

JANSEWA

An Engineering Project in Community Service

Phase – II Report

Submitted by

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in partial fulfilment of the requirements for the degree of

Bachelor of Engineering and Technology



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Madhya Pradesh

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Bonafide Certificate

Certified that this project report titled **JanSewa** is the bonafide work of **20BCE10601** Shrey Srivastava, **20BCE10367** Tanay Dwivedi, **20BCE10827** Akshat Sharma, **20BAI10382** Itasha Modi, **20BCG10044** Aalok Singh Tawar, **20BHI10037** Sagar Dutta, **20BHI10057** Ashfiya Khan, **20MIM10148** Tanzeel Khan who carried out the project work under my supervision.

This project report (Phase II) is submitted for the Project Viva-Voice examination held on **14/05/2023**

Supervisor

Dr Ranju Yadav

Comments & Signature (Reviewer 1)

Soumya San kar Ghosh.

Comments & Signature (Reviewer 2)

1. INTRODUCTION :

JanSewa is a unique e-job portal designed to directly connect labourers such as plumbers, electricians, carpenters, and other similar professionals with job employers. The platform aims to provide better accessibility and more opportunities for local workers, especially those in areas like Ashta, Sehore, and Kothri, by enabling them to connect directly with potential employers quickly and efficiently.

With JanSewa, employers can post job listings on the platform and connect with skilled workers in their local area, ensuring that the right person is hired for the job. This service aims to reduce the hassle of finding reliable workers by providing a direct link between employers and workers.

Furthermore, JanSewa also aims to help skilled workers who may struggle to find job opportunities due to socio-economic conditions or other factors by connecting these professionals directly with potential employers, the platform can help them secure work and provide for their families.

JanSewa strives to make the hiring process more accessible, efficient, and affordable for all parties involved. With its user-friendly platform and focus on connecting local workers with employers, JanSewa is set to become an essential tool for those seeking to find reliable skilled labour near VIT Bhopal remote areas and beyond.

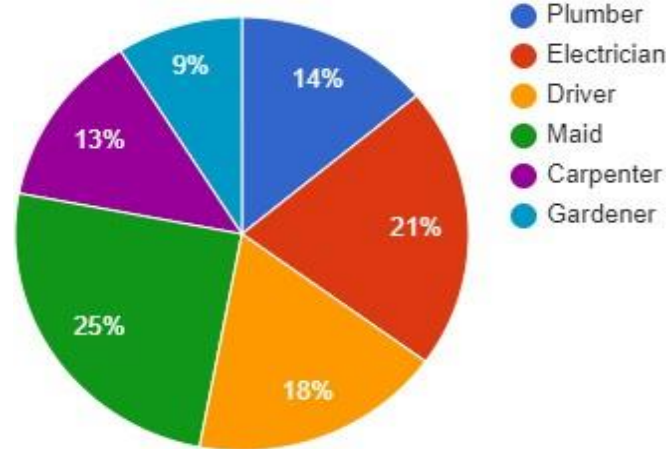
- **Categories of workers-**
- **Painters**
- **Daily Wage Workers**
- **Plumbers**
- **Electricians**
- **Carpenter**
- **Mechanic**
- **Housemaids**
- **Drivers**

1.1 MOTIVATION:

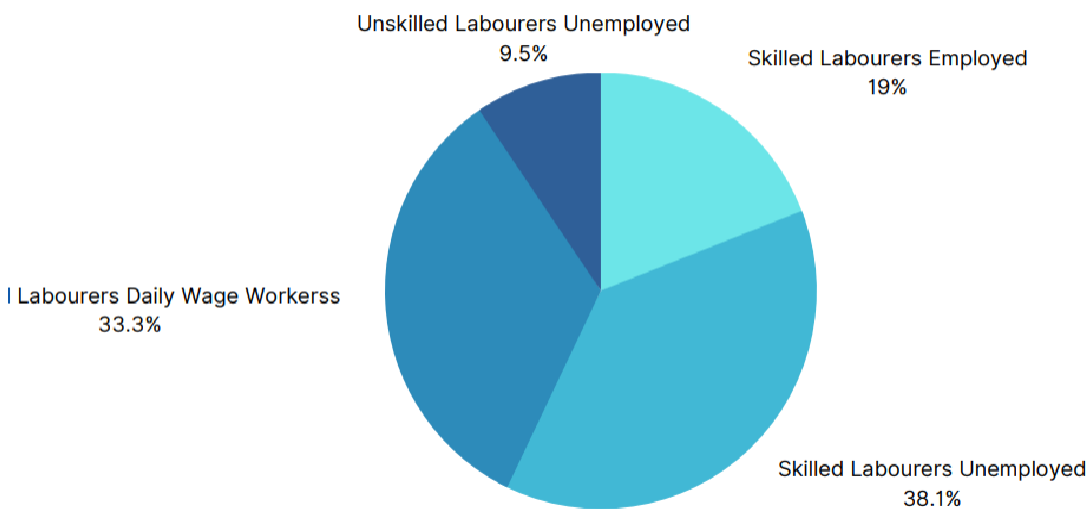
We conducted a survey and found that many unskilled workers in our local area faced challenges in finding employment opportunities, leading to financial insecurity and hardship. Additionally, we discovered that many employers also faced difficulties in finding suitable workers for their needs.

Many Women workers faced hesitation to go upfront and ask for work due to cultural norms and ethical restrictions. These issues inspired us to develop a web application that connects unskilled workers, such as housemaids, labourers, carpenters, and electricians, to potential employers in their local area.

JanSewa

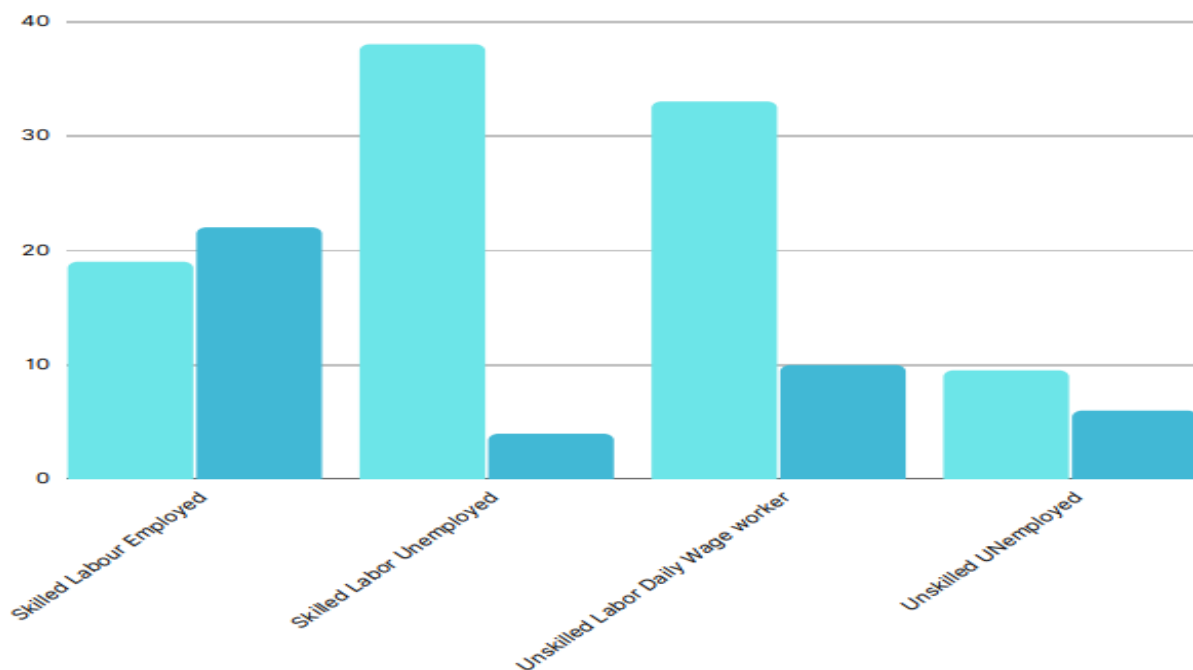
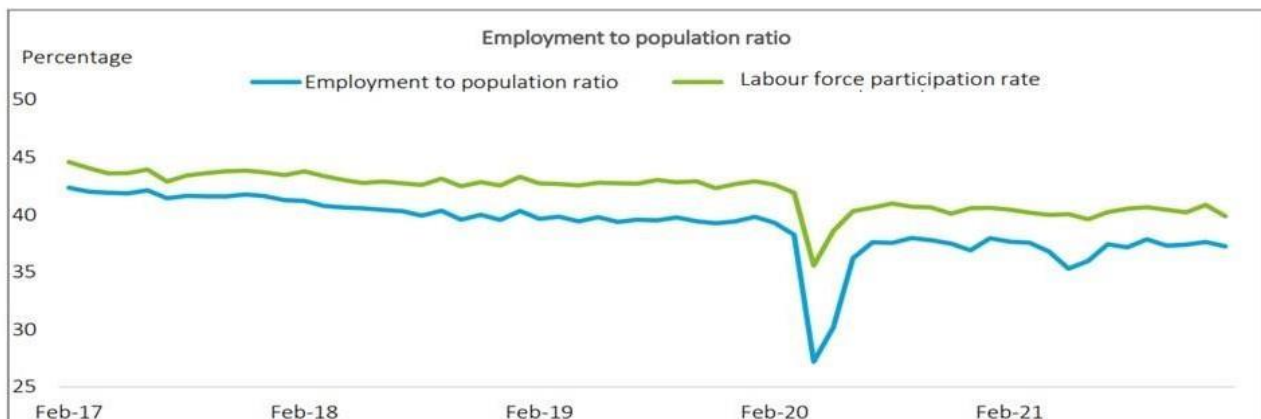


We found through our survey that a large portion of skilled labours was unemployed due to ethical and economic, unawareness factors, the majority among which were women.



