activity Diagram(Job Seeker)



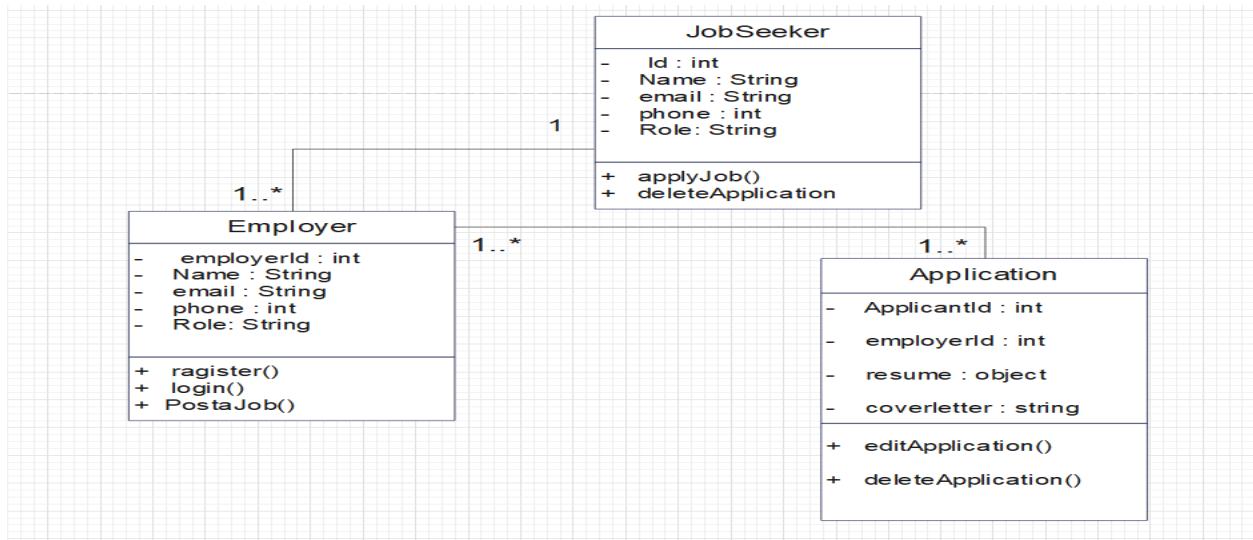
## Sequence Diagram(Employer)



