

**SOUTHWESTERN STATE COLLEGE**  
**TRIBHUVAN UNIVERSITY**  
**FACULTY OF HUMANITIES AND SCIENCE**



**A Project Report on**  
**JOBSPACE: An Online Job Portal**

*Submitted to*

**Department of Computer of Application**

**SWSC - Basundhara, Kathmandu**

*In partial fulfillment of the requirements for the Bachelor in Computer Application*

*Submitted by:*

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**SOUTHWESTERN STATE COLLEGE**  
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**SUPERVISOR'S RECOMMENDATION**

We hereby recommend that this project is prepared by Arbeen Timilsina and Shisham Poudel under supervision by Mr. Kiran Ghimire entitled “**JOBSPACE**” in partial fulfillment of the requirements for the degree of Bachelor of Computer Application be processed for the evaluation.

-----  
**Mr. Kiran Ghimire**

**Supervisor**

**Head of Department of BCA**

**Southwestern State College**

## LETTER OF APPROVAL

This is to certify that this project is prepared by Arbeen Timilsina (5-20-530-05-2020) and Shisham Poudel (5-20-530-30-2020) entitled “**JOBSPACE**” in partial fulfillment of the requirements for the degree of Bachelor in Computer Application has been evaluated. In our opinion it is satisfactory in the scope and quality as a project for the required degree.

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**Project Supervisor**  
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## ACKNOWLEDGMENT

This is an attempt to present project entitled “**JOBSPACE**” prepared for partial fulfillment of the requirement for the Degree of Bachelor in computer application (BCA) is an outcome of continuous and immeasurable cooperation and support of several hands. I would like to express my heartfelt gratitude to all for their support.

I express my sincere honor and special sense of gratitude to my academic supervision, **Mr. Kiran Ghimire**. I would also like to thank all lecturer and friends for their generous guidance, thoughtful encouragement and brilliant insight throughout this work.

## ABSTRACT

Jobspace service was developed for creating an interactive job vacancy form for candidates. This web application manages update both from the job seekers as well as the companies. It's unique development methodology helps in acquiring the client and candidate information and separating them according to the job requirements and vacancies.

The online access to it provides details of the job. An employer being registered in the web site has the facility to use the services. Being an authorized user, he can publish vacancy details and can search number of Employees on portal and also, he can search candidates on basis of the key skill which employee provides on registration.

***Keywords:*** *candidates, companies, development methodology, job, job requirements, vacancies, etc.*

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## **LIST OF ABBREVIATIONS**

<b>CSS:</b>	Cascading Style Sheet
<b>CV:</b>	Curriculum Vitae
<b>DFD:</b>	Data Flow Diagram
<b>ER:</b>	Entity Relationship
<b>HTML:</b>	Hypertext Markup Language
<b>OS:</b>	Operating system
<b>PHP:</b>	Hypertext Preprocessor
<b>SQL:</b>	Structured Query Language
<b>UI:</b>	User Interface
<b>AI:</b>	Artificial Intelligence

# CHAPTER 1: INTRODUCTION

## 1.1. Introduction

The job market is constantly changing, and as technology has developed, the job search procedure has also advanced. An online job portal project is a web-based platform that allows job seekers to search for job opportunities and employers to post job vacancies. This project aims to bridge the gap between job seekers and employers by providing a common platform where they can easily connect and fulfill their requirements. Online job portals have become increasingly popular in recent years, as more and more people turn to the internet to find employment opportunities.

There are several benefits of online job portals for both job seekers and employers. For job seekers, online job portals provide a convenient and efficient way to search for job opportunities. They can browse job listings, filter job listings by industry, location, salary, and other criteria, and apply for job openings, all through the convenience of their own computer or mobile device.

For employers or companies, online job portals can be a cost-effective way to reach a large pool of qualified candidates quickly and efficiently. They can post job openings on these portals and then search for and review applications from interested candidates. This enables employers to easily manage job postings, track applicant data, and communicate with potential hires.

The future of online job portals is bright, and they are expected to continue to grow and evolve in the years to come. One of the key trends in the future of online job portals is the use of Artificial Intelligence (AI) and Machine Learning. AI can help to automate the hiring process, making it more efficient and effective. AI can also help to improve the matching of job seekers with job openings, ensuring that candidates are matched with jobs that fit their skills and experience.

## 1.2. Objective

The objectives of the project are as follows:

- ❖ To create a platform where job seekers can easily find their respective jobs.
- ❖ To act as a bridge between job seekers and employers.

### 1.3. Problem Statement

The world has become more competitive, and the job market has gotten more difficult. With the increase in unemployment, job seekers are having difficulty finding suitable job prospects. Traditional methods of job searching, such as classified advertising, job fairs, and word-of-mouth, can be time-consuming and inefficient.

### 1.4. Scope and Limitations

#### 1.4.1. Scope

The goal of this project is to reach the people who are seeking for job based on their skills and the companies; who are searching for manpower for the growth and development of their company. Job portals provide employers with a cost-effective and efficient way to advertise job openings. It can save time and resources for both job seekers and employers. User can find the jobs within a couple of seconds and applying process is going to be super easy. The portal will include tools for creating and uploading resumes or CVs, as well as sophisticated search and filtering capabilities. This project's primary aim is to develop a user-friendly and efficient job portal that simplifies the job search process for both job seekers and employers.

#### 1.4.2. Limitations

New users or jobs with limited interactions may lack accurate recommendations initially, which could reduce the relevance of suggestions in early use. The recommendation engine requires frequent database queries, which may strain resources or slow response times if not optimized, especially at scale.

## 1.5 Development Methodology

I'm using Waterfall Model for this project as it is applicable for small scale applications and is very easy to use as well. This web application is developed step by step based on the Waterfall Model's principles.