A bigger worry is that a larger portion of the population has stopped actively seeking for work since they lost their employment as a result of the epidemic. These are the disenchanted or tenuously connected employees who are unduly pessimistic about working circumstances, lack the essential education or experience for jobs, or are being rejected by employers due to their incapacity to accept a job or for other forms of discrimination. To gain a clearer picture, we calculated the total employment to population ratio (for those aged 16 to 64). The employment-to-population ratio has continuously been lower than the labour-force participation rate (Figure 1). Furthermore, during the pandemic, this ratio fell far faster than the participation rate, implying that the proportion of discouraged and marginally connected employees in the population was substantially higher than what was represented in the participation rate.

The employment to population ratio has remained below the labour force participation rate.



Looking at the graph, we can see that the average hourly wage for skilled labour has consistently been higher than that of unskilled labour. In the first year, the average wage for skilled labour was ₹2000 per year, while unskilled labour was only ₹12,00 per year. As the years went by, both skilled and unskilled wages increased, but the gap between the two remained relatively constant.

In this industry, the demand for skilled labour is high because their specific skills and expertise are necessary to complete certain tasks efficiently and effectively. This means that skilled labourers are able to negotiate for higher wages because their employers understand the value they bring to the table.

On the other hand, the demand for unskilled labour is lower because their work can be done by almost anyone without specialized training. This means that employers can pay unskilled labourers less because there is a larger pool of potential workers who can perform the same tasks.

As result, skilled labourers are more likely to be employed and receive higher wages, while unskilled labourers may struggle to find employment and are paid minimum wage or slightly above it.

This is why it is important to invest in education and training programs that can help workers acquire new skills and increase their earning potential for which we took help of local NGO'S.

ISSUES WE ADDRESSED,

Through our survey, we learned that many workers were not aware of available job opportunities in their area, and many employers struggled to find workers with the necessary skills and qualifications. Our goal with the **JANSEWA** web application is to bridge this gap and provide a platform that benefits both workers and employers.

Our web application will list available job opportunities in various industries, including domestic work, construction, and repair services. Workers can create a profile on the app, detailing their skills, experience, and availability. Employers can then search for workers based on their specific needs and location. This will make hiring more efficient, convenient, and accessible for both parties.

By connecting unskilled workers to potential employers, we hope to provide more employment opportunities and reduce financial hardship for workers in our local area. Additionally, we aim to provide a valuable service for employers, making it easier for them to find suitable workers for their needs. Overall, our goal with **JANSEWA** is to create a platform that benefits both workers and employers, helping to improve the economic well-being of our local community.

1.2 OBJECTIVE:

By analyzing the job market in our area, we found that there is a proportion of unskilled and skilled workers who are facing difficulties in finding employment opportunities. They have to rely on traditional methods like word-of-mouth referrals or newspaper advertisements to find work, which can be time-consuming and limiting. Additionally, these workers often face discrimination and exploitation in the job market due to their lack of skills or education.

JanSewa aims to solve these problems by providing a unique customer experience in our job marketplace that connects job seekers with potential employers in their area. By using our web application, job seekers can easily search for job openings that match their skills and experience, and employers can find the right candidates quickly and efficiently.

Furthermore, JanSewa ensures that all job seekers are treated equally and without discrimination, regardless of their gender, age, or education level. We believe that everyone deserves a fair chance to find employment and earn a living wage.

Our platform also offers a hassle-free experience for both job seekers and employers. Job seekers can easily create a profile, upload their requirements, and apply for jobs with just a few clicks. Employers can easily post job openings, search for candidates, and manage applications through our user-friendly interface.

We aim to provide equal opportunities to all job seekers, connect them with potential employers, and make the job search process hassle-free and efficient.

1.3 PROPOSED WORK:

1. Based on our proposed idea, we have separated the following workings involved in the successful implementation of JanSewa connecting women and other job seekers to active employers without any discrimination and with a hassle-free experience:
2. Created a user-friendly platform where job seekers can easily register and create their profiles.
3. Have a system in place that matches the skills and qualifications of the job seekers with the requirements of the employers.
4. Focused on providing job opportunities in the nearby area of the job seekers to minimize travel time and expenses.
5. Spread awareness about JanSewa in the local community and encourage both job seekers and employers to join the platform.
6. Implemented a rating system for both job seekers and employers to ensure transparency and accountability.
7. Encouraged and facilitate the hiring of job seekers to provide more job opportunities for women as well as to promote gender equality in the workforce.

2. LITERATURE REVIEW:

The COVID-19 pandemic has disrupted the job market and caused widespread unemployment. Unfortunately, carpenters, housemaids, and labourers are among the worst affected. These professions have traditionally been overlooked and undervalued, leading to widespread discrimination and a lack of opportunities. Moreover, the pandemic has further exacerbated the situation, with many employers laying off workers and few new job openings. As a result, many of these workers are struggling to make ends meet and facing significant hardships. The lack of job security, social safety nets, and financial support has left many vulnerable to poverty and destitution. It is imperative that steps be taken to address this issue and provide these workers with better opportunities and support. Through innovative solutions and inclusive initiatives like JanSewa, we can help bridge this gap and provide a more equitable and sustainable future for all.

JanSewa is a growing part of Indian society, providing essential services and connecting job seekers with active employers. Just like platforms such as UrbanClap, Ola, and Swiggy, JanSewa is focused on delivering essential services like house cleaning, plumbing, carpentry, and more.

With the rise of e-commerce, JanSewa is using technology to provide hassle-free experiences to its users. The platform connects women and other job seekers with active employers without any discrimination, ensuring equal opportunities for everyone.

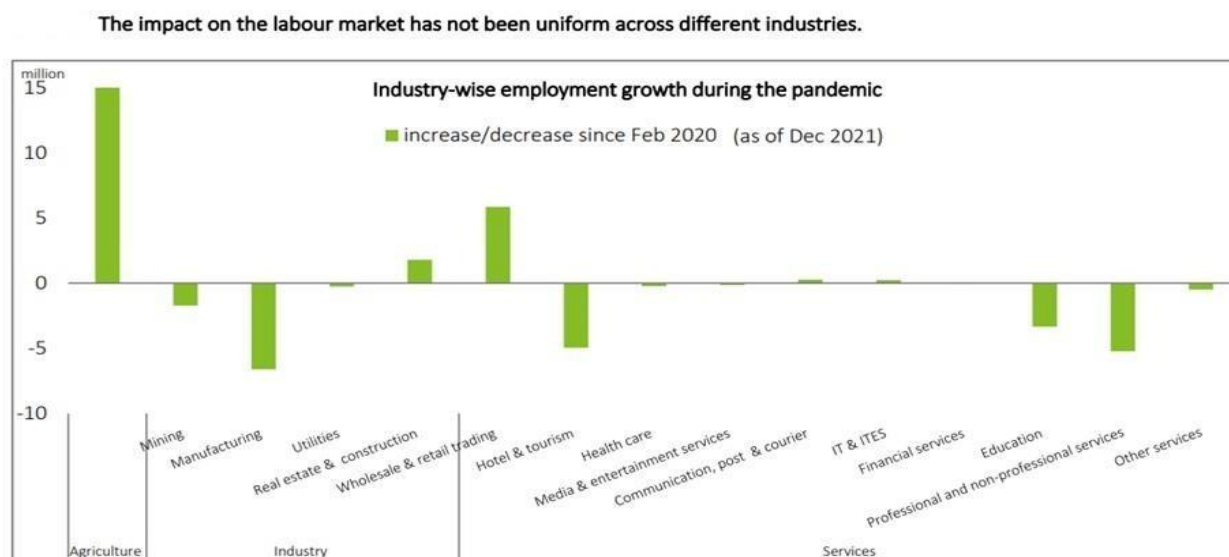
Moreover, JanSewa is also committed to spreading awareness among the local communities, encouraging more people to join the platform and taking advantage of the available opportunities. The platform also aims to recruit female service providers to provide a comfortable and secure experience for women customers.