## Sequence Diagram(Job Seeker)

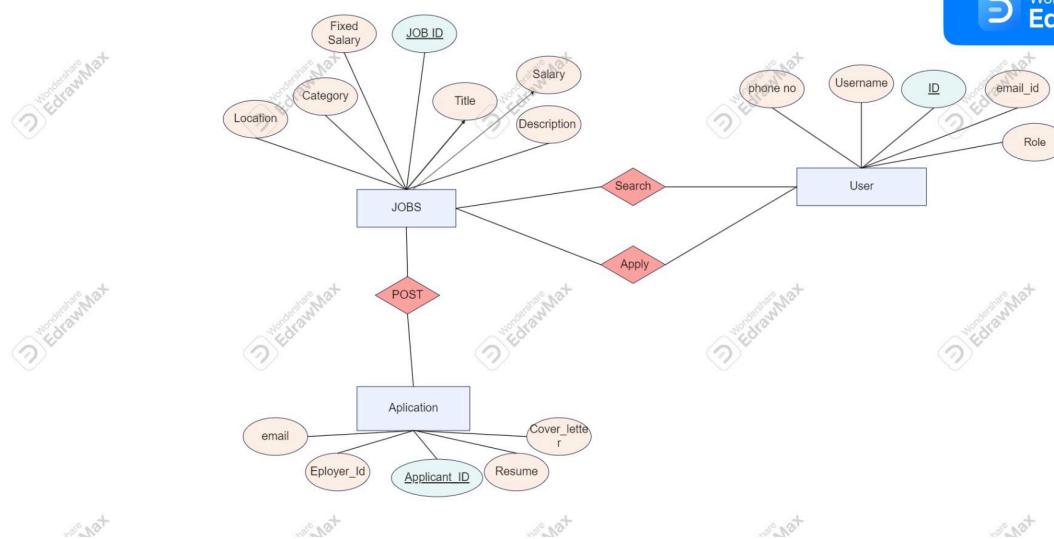


# Class Diagram



# ER-Diagram

Wondershare  
EdrawMax



## Data Dictionary

### User Table

Column Name	Data Type	Required
Name	String	true
Email	Email	true
Phone	Number	true
Password	Password	true
Role	Enum	true

## Job Table:-

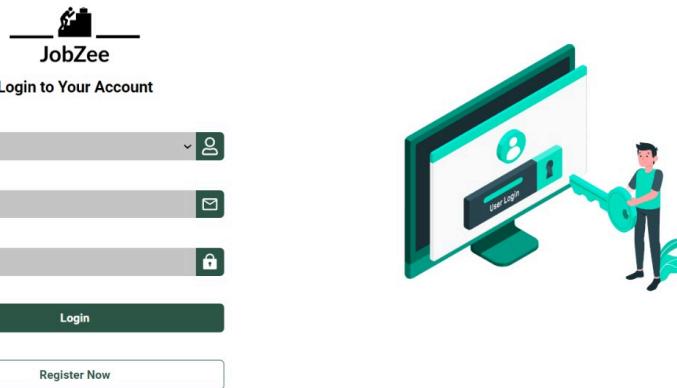
Column Name	Data Type	Required
Title	String	true
Description	String	true
Category	String	true
Country	String	true
City	String	true
Location	String	true
Fixed Salary	Number	
Salary From	Number	
Salary To	Number	
Expired	Boolean	
Job Posted On	Date	
Posted By	Object	

## Application Table:-

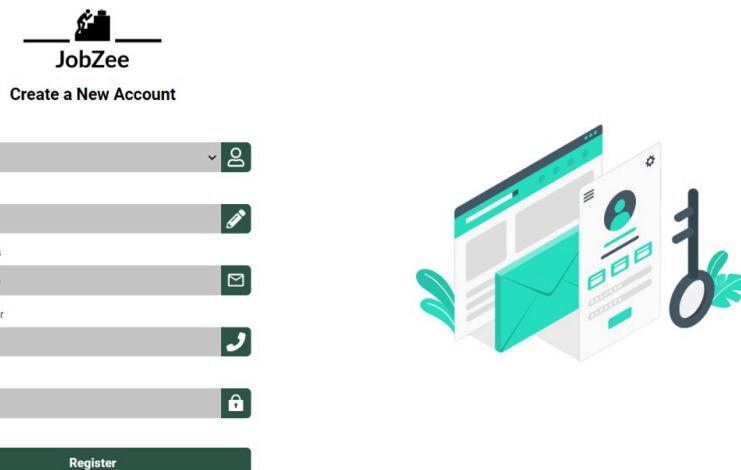
Column Name	Data Type	Required
Name	String	true
Email	Email	true
Cover Letter	String	true
Phone	Number	true
Address	String	true
Resume	Object	true
applicantId	Object	
employerId	Object	