### Waterfall model

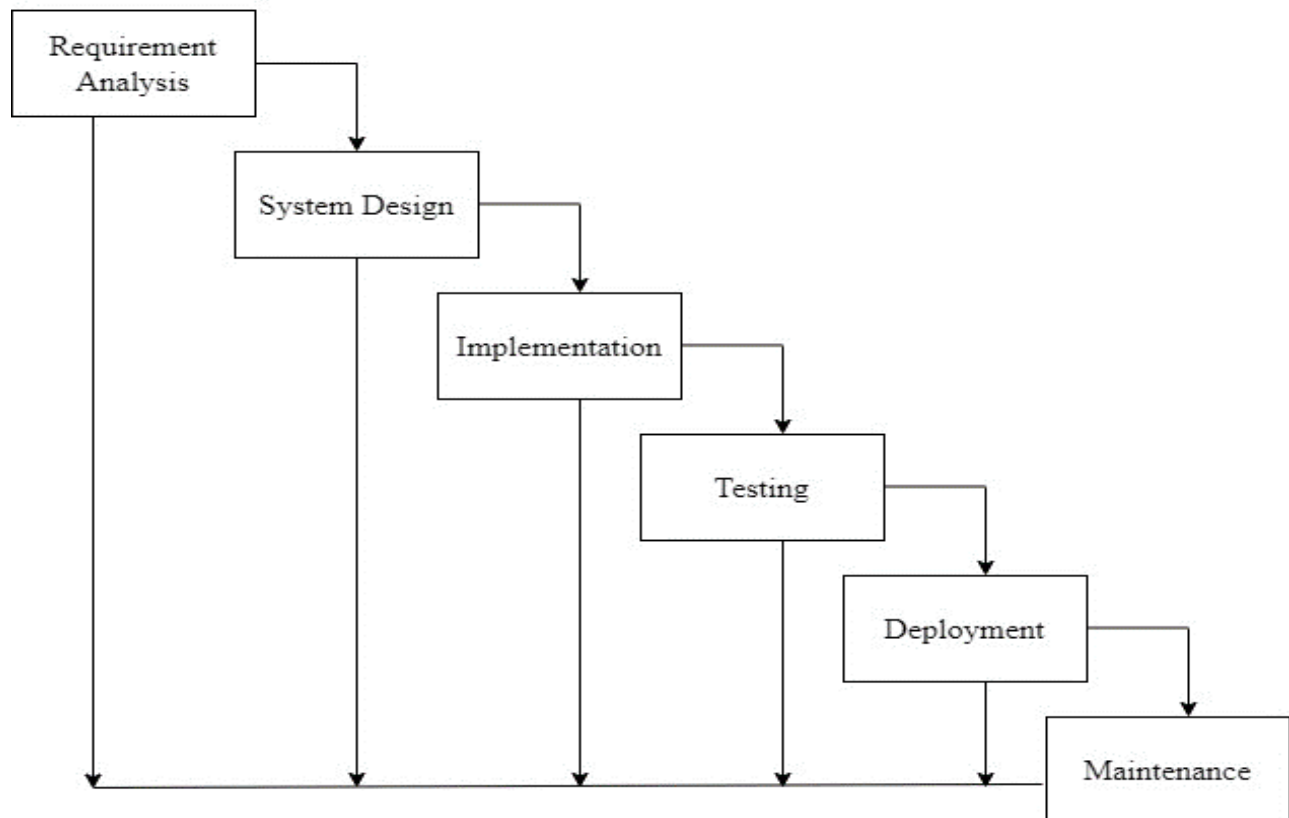


Figure 1: Use case diagram

## 1.6. Report Organization

### Chapter 1

This chapter has the following sections: Introduction, Problem Statement, Objectives and Scope. Here, job seekers can easily explore new opportunities and employers can effortlessly post job openings – that's precisely what this project is all about. It aims to bridge the gap between these two groups, making it simple for job seekers to discover positions that match their skills and for employers to find their next great hire. In a world where job hunting can be tough and time-consuming, especially through traditional methods, this system steps in to simplify the process, saving everyone precious time and resources. Therefore, a clear idea of what the system aims to achieve is also provide here.

### Chapter 2

This chapter is composed of the background studies done on online job portal which highlights the challenges faced by it and offers recommendations for improvement. It also encompasses the literature review of the similar projects and researches done by other researchers as well as about the existing system.

### Chapter 3

This chapter covers the Analysis bit of the report which includes the System Analysis, covering Requirement analysis and Feasibility analysis. Requirements have been subdivided into functional and non-functional requirements where the Feasibility study covers the Technical, Economic, and Operational feasibility of the system as well as the Schedule. It includes the Er-diagram and DFD which is use for conceptual design of the system and the flow of data. Moreover, system design includes architectural design, database schema design, and interface design where User interface design focuses on the communication between users and computers, including starting the system, logging in, and displaying desired inputs and outputs.

## Chapter 4

This chapter contains implementation and testing. The implementation phase covering tools used such as waterfall model because the requirement is already known. Others are laragon, visual studio code, snipping tool etc. and modules like registration, admin, jobseeker, company, search job and so on. For testing, we have tested login and register form of the system all the part are successful executed in the system and run effectively and manually by system.

## Chapter 5

This chapter contains the conclusion and future recommendation for the system to make it reliable and enhanced for future use.

## **CHAPTER 2: BACKGROUND STUDY AND LITERATURE REVIEW**

### **2.1. Literature Review**

A job portal is a website that connects job applicants and employers. With the growing use of the internet, job portals have become a popular way for people to find and apply for jobs. In this review, we will look at the research and literature on job portals and their impact on the employment market.

Existing Systems:

#### **i. JobAxle.com**

JobAxle.com is a platform for career development and recruitment that matches "right jobs" and "right people." After doing a thorough analysis of the job market, Tech Axis Pvt Ltd founded Job Axle in 2018, with the goal of offering the best options for hiring and career development.

With its user-friendly and resourceful website jobaxle.com, JobAxle aims to advance the recruiting process. JobAxle respects the unique needs of Employers, Freelancers, Senior Job Seekers, and Freshers.

It works diligently to meet the diverse needs of each individual. To give job seekers individualized job recommendations, JobAxle features a distinct page for IT and Non-IT Jobs.

JobAxle uses sophisticated search algorithms to give job seekers and employers a smooth experience [1].

Some of the disadvantages of the JobAxle.com are listed below:

- ❖ Poor UI design
- ❖ A site with No job listing
- ❖ Not particularly a job portal but a mixture of all stuff



## ii. Kantipurjob.com

Kantipurjob.com is the continuously updated online job site in Nepal where you can post job, vacancies and requirements for free. The company [Operated by Kantipur Management Private Limited] has been providing Human Resource Management and related solutions to organizations across the country since 2012.

Serving the users with services like HR Consulting, Staffing, E-recruitment, Business Process Outsourcing, Training and Development, Kantipurjob has all the things a job portal should have but still has some limitations. [2]

Some of the disadvantages of Kantipurjob.com are as follows:

- ❖ Very Less Jobs Listing
- ❖ Too many confusing stuffs
- ❖ Very Less Engagement

## iii. Easyjoblink.com.np

Easy Job Link is a one stop recruitment solution for all our occupational needs. With the sole objectives of playing a vital intermediary role between job seekers and employers, since their establishment in 2008, they have been catering services of high standards in bridging gaps between job seekers and job employers.

EasyJobLink work as a catalyst to prepare the raw human resources into a competent workforce and supply to the job market. They also cater the need of various organizations through outsourcing, head hunting and direct recruitment. [3]

But this all are limited to words only. This site doesn't have anything at all. For example:

- ❖ There is not a single posted job
- ❖ The Navigation bar is not designed well.
- ❖ Hardly 5 categories available.

## 2.2. Background Study

Job portal sites often face certain challenges and limitations that can impact the user experience. One of the main concerns is the lack of accuracy and relevance in job listings. Users may come across outdated or irrelevant job postings, which can be frustrating and time-consuming. Another common issue is the limited range of job opportunities available on these portals. This can be discouraging for job seekers who are looking for a wider variety of options to explore.

Another problem is the slow response times from employers. Job seekers may submit applications or inquiries and wait for extended periods without receiving any feedback [4]. This lack of timely communication can create uncertainty and hinder the job search process.