What JanSewa is doing?

JanSewa aims to connect women and other job seekers like housemaids, carpenters, and electricians to active employers without any discrimination and with a hassle-free experience. Here are some points outlining our approach:

1. After joining, job seekers will be able to see nearby job openings and apply for them easily.
2. Our goal is to connect job seekers with potential employers in a timely manner and ensure a smooth hiring process.
3. We will focus on spreading awareness among communities to encourage job seekers to join our platform.
4. Our platform will prioritize job seekers' safety and comfort by allowing them to connect with female employers and offering emergency services.
5. We will offer a variety of job categories for job seekers to choose from, including household, retail, hospitality, and more

According to a CMIE survey, a scarcity of jobs has also led to an increase in self-employment in the economy. People who are unable to find suitable employment are turning to limited sources of income, which explains the dramatic increase in self-employed taxi drivers, barbers, gymnasiums, beauticians, estate agents, brokers, religious professionals, and trainers, amongst others.



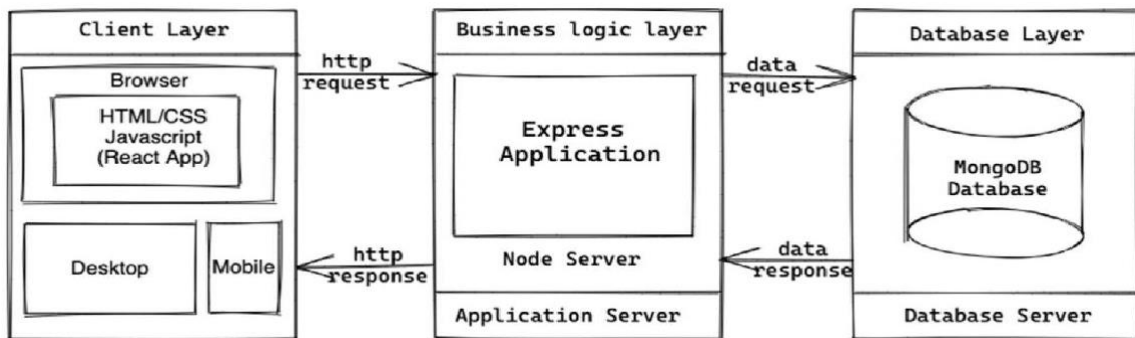
Citations

1. Labour Market Transformation in India: The Future of Work in a Post-COVID-19 Digital World
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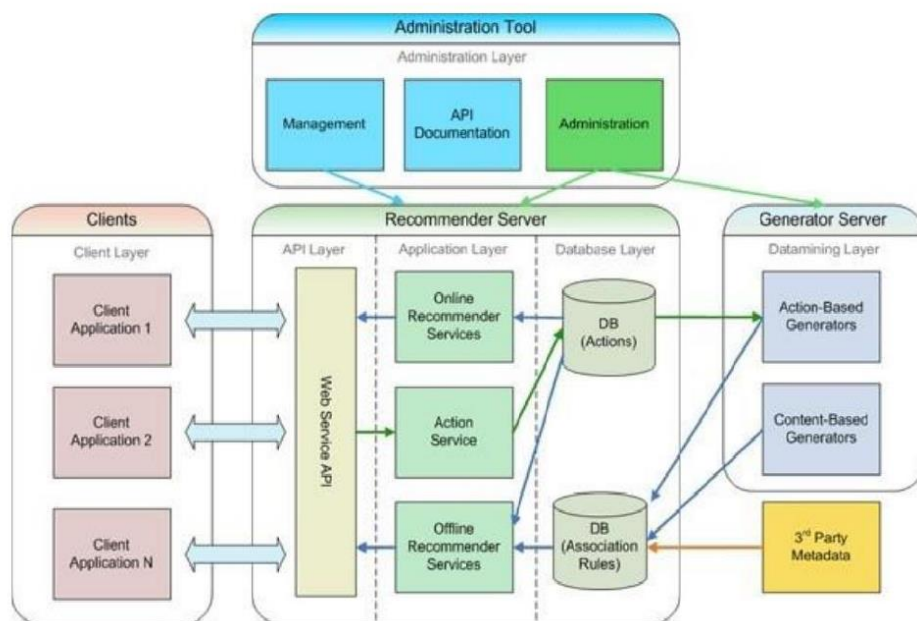
3. TOPIC OF THE WORK:

a) System Design Architecture:



(a) The fundamental structure of the web app

The fundamental structure of the web app The client that is our website which primarily comprises of html css JavaScript and reacts which will be capable of operating on desktop and mobile platforms with ease, it will be having an internal structure of APIs that will help the website to connect and access the resources of the server accompanied with another set of API's deployed internally to for CRUD which is short for create, read, update, and delete operations over the database, here the server we'll be using a mongo db server to serve the requests from the client and the server.

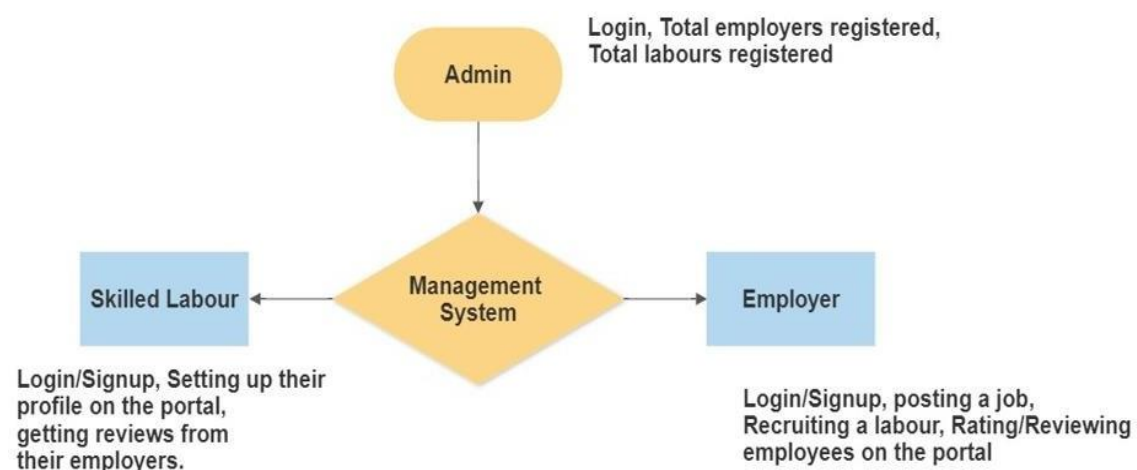


(b) A brief insight of the client-server interaction

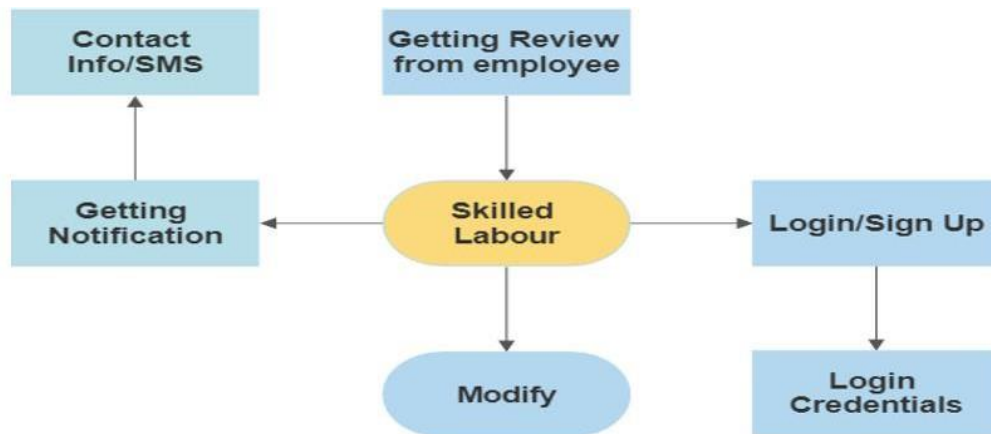
Allocation, analysis and serving of the resources will be done using a well-laid internally implemented structure of APIs that will work with our client website (Client Layer), Content Management System (Business Logic Layer) and the Server itself. The usage of APIs and the CMS or Content Management System will ensure the enforcement of the appropriate rules and working procedures that will ensure the smooth running of the server and services.