## Screen Shots:-

### Login



### Register:-



## Job Seeker Home Page:-

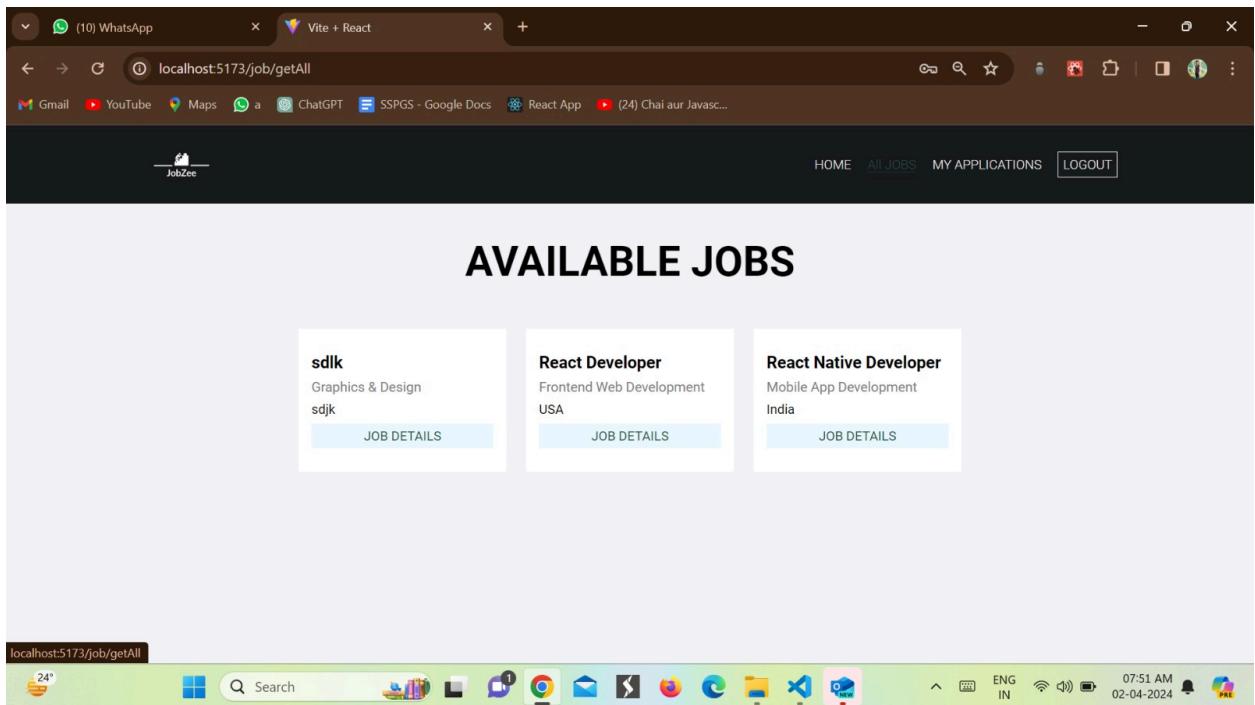


### Find a Job that suits Your interests and skills

Pursue a role that ignites your interests and allows you to make a meaningful contribution. Embark on a journey to find a career that aligns with your passions and leverages your strengths.



## Job Seeker All Job



## Job Details

The screenshot shows a job details page titled "JOB DETAILS". The page contains the following information:

- Title :** sdlk
- Category :** Graphics & Design
- Country :** sdjk
- City :** sdkj
- Location :** jsi
- Description :** dskjk
- Job Posted On :** 2024-03-18T14:41:58.372Z
- Salary:** 12000 - 15000

A green "Apply Now" button is visible at the bottom.

The browser's address bar shows the URL: `localhost:5173/job/65f854eb459e2281e05a9aa7`. The taskbar at the bottom includes icons for WhatsApp, Vite + React, Gmail, YouTube, Maps, ChatGPT, SSPGS - Google Docs, React App, and Chai aur Javasc... The system tray shows the date as 02-04-2024 and the time as 07:52 AM.

## Job Application Form

The screenshot shows a job application form page titled "Application Form". The form fields include:

- Your Name:
- Enter your email:
- Enter a phone number:
- Enter Address:
- Cover Letter:
- Select Resume:  
Choose File | No file chosen

A green "Send Application" button is located at the bottom.