Customer service is another area that requires improvement. Users often face difficulties or have questions about using the portal effectively, but the available support may be limited or not responsive enough. This can leave users feeling unsupported and hinder their ability to navigate the platform successfully.

Furthermore, some job portals require users to pay for premium features, which can limit access to valuable resources and functionalities. This can be a barrier for job seekers who may not have the financial means to avail such features.

To address these issues, job portals should prioritize the accuracy and relevance of job listings. Regularly updating the listings and implementing quality control measures can help ensure that users are presented with current and suitable opportunities. Expanding the pool of job opportunities by partnering with more employers and organizations can also enhance the variety and availability of positions.

Improving response times from employers is crucial for a positive user experience. Encouraging prompt and regular communication between employers and job seekers can reduce uncertainty and enhance the overall efficiency of the job application process.

Lastly, job portals should consider exploring alternative monetization models rather than relying solely on premium features. This can ensure that essential resources and functionalities are accessible to a wider range of users, regardless of their financial constraints.

By addressing these challenges and limitations, job portals can humanize the job search process, offering users a more accurate, relevant, and supportive platform to find suitable job opportunities and enhance their career prospects [4].

## **CHAPTER 3: SYSTEM ANALYSIS AND DESIGN**

### **3.1. System Analysis**

The project will be explained using dataflow diagrams, flowcharts, use-case diagrams, connection and entity diagrams, and so on.

#### **3.1.1. Requirement Analysis**

##### **3.1.1.1. Functional Requirement**

- ❖ Jobseeker shall login to the system
- ❖ Jobseeker shall register to the system
- ❖ Company shall login to the system
- ❖ Company shall register to the system
- ❖ Admin shall login to the system
- ❖ Admin shall register to the system
- ❖ Jobseeker shall be able to view the jobs
- ❖ Jobseeker shall be able to upload their CV/Resume
- ❖ Jobseeker shall be able to search the jobs.
- ❖ Jobseeker shall be able to apply for the job
- ❖ Jobseeker shall be able to view the applied jobs
- ❖ Company shall be able to view the applied jobs
- ❖ Company shall view the CV/Resume uploaded by Jobseeker
- ❖ Company shall view if their posted jobs have been applied
- ❖ Admin shall approve or reject the company
- ❖ Company and Jobseeker shall edit their profile

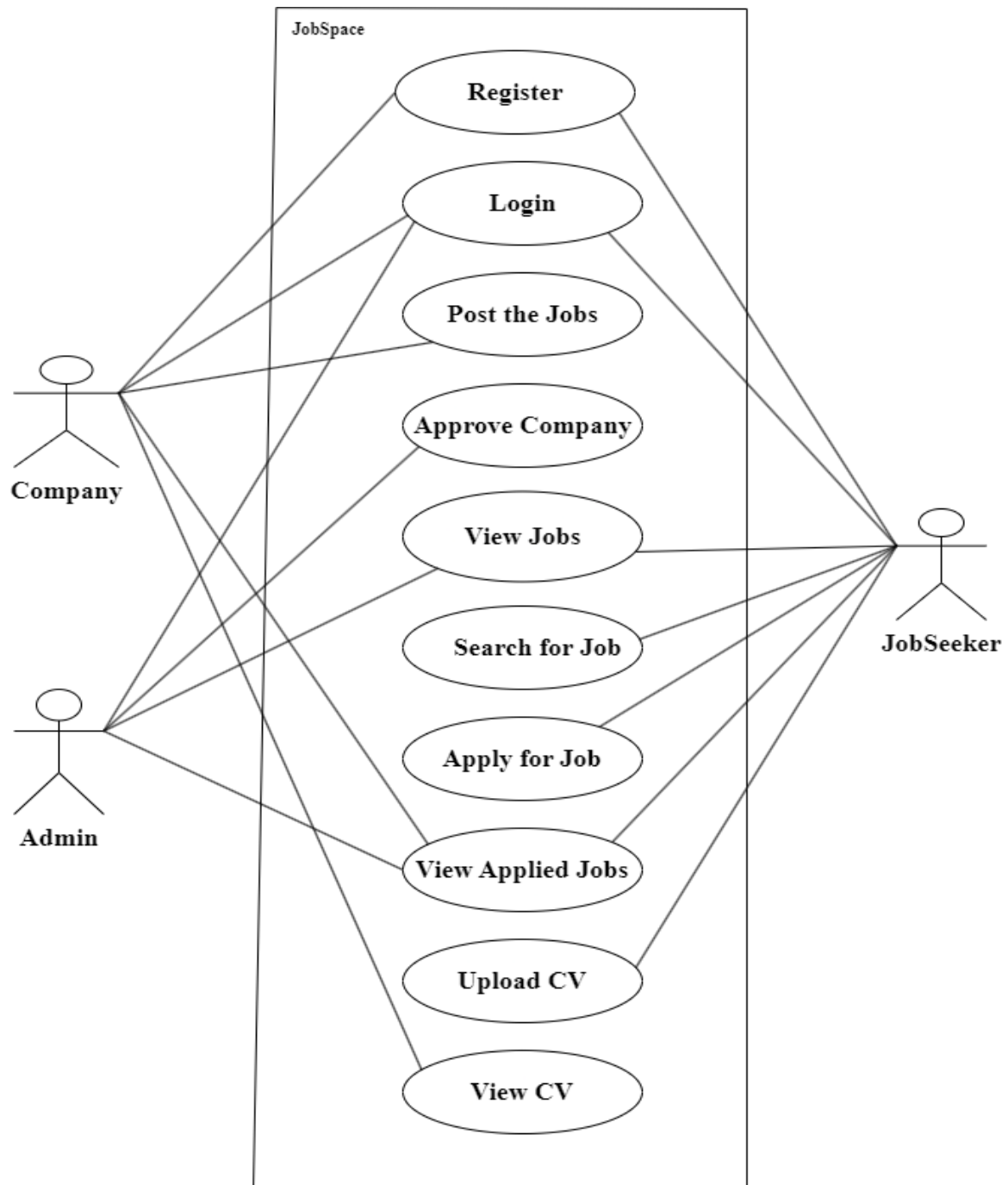


Figure 2: Use case diagram

#### 3.1.1.2. Non-functional Requirement

- ❖ The system must have an intuitive UI.
- ❖ The system must have a good response.
- ❖ The system must be compatible with different systems and devices
- ❖ The system must be maintainable with clear documentation

#### 3.1.2. Feasibility Analysis

##### 3.1.2.1. Technical Feasibility

This project was developed within Intel Core i3 2.0 GHz, 2GB RAM and windows 10 OS. So that it can support every user's device.

##### 3.1.2.2. Operational Feasibility

Once the registration is completed you can login and search for jobs easily and can apply directly. The developed system is easy to use and simple guidelines is enough to be able to operate the system as well as it is easy to maintain.

##### 3.1.2.3. Economic Feasibility

The project can be developed in a very cost-effective way because the project would be using open-source software like JS and PHP which are available free online. The system doesn't have to pay for premium features.

#### 3.1.2.4. Schedule Feasibility

It includes the total time period for the completion of the project.

Gantt chart was used for scheduling the time for this project.