Flowchart:

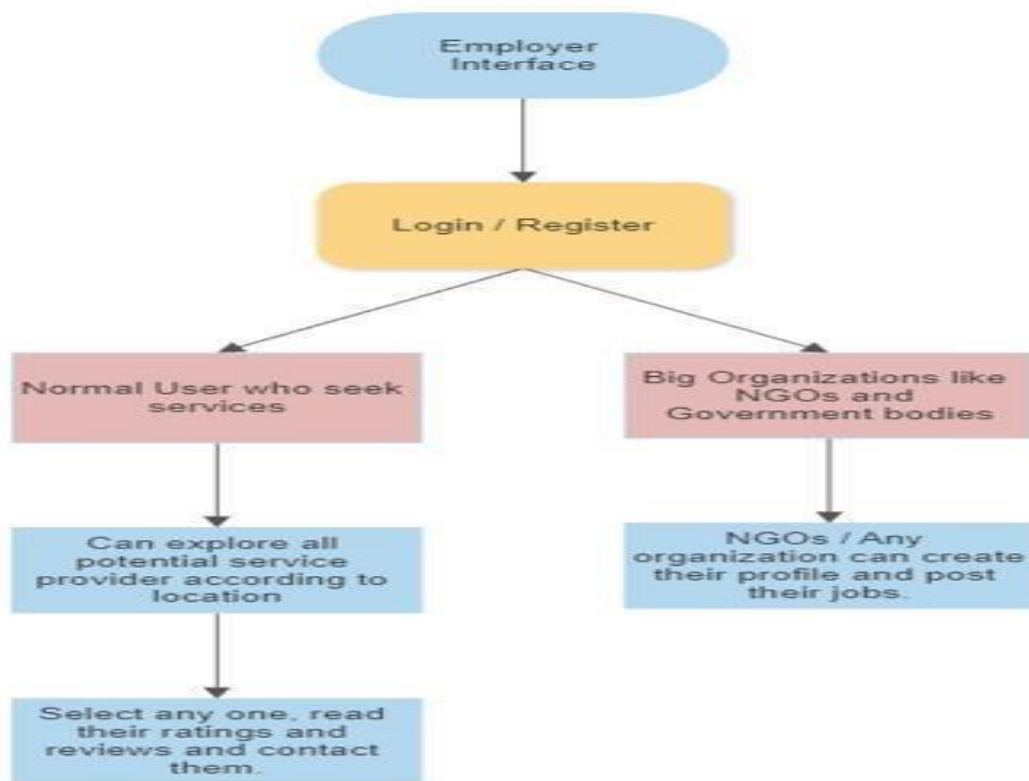
1. **User Registration:** A user registration form is provided where potential employers and workers can register themselves with the application.
2. **Profile Creation:** After registration, the user can create their own profile with detailed information. The employer should be able to see the worker's profile and can select the most suitable candidate for their job.
3. **Job Posting:** The employer should be able to post their job requirements and the worker can apply for a job. The employer can search for workers with specific skills.
4. **Job Matching:** The application should have a job matching feature where workers can be matched with the most suitable job. The system should also provide a list of recommended jobs for each worker.
5. **Messaging System:** A messaging system should be provided where the employer and worker can communicate with each other.
6. **Reviews and Ratings:** The application should also have a review and rating system where employers can rate the worker's performance.
7. **Security:** The application should have necessary security measures in place to ensure that the data is secure and confidential.



Portal Flow Diagram



Labour Flow Diagram



Employer Flow Diagram

b) Working Principle:

1- Login or Register and User Authentication :

1. Our e-job portal site will start with a login/Signup page.
2. To get access to our website, A user has to sign up for our website for the first time. After signing up, the user can log in using the username and password.
3. After Login, users will get access to our e-job portal.
4. Skilled workers can register on JanSewa's portal as job seekers/employees.
5. Registered employers can filter their search by city and specific job requirements.
6. A list of relevant employees and labourers will be displayed to the employer based on their search criteria.

2- JanSewa Job Seekers Actions:

1. Job seekers can register, edit, or delete their profiles through the website or message.
2. Upon successful registration, the job seekers will receive notifications on their app screen or through email/MMS for any job opportunities that match their skills and location.

3- Employers Action:

1. Employers or job givers can create their profile, edit and delete it as per their requirement on the JanSewa website.
2. They can search for job seekers who are registered on the platform.
3. The website will display the list of job seekers available in their current city on the home page.
4. Employers can also search for specific job seekers based on their skill set, location, availability, and wages.
5. The employer can contact the job seeker through the website or through other modes of communication provided by the platform.

4 - Categories of Services available on our site and Service page:

1. Once you log in, you will be directed to the home page of our website.
2. The home page consists of the categories of services related to job seekers and employers.
3. When the user clicks on one of the categories, a web page will open with a list of available services related to that category.
4. When the user clicks on a specific service, a service page will open with brief information about that service. It will also display the availability of the service in the user's region and available employees for work.

5- NGO Regulated:

1. NGOs and related organizations can create their profile and post job openings on the JanSewa website.
2. The website will send job opening message notifications to workers who have registered with the website.
3. NGOs and related organizations can edit and delete their profiles on the website as needed.

6- Dashboard to Monitor:

1. The dashboard provides job seekers with a status update on their job applications.
2. Notifications regarding job openings and application status will be sent to job seekers through the sms or email.
3. Skilled and unskilled workers looking for employment opportunities can register as job seekers/labourers through our portal. Once registered, employers who are also registered on the platform can filter job seekers in their city who are qualified for the job they need. This matching process allows for a streamlined connection between job seekers and employers, thus facilitating job opportunities without any educational literacy or gender boundaries.

c) Issues in existing Work:

1. Limited job opportunities: Many job portals have a small number of job openings for labourers, making it challenging for workers to find suitable employment.
2. Lack of transparency: Some job portals may not provide clear and comprehensive information about the job duties, pay, and working conditions, making it challenging for workers to make informed decisions about accepting a job.
3. Inaccurate job descriptions: Some job postings may not accurately depict the actual duties and responsibilities of the job, resulting in confusion and disappointment for workers who are hired.
4. Lack of support: Many job portals may not provide resources or assistance to workers, such as help with finding housing or transportation to work.

d) Results and Discussion:

The expected results of the JanSewa portal as a job portal is to provide equal employment opportunities to all job seekers, regardless of their caste, gender or any other discriminatory factor. The portal aims to bridge the gap between job seekers and job providers and provide a common platform for both parties to connect. By providing easy registration, profile editing and job search options, the portal makes the job searching process hassle-free for job seekers. The portal also sends job notifications to registered job seekers to keep them updated about the latest job openings. Through this solution, we aim to uplift the labour class and promote equality in society. Additionally, as the portal sources and fulfils the needs of the local community, it helps to support the local economy. The success of the portal will be measured by the number of job seekers who successfully find employment through the platform and the positive impact it creates on the local community.

In summary, JanSewa is for the community through technology and engineering, It also has numerous advantages

1. Provides equal employment opportunities to all job seekers.
2. Bridges the gap between job seekers and job providers.
3. Provides a common platform for both parties to connect.
4. Makes the job searching process hassle-free for job seekers.
5. Sends job notifications to keep job seekers updated about the latest job openings.
6. Aims to uplift the labour class and promote equality in society.
7. Supports the local economy by sourcing and fulfilling the needs of the local community.

Features

1. SignIN / SignUP
2. Forget the Password
3. Post A Job
4. View All Jobs
5. View Details of Any Job
6. BookMark Jobs
7. Track Your BookMark Jobs in DataTable View
8. Track Your Applied Jobs in DataTable View
9. Track Your Posted Jobs and view Submitted Application
10. Accept and Reject Different Application
11. Status Updated for applied Job based on Job poster action
12. JWT validation on each Authorized Request