The browser's address bar shows the URL: `localhost:5173/application/65f854eb459e2281e05a9aa7`. The taskbar at the bottom includes icons for WhatsApp, Vite + React, Gmail, YouTube, Maps, ChatGPT, SSPGS - Google Docs, React App, and Chai aur Javasc... The system tray shows the date as 02-04-2024 and the time as 07:52 AM.



## Applicants Status:-

The screenshot shows a web browser window with multiple tabs open. The active tab displays the 'My Applications' section of the JobZee platform. It lists three applications, each with a preview of the resume and a 'Delete Application' button.

- Application 1:** Name: Jinal Kothari, Email: jinal@gmail.com, Phone: +919898989898, Address: Jinal@gmail.com, Cover Letter: fbksjdbfd. Preview shows a blue-themed resume.
- Application 2:** Name: Dhaval Prajapati, Email: dhaval@gmail.com, Phone: +9016488402, Address: Sudarshan Apartment Visat Gandhinagar Highway, Cover Letter: kjsndjvnsjdv. Preview shows a yellow-themed resume.
- Application 3:** Name: Jinal Kothari, Email: jinal@gmail.com, Phone: +9898098908, Address: svysndvbjk, Cover Letter: vkbdbsbvdjkvg. Preview shows a white-themed resume.

The browser's taskbar at the bottom shows various open applications like WhatsApp, Vite + React, Chat Blackbox, etc., along with system icons for battery, signal, and date/time (04:50 PM, 13-04-2024).

## Employer Home Page

The screenshot shows the Employer Home Page of the JobZee platform. The top navigation bar includes links for 'HOME', 'All JOBS', 'APPLICANT'S APPLICATIONS', 'POST NEW JOB', 'VIEW YOUR JOBS', and 'LOGOUT'. Below the navigation, there is a large call-to-action text: 'Find a Job that suits Your interests and skills'.

A descriptive text below the CTA reads: 'Pursue a role that ignites your interests and allows you to make a meaningful contribution. Embark on a journey to find a career that aligns with your passions and leverages your strengths.'

On the right side, there is a decorative illustration of people interacting with a large pink 'JOB' sign, surrounded by leaves and plants.

At the bottom, there are four statistics boxes: '1,23,441 Live Job', '91220 Companies', '2,34,200 Job Seekers', and '1,03,761 Employers'.

The browser's taskbar at the bottom shows various open applications like WhatsApp, Vite + React, Chat Blackbox, etc., along with system icons for battery, signal, and date/time (07:53 AM, 02-04-2024).

1,23,441  
Live Job

91220  
Companies

2,34,200  
Job Seekers

1,03,761  
Employers

# All Job For Employer

The screenshot shows a browser window for 'Vite + React' at 'localhost:5173/job/getAll'. The page title is 'AVAILABLE JOBS'. It displays three job listings in cards:

- sdlk**  
Graphics & Design  
sdjk  
[JOB DETAILS](#)
- React Developer**  
Frontend Web Development  
USA  
[JOB DETAILS](#)
- React Native Developer**  
Mobile App Development  
India  
[JOB DETAILS](#)

The browser's address bar shows '(10) WhatsApp' and 'localhost:5173/job/getAll'. The taskbar at the bottom includes icons for search, file explorer, and various applications like ChatGPT, Google Docs, and React App.

## Job Details for Employer

The screenshot shows a browser window for 'Vite + React' at 'localhost:5173/job/65f854eb459e2281e05a9aa7'. The page title is 'JOB DETAILS'. The job details are as follows:

**Title :** sdlk  
**Category :** Graphics & Design  
**Country :** sdjk  
**City :** sdkj  
**Location :** jsi  
**Description :** dskjk  
**Job Posted On :** 2024-03-18T14:41:58.372Z  
**Salary:** 12000 - 15000

The browser's address bar shows '(10) WhatsApp' and 'localhost:5173/job/65f854eb459e2281e05a9aa7'. The taskbar at the bottom includes icons for search, file explorer, and various applications like ChatGPT, Google Docs, and React App.