Week/ Progress	1	2	3	4	5	6	7	8	9	10	11	12	13
Study and Decision													
Design													
Core Program Code													
Check Program													
Test Program													
Conclude													

Figure 3: Gantt chart

### 3.1.3. Data Modeling

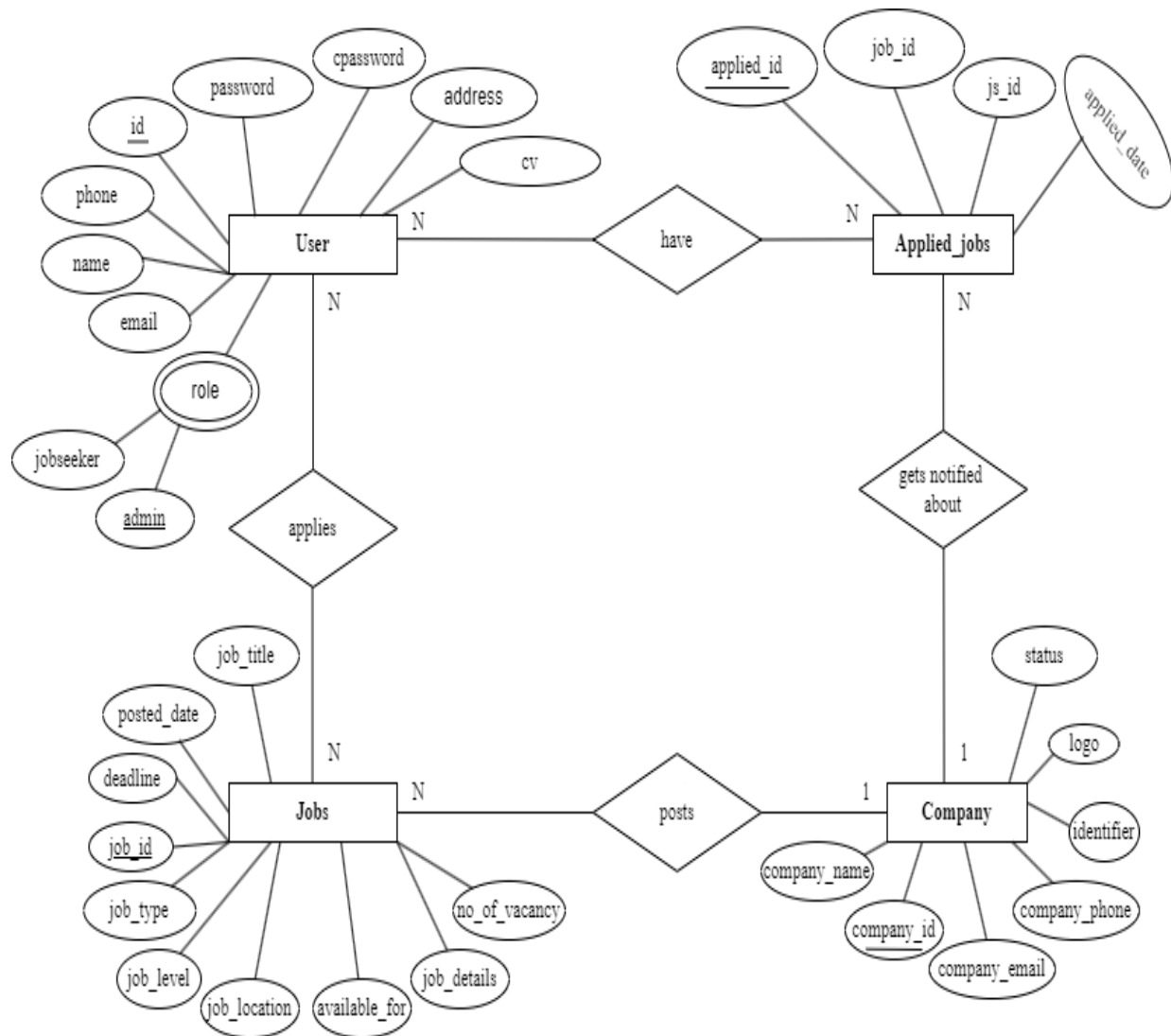


Figure 4: Er-diagram



### 3.1.4. Process Modeling

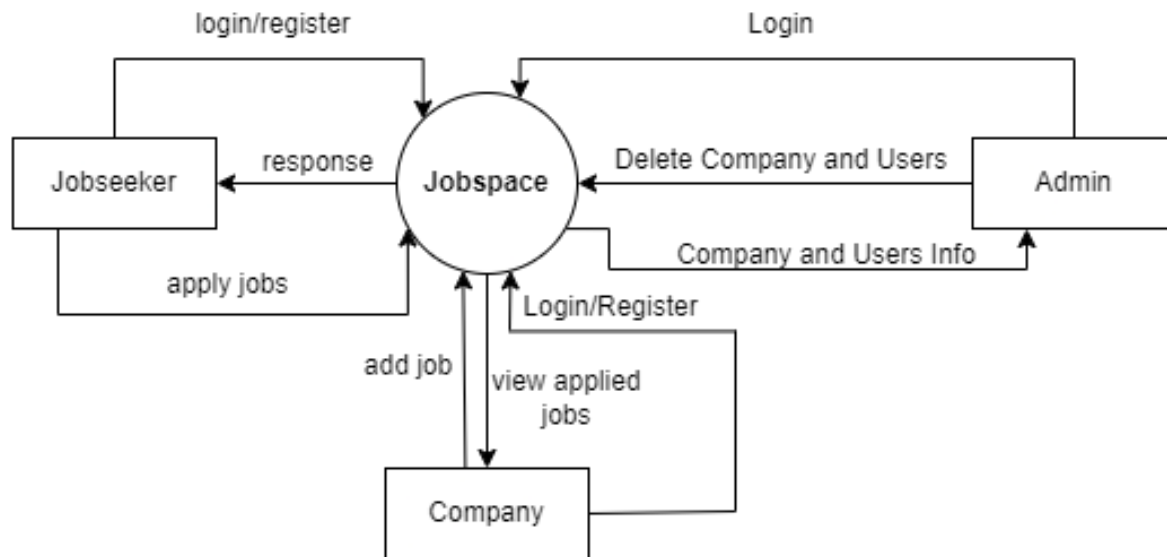


Figure 5: Level 0 DFD