4. INDIVIDUAL CONTRIBUTIONS:

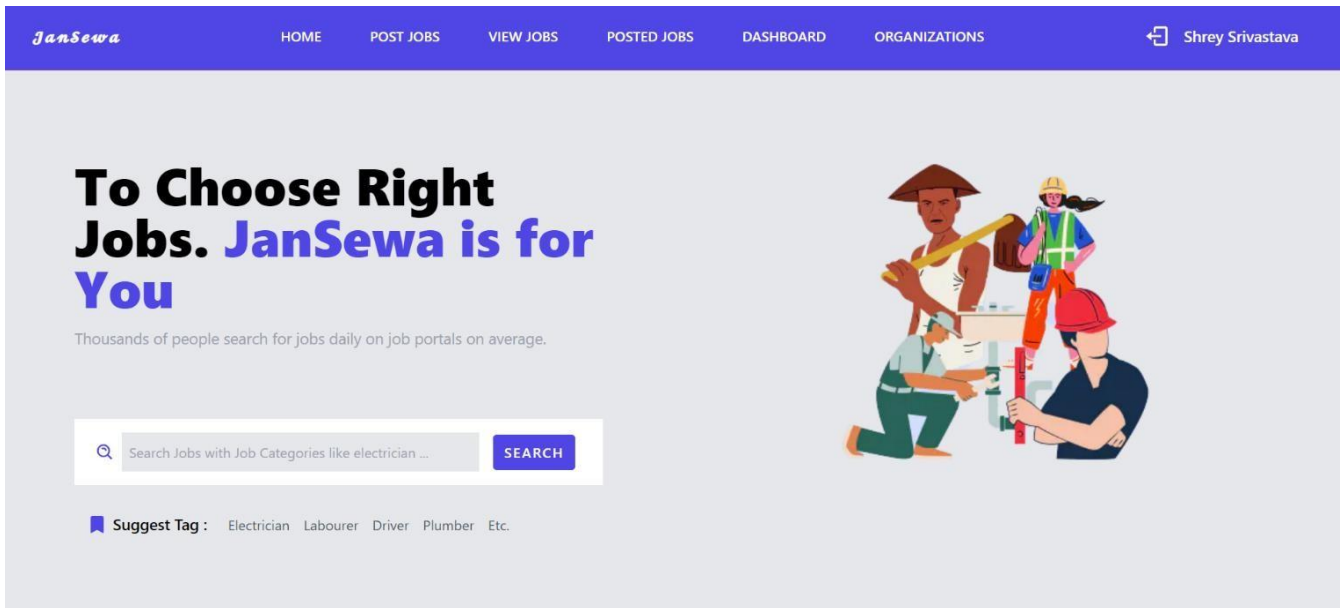
1. Frontend Team

As a frontend developer at JanSewa, a job-seeking and job-giving website, Myresponsibilities include:

1. Developing and maintaining the website's user interface: As a front-end developer, I was responsible for designing and implementing the website's user interface using MERN Technology.
2. Ensuring website responsiveness and cross-browser compatibility: I need to ensure that the website is responsive across various devices and screen sizes and that it is compatible with different web browsers.
3. Collaborating with the design and backend development teams: I work closely with the design team to ensure that the website's design is implemented correctly. I am also working with the backend development team to integrate the front end with the backend.
4. Testing and debugging: I thoroughly tested the website to ensure that it is functioning as expected and identify and fix any issues or bugs.
5. Optimizing website performance: I was responsible for optimizing the website's performance, including page load speed, by implementing best practices such as caching, code minification, and compression.

1. Home Page: Ashfiya Khan 20BHI10057

2. Designing and implementing the layout and structure of the home page using React
3. Creating a responsive design that adapts to different screen sizes and devices
4. Integrating React components to add interactive elements such as sliders, pop-ups, and animations
5. Incorporating UI/UX design principles to enhance the user experience
6. Collaborating with the design team to ensure that the website's visual design is implemented correctly.



2. Post Jobs Page: Tanzeel Khan 20MIM10148

1. Creating a layout and structure for the post page using React
2. Integrating dynamic content such as user-generated posts and job listings from the backend
3. Designing and implementing forms for users to submit their job applications or create job listings
4. Adding interactive features such as buttons and dropdown menus to allow users to perform actions such as applying for jobs, saving job listings, and sharing job posts
5. Ensuring that the page is optimized for SEO and accessibility
6. Collaborating with the backend development team to ensure that the frontend and backend are properly integrated
7. In summary, My responsibilities as a frontend developer at JanSewa for the home page view and post page would be to create visually appealing, user-friendly, and responsive layouts that integrate with the backend and allow users to interact with the website's features easily.



ENTER JOB DETAILS

Title :

Salary :

Email :

Company :

Description :


Job Category :

3. View Jobs Page: Tanay Dwivedi 20BCE10367

As a frontend developer at JanSewa, My responsibilities for the "View Job" page on the job-seeking and job-giving website were :

1. Designing and implementing the user interface: I was responsible for designing and implementing the user interface for the "View Job" page using technologies such as Next.js, Tailwind CSS, and Redux Toolkit. I was involved in creating a user-friendly layout that displays all relevant job details, such as job title, location, salary, and Organization.
2. Retrieving data from the backend: I retrieved job data from the backend using SWR hooks for fetching API and ensuring that the data is displayed accurately on the "View Job" page.
3. Implementing interactive features: I implemented interactive features such as an "Apply Now" button that directs the user to the job application page, or a "Save Job" feature that allows the user to save job listings for future reference.
4. Ensuring website responsiveness and cross-browser compatibility: I was ensured that the "View Job" page is responsive across various devices and screen sizes and that it is compatible with different web browsers.
5. Testing and debugging: I was thoroughly tested the "View Job" page to ensure that it is functioning as expected and identify and fix any issues or bugs.

Job Details



Paramedical Technician
MedicalLab Diagnostics Pvt. Ltd

Job Poster Anivartak Jain

Email anivartak27@gmail.com

Location Bhopal

Category Healthcare/Paramedical

Job Type Parttime

Salary ₹ 25000

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JOB DESCRIPTION

MedicalLab Diagnostics Pvt. Ltd., a reputable medical diagnostics company in Indore, is seeking dedicated Paramedical Technicians to join our team. As a Paramedical Technician, you will assist in collecting and analyzing patient samples, performing laboratory tests, and maintaining accurate records. You will work closely with medical technologists and other healthcare professionals to ensure efficient and reliable diagnostic services. The ideal candidate should have a diploma in Medical Laboratory Technology or a related field, strong attention to detail, and the ability to work independently as well as part of a team. Previous experience in a clinical laboratory setting is preferred. If you are passionate about accurate and timely diagnostics and have a commitment to quality, we look forward to receiving your application.


Job Summary

Total Vacancies 4

Dead Line 14/05/2023

Experience Required Previous experience in a clinical laboratory setting preferred

Related Jobs



Registered Nurse (Critical Care)
City Hospital

Job Type Fulltime

Salary 45000

Total Vacancies 12


Dead Line 22/07/2023

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brand positioning and customer engagement. The ideal candidate should have a strong background in marketing, excellent communication skills, and a proven track record of successful marketing campaigns. If you have a creative mindset, strong leadership abilities, and a passion for driving business growth, we would love to hear from you.

Experience Required Minimum 10 years of experience in marketing

Related Jobs



Senior Physiotherapist
HealthCare Clinic Pvt. Ltd.


Job Type Fulltime

Salary 800000

Total Vacancies 2

Dead Line 30/06/2023

[VIEW DETAIL →](#)



Senior Physiotherapist
HealthCare Clinic Pvt. Ltd.


Job Type Fulltime

Salary 800000

Total Vacancies 2

Dead Line 30/06/2023

[VIEW DETAIL →](#)



Senior Physiotherapist
HealthCare Clinic Pvt. Ltd.


Job Type Fulltime

Salary 800000

Total Vacancies 2

Dead Line 30/06/2023

[VIEW DETAIL →](#)



Senior Physiotherapist
HealthCare Clinic Pvt. Ltd.

Job Type Fulltime

Salary 800000

Total Vacancies 2

Dead Line 30/06/2023

[VIEW DETAIL →](#)

4. Posted Jobs Page: Sagar Dutta 20BHI10037

As a frontend developer at JanSewa, My responsibilities for the "Posted Job" page on the job-seeking and job-giving website were:

1. Designing and implementing the user interface: I was responsible for designing and implementing the user interface for the "Posted Job" page using technologies such as Next.js, Tailwind CSS, and Redux Toolkit. I was involved in creating a user-friendly layout that displays all relevant job details, such as job title, location, salary, and Organization.
2. Retrieving data from the backend: I retrieved job data from the backend using SWR hooks for fetching API and ensuring that the data is displayed accurately on the "Posted Job" page.
3. Implementing interactive features: I implemented interactive features such as an "Edit Job" button that allows the user to edit job listings or a "Delete Job" feature that allows the user to remove job listings.
4. Ensuring website responsiveness and cross-browser compatibility: I ensured that the "Posted Job" page is responsive across various devices and screen sizes, and that it is compatible with different web browsers.
5. Testing and debugging: I thoroughly tested the "Posted Job" page to ensure that it is functioning as expected and identify and fix any issues or bugs.