# Applicant Application

The screenshot shows a web browser window for 'localhost:5173/application/me'. The page title is 'Applications From Job Seeker'. It displays personal information for a user named Daxesh Chauhan, including Name, Email, Phone, Address, and Cover Letter. Below this, there is a preview of a resume for Brian R. Walter, showing sections like Education, Experience, and Skills. The browser's address bar shows '(10) WhatsApp' and 'Vite + React'. The taskbar at the bottom includes icons for various applications like Gmail, YouTube, Maps, ChatGPT, Google Docs, and a React App.

# Post a Job by Employer

The screenshot shows a web browser window for 'localhost:5173/job/post'. The page title is 'POST NEW JOB'. It features a form with fields for Job Title, Select Category, Country, City, Location, and a Description area. A note says 'Please Provide Salary Type \*'. At the bottom is a large green 'CREATE JOB' button. The browser's address bar shows '(10) WhatsApp' and 'Vite + React'. The taskbar at the bottom includes icons for various applications like Gmail, YouTube, Maps, ChatGPT, Google Docs, and a React App.

## View Job Posted by Employer

The screenshot shows a web browser window with multiple tabs open. The active tab is titled "JobZee - Google Docs" and the URL is "localhost:5173/job/me". The page displays a section titled "YOUR POSTED JOBS" with two job entries:

Title:	Description
React Native Developer	
Country:	India
City:	Ahmedabad
Category:	Mobile App Development
Location:	Sola
Salary :	20000 - 30000
Expired:	TRUE

Below this, there is another job entry:

Title:	Description
Javascript Developer	
Country:	India

The browser's toolbar at the bottom includes icons for search, refresh, and various applications like WhatsApp, Gmail, and ChatGPT. The system tray shows the date as 13-04-2024 and the time as 04:49 PM.

## Edit a Job

The screenshot shows a web browser window with multiple tabs open. The active tab is titled "JobZee - Google Docs" and the URL is "localhost:5173/job/me". The page displays a section titled "YOUR POSTED JOBS" with one job entry:

Title:	Description
React Developer	
Country:	USA
City:	WashingtonDC
Category:	Frontend Web Development
Location:	Texas
Salary :	190000
Expired:	TRUE

The browser's toolbar at the bottom includes icons for search, refresh, and various applications like WhatsApp, Gmail, and ChatGPT. The system tray shows the date as 02-04-2024 and the time as 07:56 AM.

## **Expected Outcomes:-**

Improved job seeking and management process for organizations: Our job hiring website will provide a centralized platform for organizations to manage their job opportunities, making it easier for them to connect with qualified candidates and efficiently use their resources.

Increased visibility and access to job opportunities for job seekers: The website will offer a user-friendly interface for job seekers to search and apply for relevant job opportunities, increasing their chances of finding and securing their desired positions.

Streamlined communication and application process: The website will facilitate seamless communication between organizations and job seekers, reducing the time and effort required to manage job applications and inquiries.

## Future Scope

- Integration with social media platforms for easier job sharing and promotion
- Implementing a recommendation engine to suggest jobs to job seekers based on their interests and qualifications
- Adding a chatbot for quick and easy communication between employers and job seekers
- Developing a mobile app for job seekers to easily search and apply for jobs on-the-go
- Incorporating video interviews to streamline the hiring process and reduce travel costs
- Offering premium features for employers, such as advanced search filters and analytics
- Providing career development resources for job seekers, such as resume building tools and interview tips
- Expanding to include freelance and gig job opportunities
- Integrating with background check services to provide a more comprehensive hiring solution for employers
- Developing partnerships with educational institutions to provide job training and placement services for students and recent graduates.

## References:-

- 1.LinkedIn:-<https://in.linkedin.com/>
- 2.Indeed - <https://in.indeed.com/?r=us>
- 3.Naukri-<https://in.naukri.com/>