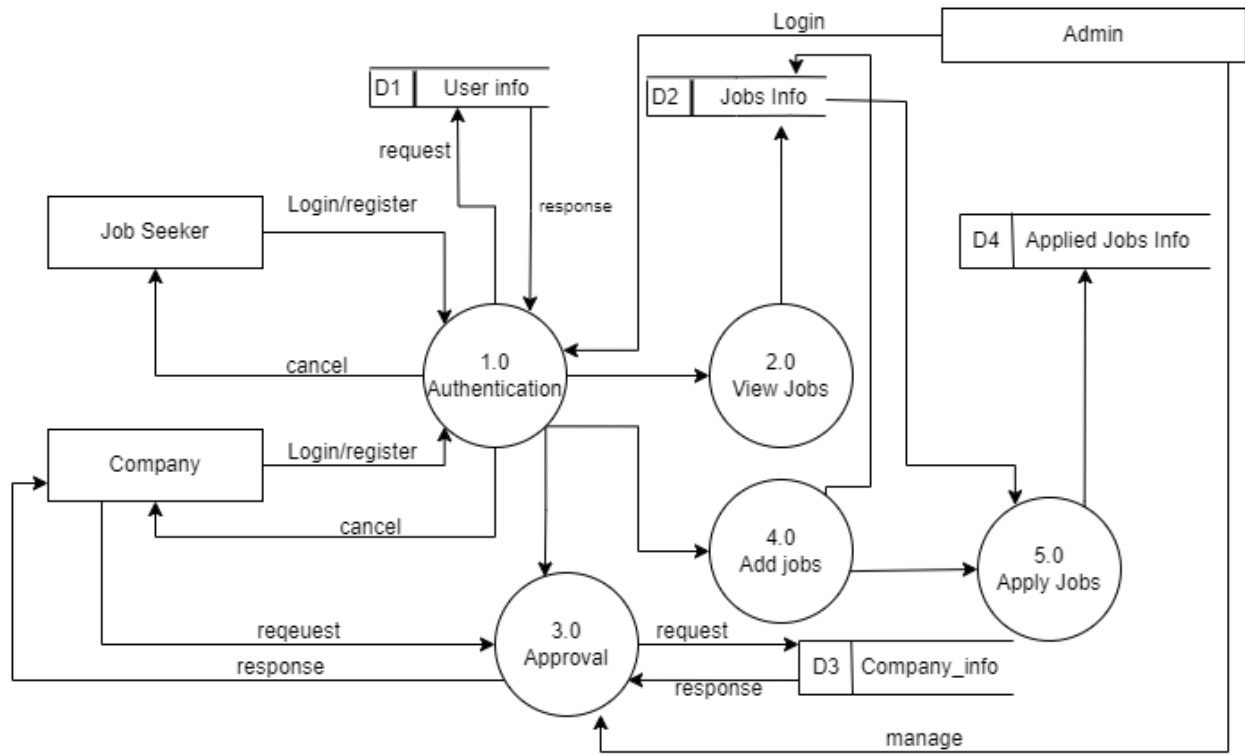


Figure 6: Level 1 DFD

## 3.2. System Design

### 3.2.1. Architectural Design

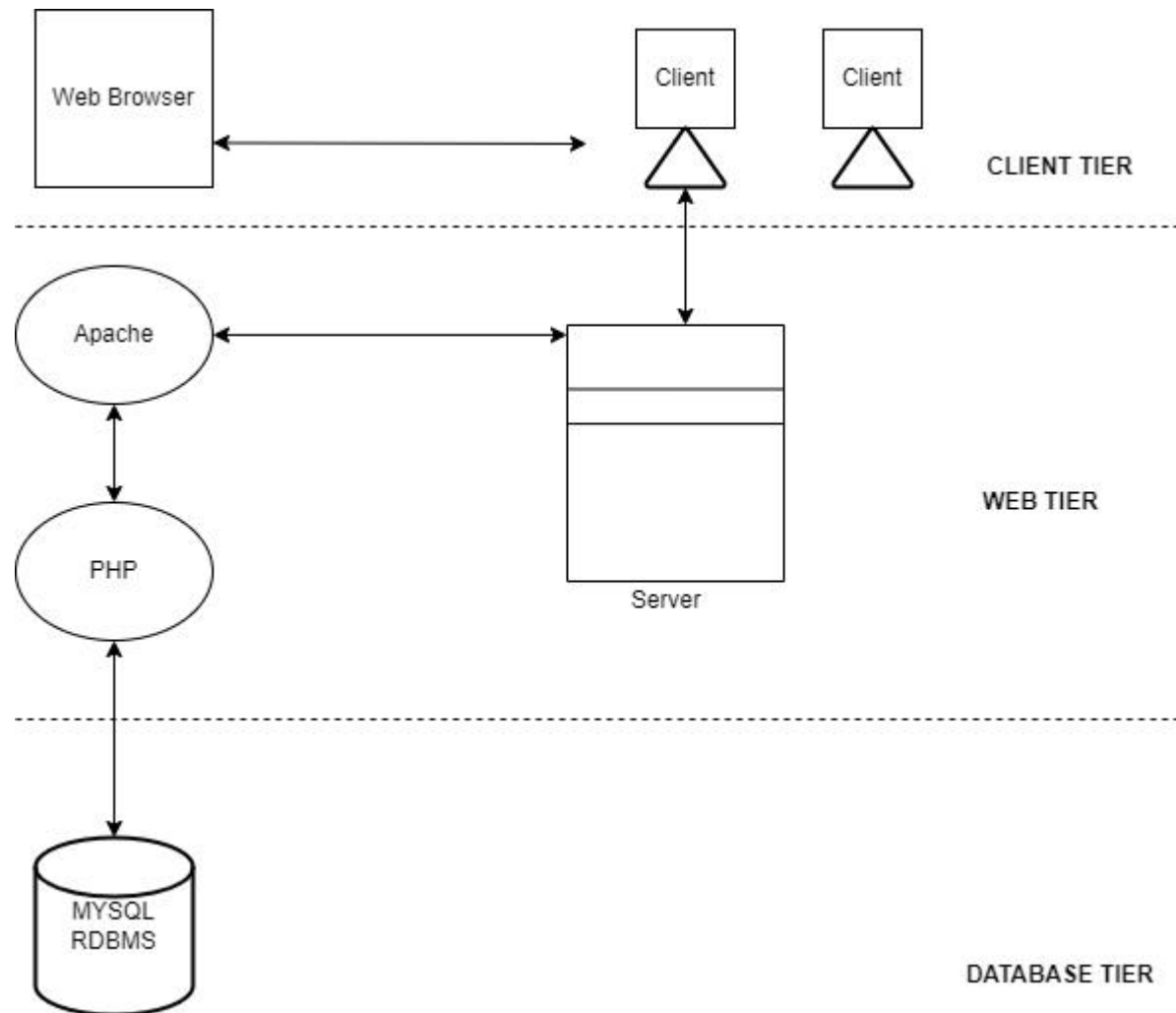


Figure 7: Architectural design

### 3.2.2. Design Database Schema

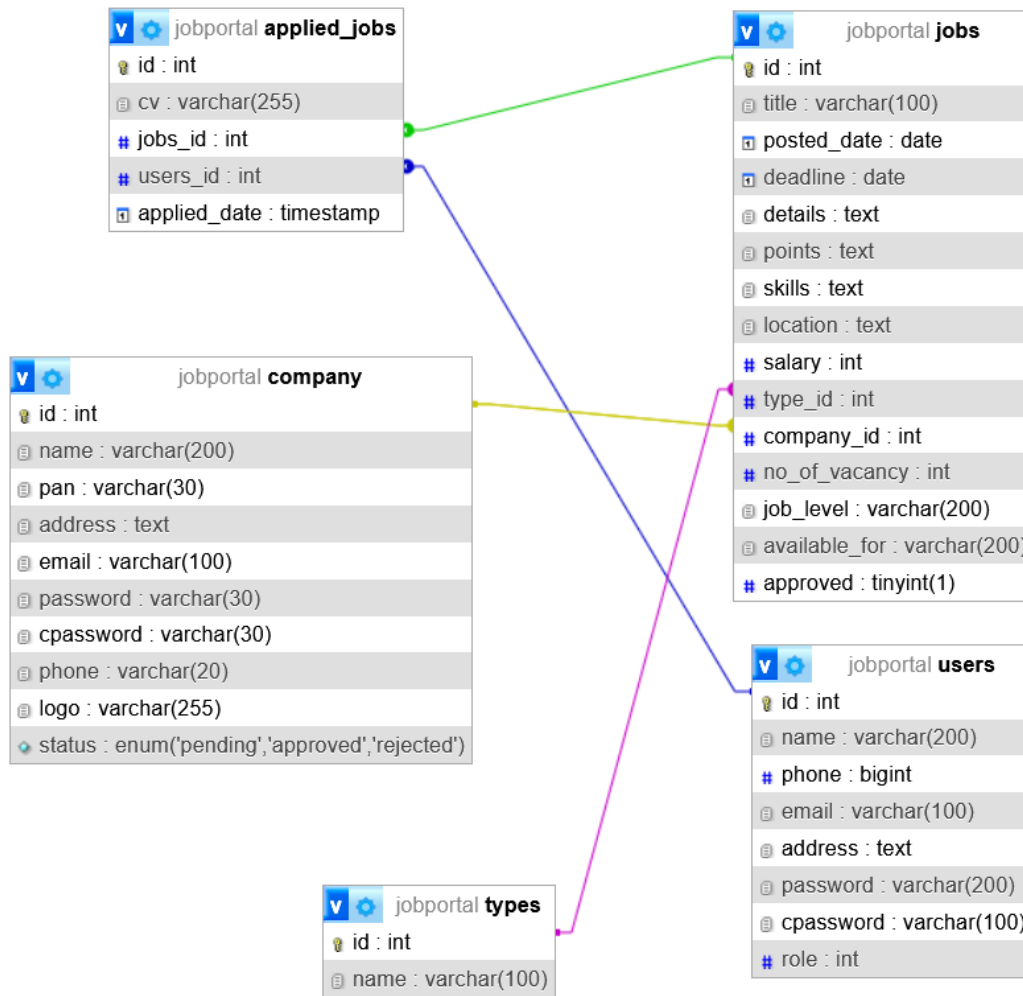
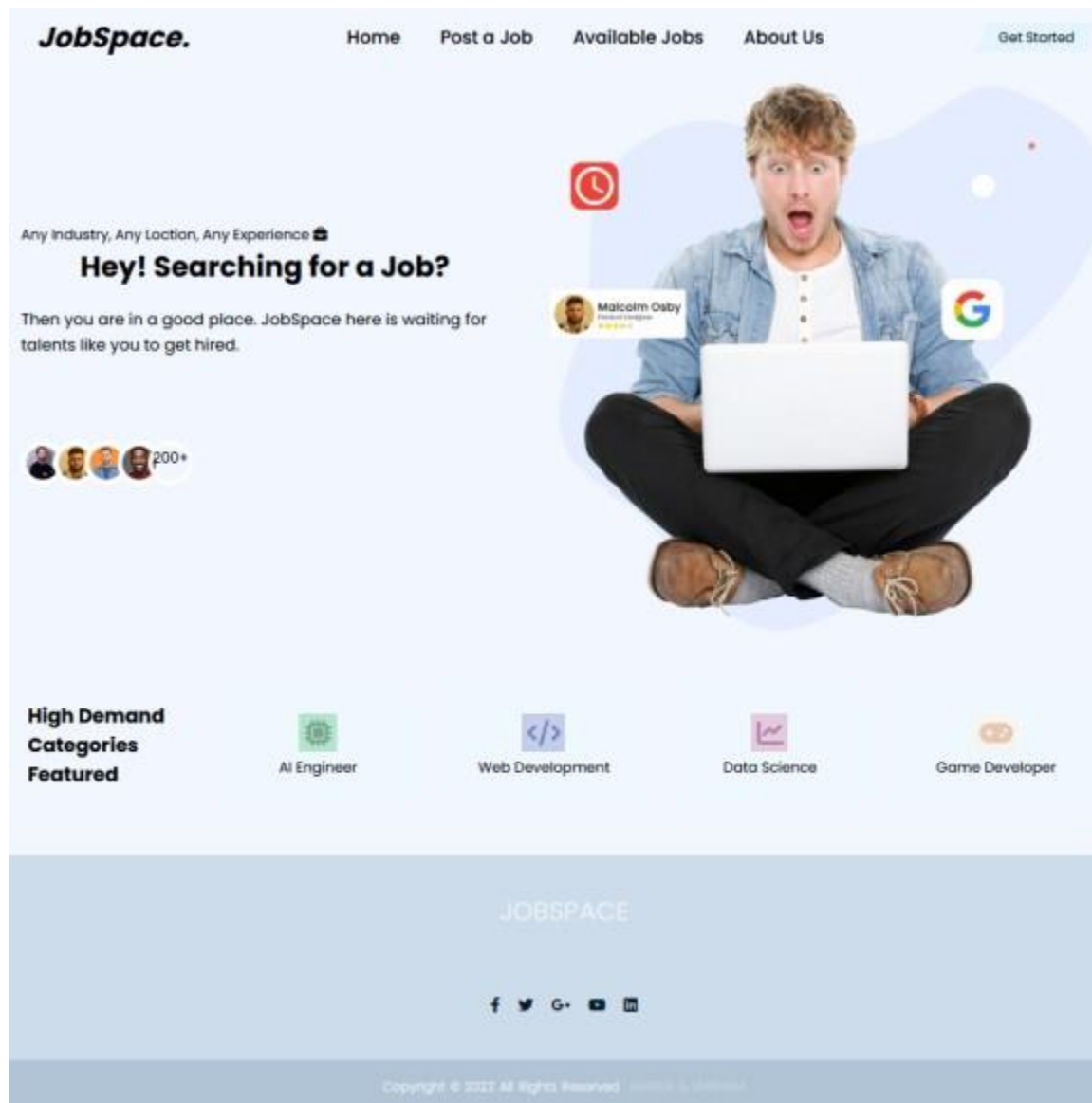


Figure 8: Database schema

### 3.2.3. Interface Design



### 3.3. Algorithm Details

#### 3.3.1. Item-based Collaborative Filtering

Item-based collaborative filtering (IBCF) recommends items (jobs, in this case) based on similarities between items. It compares each item's interaction history with other items to identify items that are often interacted with by similar users. This algorithm is effective for recommending jobs similar to those a user has previously shown interest in, such as by clicking or applying.