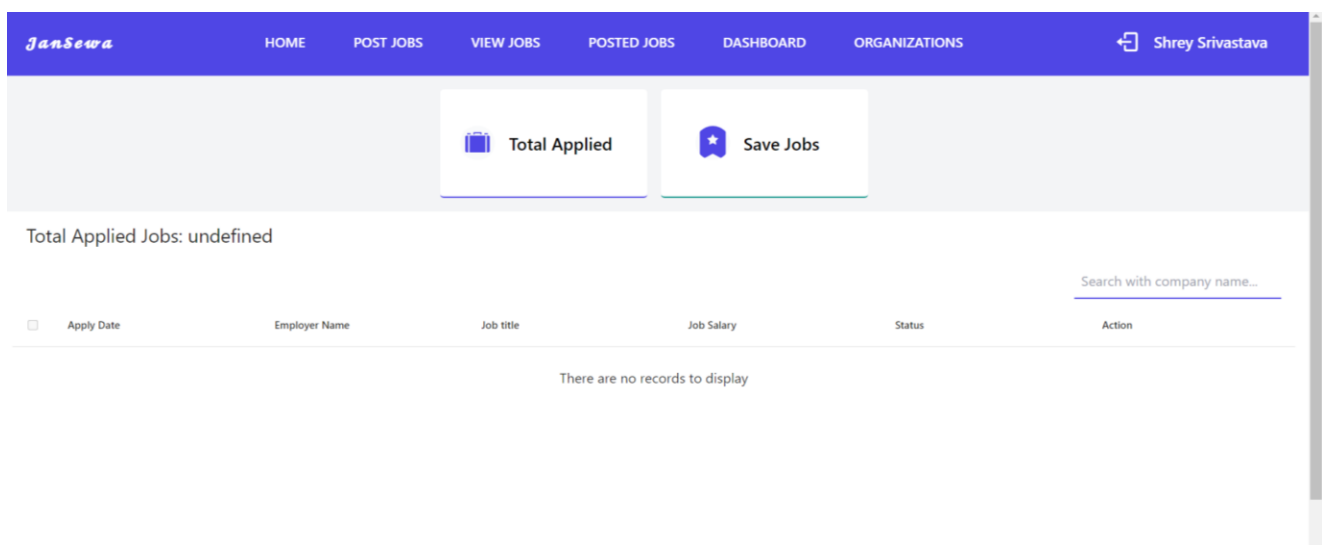


5. Dashboard: Itasha Modi 20BAI10382

As a frontend developer at JanSewa, My responsibilities for the "Dashboard" page on the job-seeking and job-giving website were:

1. Designing and implementing the user interface: I was responsible for designing and implementing the user interface for the "Dashboard" page using technologies such as Next.js, Tailwind CSS, and Redux Toolkit. I was involved in creating a user-friendly layout that displays all relevant information about the user's job applications, job postings, and account details.

2. Retrieving data from the backend: I retrieved data from the backend using SWR hooks for fetching API and ensure that the data is displayed accurately on the "Dashboard" page. This includes data such as the user's job applications, job postings, and account details.
3. Implementing interactive features: I implemented interactive features such as a "New Job Posting" button that allows the user to create a new job posting, or a "Job Application" feature that allows the user to apply for jobs directly from the dashboard.
4. Ensuring website responsiveness and cross-browser compatibility: I ensured that the "Dashboard" page is responsive across various devices and screen sizes, and that it is compatible with different web browsers.
5. Testing and debugging: I thoroughly tested the "Dashboard" page to ensure that it is functioning as expected and identify and fix any issues or bugs.




6. Organizations Page: Ashfiya Khan 20BHI10057

As a frontend developer at JanSewa, My responsibilities for the "Organizations" page on the job-seeking and job-giving website would include:

1. Designing and implementing the user interface: I was responsible for designing and implementing the user interface for the "Organizations" page using technologies such as Next.js, Tailwind CSS, and Redux Toolkit. This was involved in creating a user-friendly layout that displays all relevant information about the organizations listed on the website.
2. Retrieving data from the backend: I retrieved data from the backend using SWR hooks for fetching API and ensuring that the data is displayed accurately on the "Organizations" page. This includes data such as the organization's name, logo, description, and available job postings.
3. Implementing interactive features: I implemented interactive features such as a static card using JSON object that allows multiple organizations within this page. I made cards in which we have detailed descriptions of different organizations with their links in it.
4. Ensuring website responsiveness and cross-browser compatibility: I ensured that the "Organizations" page is responsive across various devices and screen sizes, and that it is compatible with different web browsers.
5. Testing and debugging: I thoroughly tested the "Organizations" page to ensure that it is functioning as expected and identified and fixed any issues or bugs.

AVAILABLE ORGANIZATIONS




Ministry of Labour and Employment

The Ministry of Labour and Employment is responsible for formulating and implementing policies and programs related to employment, job creation, and workers' welfare in India. It oversees several agencies that provide employment services and support.

Government

More details →




National Career Service (NCS)

NCS is an online platform developed by the Ministry of Labour and Employment to provide job-related services. It offers job listings, career counseling, skill assessments, and information about government schemes and programs.

Government

More details →




National Rural Employment Guarantee Act (NREGA)

NREGA aims to provide employment opportunities and ensure livelihood security for rural workers. It guarantees a certain number of days of wage employment to eligible households in rural areas.

Government

More details →



National Skill Development Corporation (NSDC)

NSDC is a public-private partnership organization that promotes skill development and vocational training in India. It collaborates with various training providers and industries to enhance the employability of workers.

Government

More details →

2. Backend Team

1. Backed Developer: Shrey Srivastava 20BCE10601

As a backend developer at JanSewa, My responsibilities for the job seeking and job giving website built on the MERN stack were:

1. **Server deployment:** I was responsible for deployed the project on Vercel .
2. **Caching:** I implemented caching strategies to improve website performance and reduce server load.

The screenshot shows a VS Code editor interface. On the left, the 'EXPLORER' sidebar displays the project structure for 'JANSEWA'. The main editor area shows the 'dashboard.jsx' file, which contains a React component 'Dashboard'.

Project Structure (EXPLORER):

- next
 - cache
 - server
 - static
 - chunks
 - pages
 - auth
 - frontend
 - _app.js
 - _error.js
 - index.js
 - amp.js
 - main.js
 - polyfills.js
 - react-refresh.js
 - webpack.js
 - development
 - webpack
 - 5b58bcc85a2884dd.webpack.hot-update...
 - 62591118ef0e02cd.webpack.hot-update...
 - 7968158517db2341.webpack.hot-update...
 - a4c197dbb4e1849a.webpack.hot-update...
 - aaa42393d983ce16.webpack.hot-update...
 - amp.f932d62d0347d6f0.hot-update.js

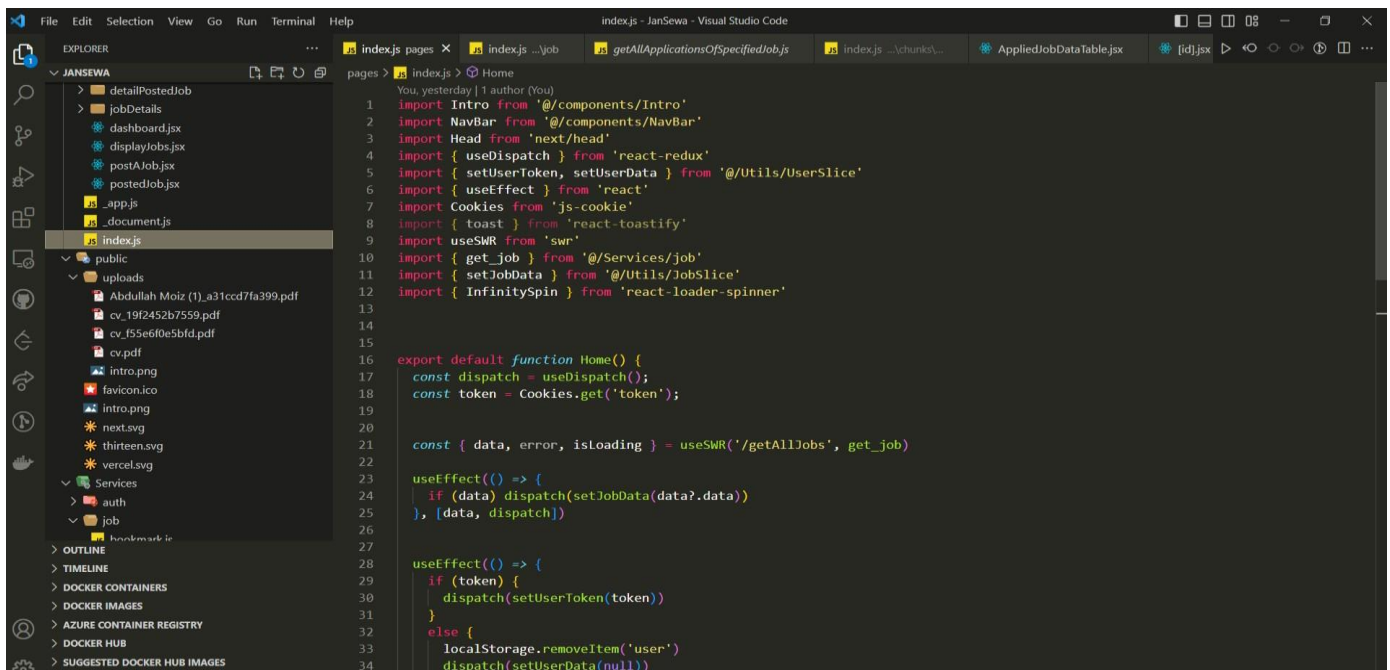
dashboard.jsx File Content:

```

1  import AppliedJobDataTable from '@components/AppliedJobDataTable'
2  import NavBar from '@components/NavBar'
3  import SavedJobDataTable from '@components/SavedJobDataTable'
4  import { get_my_applied_job } from '@Services/job'
5  import { get_book_mark_job } from '@Services/job/bookmark'
6  import { setAppliedJob, setBookMark } from '@Utils/AppliedJobSlice'
7  import Cookies from 'js-cookie'
8  import { useRouter } from 'next/router'
9  import React, { useEffect, useState } from 'react'
10 import { BsFillBookmarkStarfill } from 'react-icons/bs'
11 import { GSuitcase } from 'react-icons/gi'
12 import { Infinityspin } from 'react-loader-spinner'
13 import { useDispatch, useSelector } from 'react-redux'
14
15
16
17
18 export default function Dashboard() {
19   const [showTable, setShowTable] = useState('appliedJobs')
20   const [loading, setLoading] = useState(true)
21   const router = useRouter();
22   const dispatch = useDispatch();
23
24   const activeUser = useSelector(state => state?.User?.userData)
25   const id = activeUser?._id
26
27   useEffect(() => {
28     if (!id || !Cookies.get('token')) {
29       router.push('/auth/login')
30     }
31   }, [activeUser, id, Cookies])

```

3. **Review system:** I was responsible for developing and implementing a review system to allow users to rate and review job postings and organizations on the website.
4. **Authentication:** I was responsible for implementing authentication and authorization mechanisms to ensure that only authorized users can access certain parts of the website.
5. **Component development:** I was responsible for developing and implementing backend components using technologies such as Node.js and MongoDB. This may include components such as user profiles, job postings, and organizations.
6. **Middleware development:** I was responsible for developing middleware functions to handle common tasks such as error handling, request validation, and data sanitization.



2. Backed Developer: Aalok Singh Tanwar 20BCG10044

As a backend developer at JanSewa, My responsibilities for the job-seeking and job-giving website built on the MERN stack were:

1. **Collaborating with the Development Team:** To integrate the front with the backend built on technologies such as Node.js, MongoDB, and SWR hooks for fetching API.
2. **Developing and implementing React components:** Using JSX and other frontend libraries to create a dynamic and responsive user interface.
3. **Utility development:** I was for developing utility functions that can be used across the backend codebase, such as date formatting and email validation.
4. **Testing and debugging:** I thoroughly tested the backend codebase to ensure that it is functioning as expected and identify and fix any issues or bugs.

AppliedJobSlice.js - JanSewa - Visual Studio Code

EXPLORER

- JANSEWA
 - cv_19f2452b7559.pdf
 - cv_f55e6f0e5bfd.pdf
 - cv.pdf
 - intro.png
 - intro.png
 - next.svg
 - thirteen.svg
 - vercel.svg
 - Services
 - auth
 - job
 - bookmark.js
 - index.js
 - hilo.js
 - Store
 - store.js
 - styles
 - globals.css
 - Utils
 - AppliedJobSlice.js
 - JobSlice.js
 - UserSlice.js
 - .env

AppliedJobSlice.js

```
1 import { createSlice } from '@reduxjs/toolkit'
2
3 const initialState = {
4   appliedJob : [],
5   bookMark : [],
6 }
7
8 export const appliedJobSlice = createSlice({
9   name: 'AppliedJob',
10  initialState,
11  reducers: {
12    setAppliedJob : (state, action) => {
13      state.appliedJob = action.payload
14    },
15    setBookMark : (state, action) => {
16      state.bookMark = action.payload
17    },
18  },
19 })
20
21 // Action creators are generated for each case reducer function
22 export const { setAppliedJob, setBookMark } = appliedJobSlice.actions
23
24 export const AppliedJobReducer = appliedJobSlice.reducer
```

postAJob.js - JanSewa - Visual Studio Code

EXPLORER

- JANSEWA
 - getSpecifiedJobs.js
 - postAJob.js
 - responseOfApplication.js
 - auth
 - frontend
 - applicationDetail
 - applyJob
 - detailPostedJob
 - jobDetails
 - dashboard.jsx
 - displayJobs.jsx
 - postAJob.jsx
 - postedJob.jsx
 - _app.js
 - _document.js
 - index.js
 - public
 - uploads
 - Abdullah Moiz (1)_a31ccd7fa399.pdf
 - cv_19f2452b7559.pdf
 - cv_f55e6f0e5bfd.pdf
 - cv.pdf
 - intro.png
 - favicon.ico

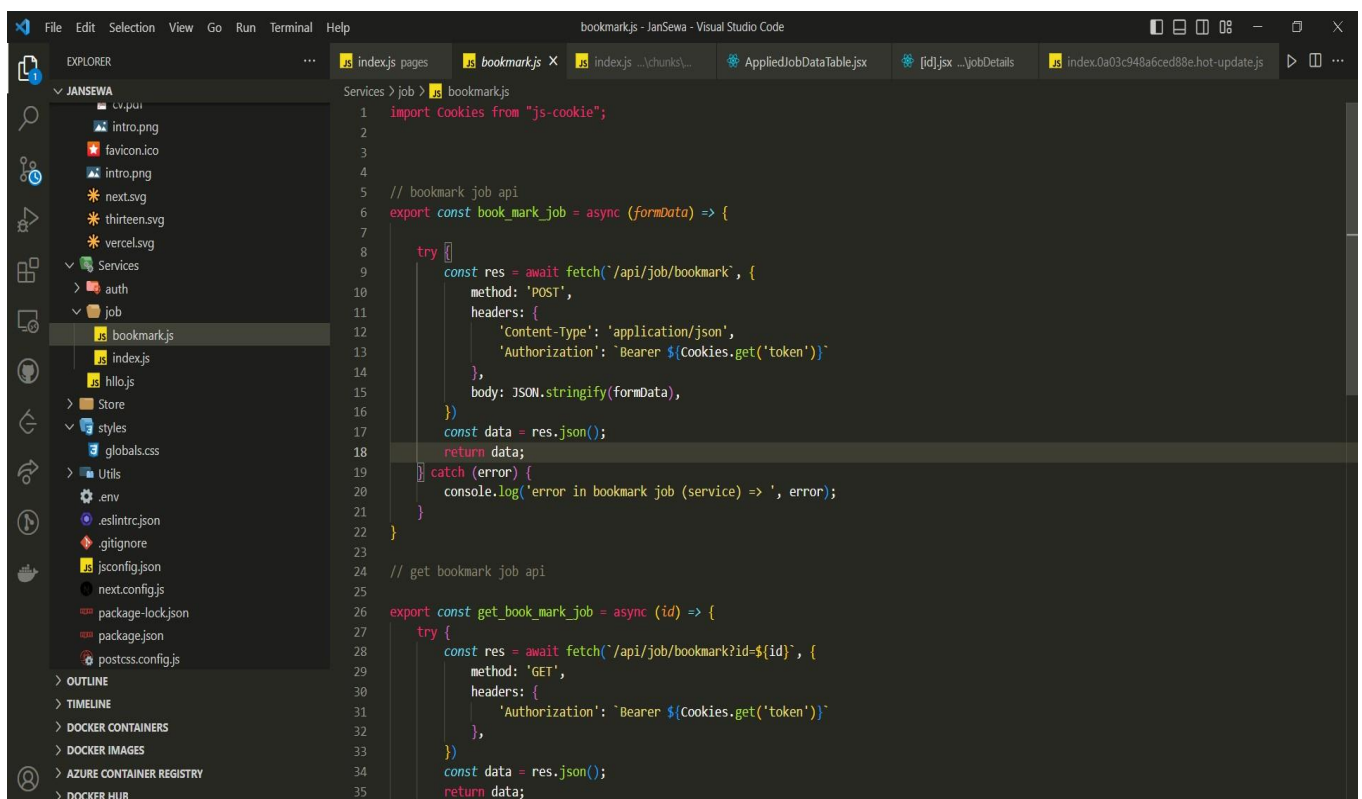
postAJob.js

```
1 import ConnectDB from '@/DB/connectDB';
2 import validateToken from '@/middleware/tokenValidation';
3 import Job from '@/models/Job';
4 import Joi from 'joi';
5
6
7 const schema = Joi.object({
8   title: Joi.string().required(),
9   description: Joi.string().required(),
10  user: Joi.required(),
11  email: Joi.string().email().required(),
12  company: Joi.string().required(),
13  job_category: Joi.string().required(),
14  job_type: Joi.string().required(),
15  job_experience: Joi.string().required(),
16  job_vacancy: Joi.number().required(),
17  job_deadline: Joi.date().required(),
18  salary: Joi.number().required(),
19 });
20
21
22 export default async (req, res) => {
23   await ConnectDB();
24   const { method } = req;
25   switch (method) {
26     case 'POST':
27       await validateToken(req, res, async () => {
28         await postAJob(req, res);
29       });
30       break;
31     default:
32       res.status(400).json({ success: false, message: 'Invalid Request' });
33   }
34 }
```


3. Backend Developer: Akshat Sharma 20BCE10827

As a backend developer at JanSewa, My responsibilities for the job-seeking and job-giving website built on the MERN stack were:

1. Implementing *joi* validation to ensure that data entered by users is valid and secure.
2. Developing backend components such as user profiles, job postings, and organizations using Node.js and MongoDB.
3. Developing middleware functions to handle common tasks such as error handling, request validation, and data sanitization.
4. Developing utility functions that can be used across the codebase, such as date formatting and email validation.