**Steps:**

- **Data Collection:** Collect job interaction data from users (clicks, applications, etc.). Store these interactions in a table (user\_job\_interactions) with columns like user\_id, job\_id, interaction\_type, and timestamp.
- **Job Similarity Calculation:** Use the interaction data to compute similarity between jobs. For instance, calculate how often two jobs are clicked or applied to by the same users.
- **Recommendation Generation:** For a given job, recommend other jobs with high similarity scores. This allows recommendations to appear on each job page, based on interactions from other users with similar interests.

## **CHAPTER 4: IMPLEMENTATION AND TESTING**

### **4.1. Implementation**

The job portal project revolves around people, the jobseekers, employers, and administrators who form the heart and soul of the platform. It's all about creating a warm and engaging environment that understands the needs and aspirations of individuals in their quest for meaningful employment. Here's how the project comes to life:

From the moment a jobseeker registers, we want them to feel welcomed and valued. We provide a simple and intuitive registration process, making it easy for them to create their profiles and showcase their unique talents and experiences. By offering a secure login, we ensure that jobseekers feel safe and connected as they embark on their job search journey.

Everyone, whether registered or not, can freely explore the job listings. We believe that transparency is key, so we make sure that no one is left out. Jobseekers can immerse themselves in a world of possibilities, discovering positions that align with their passions and goals.

To empower jobseekers, we enable them to upload their CVs/Resumes, their professional stories in written form. This personal touch allows employers to grasp their potential and qualifications, fostering a deeper understanding of each candidate's unique strengths.

The search feature is like a compass, guiding jobseekers towards the right opportunities. They can search by job title, location, or industry, making the process personalized and efficient. We understand that finding the perfect fit is crucial for both jobseekers and employers.

When jobseekers find their dream jobs, we make it effortless for them to apply. With just a few clicks, they can send their applications, knowing that they've taken an important step forward. And they don't have to worry about losing track of their applications-we provide a dedicated section where they can easily view all their applied jobs.

On the other side, employers and administrators hold the key to unlocking opportunities. They can view the CVs/Resumes of jobseekers, getting to know the person behind the qualifications. By humanizing this process, we encourage employers to see the potential in every individual, going beyond the words on a piece of paper.

Employers can also track the progress of their job postings, knowing how many aspiring candidates have shown interest. This feedback loop helps them gauge their impact and adjust their recruitment strategies accordingly.

Our dedicated team of administrators ensures that the job portal maintains its integrity. They carefully review and approve job listings, upholding the quality standards we strive for. They also have the power to expand the platform by adding new companies, expanding the pool of opportunities available to jobseekers.

At the core of our job portal project is the belief in the power of human connection. We understand that finding the right job is not just about qualifications and skills-it's about the dreams and aspirations of individuals, and the companies that are looking to grow with exceptional talent. By humanizing the job search and recruitment experience, we aim to bring people together, fostering meaningful connections and shaping promising futures.



#### 4.1.1. Tools Used

To implement the project, we are going to use the waterfall model (outcome of one phase acts as input for next phase). This project's description is stable. Since we have well known, clean and fixed requirements therefore its best fits for the software development. This model is simple, easy to comprehend and user friendly. Phases are processed and finished one at a time in this model, and they do not overlap. The waterfall model works well for smaller tasks with well-defined sequences.

#### ❖ Waterfall model

The following illustration is a representation of the different phases of the Waterfall Model.

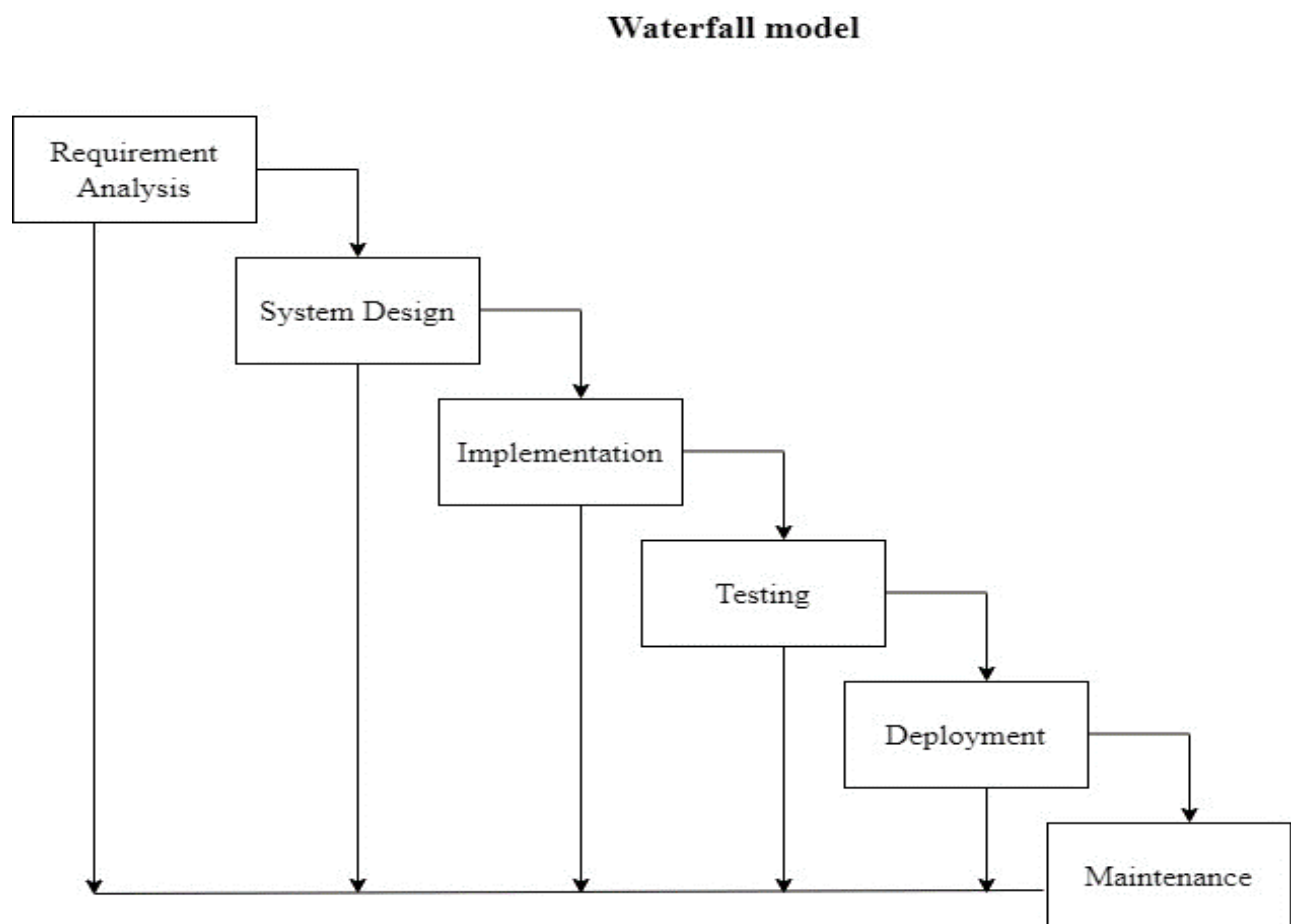


Figure 9: Waterfall Model

i. Requirement gathering

Before starting our project, we gather required information for our system via different sources which are mention in literature review. We studied existing system documentation and determine the key features and functionalities required for the job portal. Also, we discussed to the teachers and senior students to obtain an idea.