3. Database Team

1. Database Developer: Aalok Singh Tanwar 20BCG10044

As a database developer in JanSewa, My responsibilities were:

1. **Designing and implementing the database schema:** I was responsible for designing and implementing the database schema using MongoDB.
2. **Implementing database queries and APIs:** I was responsible for implementing efficient and optimized database queries and APIs using Mongoose, a MongoDB object modeling tool.
3. **Managing database performance and scalability:** I was responsible for monitoring and managing database performance and scalability, including optimizing database queries, managing indexes, and implementing caching techniques to improve website performance.

```
1 import ConnectDB from '@/DB/connectDB';
2 import validateToken from '@/middleware/tokenValidation';
3 import AppliedJob from '@/models/ApplyJob';
4
5
6
7
8 export default async (req, res) => {
9   await ConnectDB();
10  const { method } = req;
11  switch (method) {
12    case 'GET':
13      await validateToken(req, res, async () => {
14        await getAllApplicationsOfSpecifiedJob(req, res);
15      });
16      break;
17    default:
18      res.status(400).json({ success: false, message: 'Invalid Request' });
19  }
20 }
21
22 const getAllApplicationsOfSpecifiedJob = async (req, res) => {
23   await ConnectDB();
24   const data = req.query;
25   const id = data?.id
26
27   if(!id) return res.status(400).json({ success: false, message: "Please Login" })
28
29   try {
30     const gettingjobs = await AppliedJob.find({job : id}).populate('user');
31     return res.status(200).json({ success: true, data: gettingjobs })
32   } catch (error) {
33     console.log('Error in getting a specified Job job (server) => ', error);
34     return res.status(403).json({ success: false, message: "Something Went Wrong Please Retry login !" })
35   }
```

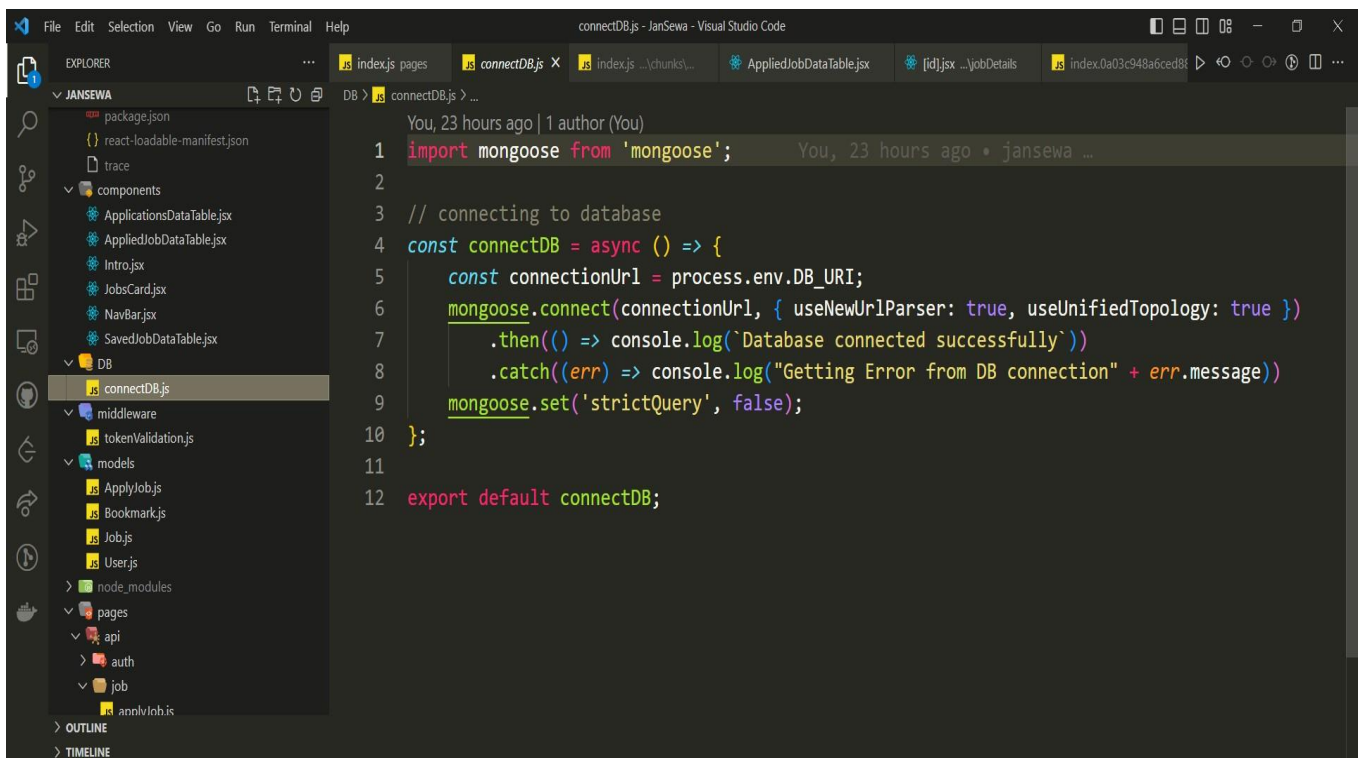
2. Database Developer: Shrey Srivastava 20BCE10601

As a database developer in JanSewa, My responsibilities were:

1. **Ensuring database security:** I was responsible for ensuring the security of the database, including implementing authentication and authorization mechanisms, as well as implementing encryption and hashing techniques to protect sensitive user data.
2. **Collaborating with the backend and frontend teams:** I was worked closely with the backend and frontend development teams to ensure that the database is integrated correctly with the server and the frontend.

```
1 import ConnectDB from '@/DB/connectDB';
2 import validateToken from '@/middleware/tokenValidation';
3 import AppliedJob from '@/models/ApplyJob';
4
5
6
7
8 export default async (req, res) => {
9   await ConnectDB();
10  const { method } = req;
11  switch (method) {
12    case 'GET':
13      await validateToken(req, res, async () => {
14        await getAllApplicationsOfSpecifiedJob(req, res);
15      });
16      break;
17    default:
18      res.status(400).json({ success: false, message: 'Invalid Request' });
19  }
20 }
21
22 const getAllApplicationsOfSpecifiedJob = async (req, res) => {
23   await ConnectDB();
24   const data = req.query;
25   const id = data?.id
26
27   if(!id) return res.status(400).json({ success: false, message: "Please Login" })
28
29   try {
30     const gettingjobs = await AppliedJob.find({job : id}).populate('user');
31     return res.status(200).json({ success: true, data: gettingjobs })
32   } catch (error) {
33     console.log('Error in getting a specified Job job (server) => ', error);
34     return res.status(403).json({ success: false, message: "Something Went Wrong Please Retry login !" })
35   }
```

3. You should keep up with emerging trends and technologies in database development and incorporate them into the website when appropriate.



```
1 import mongoose from 'mongoose';
2
3 // connecting to database
4 const connectDB = async () => {
5   const connectionUrl = process.env.DB_URI;
6   mongoose.connect(connectionUrl, { useNewUrlParser: true, useUnifiedTopology: true })
7     .then(() => console.log('Database connected successfully'))
8     .catch((err) => console.log("Getting Error from DB connection" + err.message))
9   mongoose.set('strictQuery', false);
10 };
11
12 export default connectDB;
```

5.CONCLUSION:

JanSewa portal is a solution that aims to bridge the gap between job seekers and job providers, providing equal employment opportunities for all. The portal leverages technology to make the job searching process hassle-free for job seekers while also supporting the local economy. JanSewa's success will be measured by the number of job seekers who successfully find employment through the platform and the positive impact it creates on the local community. The portal offers a win-win situation for both job seekers and job providers, enabling a more efficient and transparent job market. Through this solution, we hope to uplift the labour class and promote equality in society.

The JanSewa project aims to provide a ray of hope for the countless impoverished labourers who are either jobless or subjected to meagre wages for excessive work. The initiative strives to enable these labourers to earn their livelihood with respect and honour.

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