ii. System design

Firstly, we made the conceptual design of our project and the system is prepared as per the gathering information. We use ER-diagram and DFD to make the design of our project.

iii. Implementation

During this phase, the actual design is implemented by dividing into small modules. In the frontend we use HTML, CSS, and JavaScript as the foundation for building the user interface and applying styles and interactivity and in the backend, we use PHP and MySQL to store and retrieve data.

iv. Testing

Our system uses different cases for testing such as unit testing and system testing for better performance.

v. Deployment

Following the completion of functional and non-functional testing, the product is ready to deployed in the client environment to get the user's feedback.

vi. Maintenance

This phase use to maintain the bugs which occurs into the system. It also included boost performance, add new features, updating the system etc. and all these things will be done after it has been delivered to the customer and gets feedback from them.

❖ Laragon

This is a development environment which helps to set up and manage web development projects locally. It includes tools for managing databases like MySQL. It can also switch between different version of PHP to ensure compatibility with various projects.

❖ Visual Studio Code

This is our code editor where we have written our all of codes. This tool is very user friendly and have lots of extensions which helps for making the coding process more efficient.

❖ Snipping Tool

This is a pre-installed tool on our Windows Machine which helps to take the screenshots of all required figures, documents and user interfaces.

❖ Microsoft Word

This tool is used to do all the documentation of our project from the scratch to the very end.

❖ Microsoft PowerPoint

This tool is used to make the PowerPoint slides to do presentation of our project.

#### 4.1.2. Implementation Details of Modules

##### ❖ Registration

Employees and employers can register with legitimate information such as contact information, experience information, and profile information.

##### ❖ Jobseeker

Job Seeker registers himself, uploads his resume, and fills out the profile provided by admin. After logging in, he will search for jobs based on various criteria and apply for jobs based on his skills and experiences.

##### ❖ Admin

Admin have to login in order to access admin-dashboard. Admin can edit his/her profile. Admin can view all the details of company, delete the company, view the jobs posted by company and delete the job and view job seeker's info and delete the job seeker if required. Admin can also view the count of total number of jobseekers, total number of jobs and total number of companies.

##### ❖ Company

Company has to register before logging in if not registered. Company can update its profile. Company can post the jobs and also view the jobs which are applied by jobseekers. Company can view the jobseeker's name, email, phone number, applied date and download the CV uploaded by the jobseeker.

##### ❖ Search job

A registered job seeker can look for jobs using various filtering parameters.

##### ❖ Job post

An organization can add job post with salary details, working hours, designation details, experienced details.

## ❖ Authentication

Only authenticated user can access the site. User without his email and password can't enter into the system.

## 4.2. Testing

### 4.2.1. Test cases for unit testing

Table 1: Unit testing for user registration

Test case ID	Testcase Description	Test Step	Test Data	Excepted Outcome	Actual Outcome	Remarks
TC-UR-01	checking the validation in registration form	Enter validate username, email, password, address except phone	Username: Jaster Email: jaster12322@gmail.com Password: abcd123@ Phone: Address: Pokhara	Please fill all the fields.	Sign up failed	pass
TC-UR-02	checking the validation in registration form	Enter validate username, email, password, phone, address	Username: Jaster Email: jaster12322@gmail.com Password: abcd123@ Phone:6812346732 Address: Pokhara	Number should be start from 9	Input phone number is accepted	Fail
TC-UR-02	Supporting steps for TC-UR-02 (fail): ❖ Number should be start from 9 and have 10 digits.					
TC-UR-03	checking the validation in registration form	Validating the phone which is start from digit 9	Username: Jaster Email: jaster12322@gmail.com Password: Abcd123@ Phone:9812346732 Address: Pokhara	Register successfully	Register successfully	Pass

TC-UR-04	checking the validation in registration form	Enter same validate data which are already registered	Username: Abcd Email: xyz@gmail.com Password: xyz123@ Phone:9876234001 Address: Kathmandu	This account is already existing	Already have an account	Pass
TC-UR-05	checking the validation in registration form	Enter invalid username and validate other fields	Username: 12345 Email: ram@gmail.com Password: ram123@ Phone:9812346732 Address: Pokhara	Username should be start from alphabet	Input is accepted when the username is start from number	Fail
TC-UR-05	Supporting steps for TC-UR-05(fail): ❖ Username must be start from alphabet					
TC-UR-06	checking the validation in registration form	Validating username which should be start with alphabet	Username: Ram shah Email: ram@gmail.com Password: ram123@ Phone:9812346732 Address: Pokhara	Register successfully	Register successfully	pass

#### 4.2.2. Test cases for integration testing

Table 2: Testing for user login

Test ID	Test Description	Test step	Test data	Excepted outcome	Actual outcome	Remarks
TC-UL-01	checking the validation in login form by the users	Enter the invalid user's Email and password	Email: jaster12322@mail.com Password: xyz123@	Login failed	Invalid username or password	pass
TC-UL-02	checking the validation in login form by the users	Enter valid email and invalid password	Email: xyz@gmail.com Password: admin	Login failed	Invalid username or password	pass
TC-UL-03	checking the validation in login form by the users	Enter the valid user's Email and valid password	Email: jaster12322@gmail.com Password: Abcd123@	Login successfull y	Login successful to homepage	pass

Table 3: Testing for admin login

Test ID	Test Description	Test step	Test data	Excepted outcome	Actual outcome	Remarks
TC-AL-01	checking the validation in login form by admin	Enter the invalid admin's Email and password	Email: arbeen@gmail.com Password: Qwerty	Login Failed	Login Failed	Pass
TC-AL-02	checking the validation in login form by admin	Enter valid admin email and invalid password	Email: poudelshisham@gmail.com Password: abcde	Login Failed	Login Failed	pass
TC-AL-03	checking the validation in login form by admin	Enter the valid admin's email and password	Email: poudelshisham@gmail.com Password: Shisham123@	Login successful to Admin Dashboard	Login successful to Admin Dashboard	pass



Table 4: Testing for company registration

Test ID	Test Description	Test step	Test data	Excepted outcome	Actual outcome	Remarks
TC-CR-01	checking the validation in company registration form	Enter company name with special character and random PAN number	Name: #ABC company Address: ktm PAN: 123456A Email: abc@gmail.com Password: #abcComp Phone: 9823456892 Logo: select from browser	Signup fail	Register successfully	fail
TC-CR-01	Supporting steps for TC-CR-01 (fail): ❖ Company name should not contain any special characters ❖ The first 5 digit of PAN should be alphabet followed by 4 numerical digits and ending with an alphabets					
TC-CR-02	checking the validation in company registration form	Enter all the fields with valid data	Name: ABC company Address: ktm PAN: AABBC1234A Email: abc@gmail.com Password: #abcComp Phone: 9823456892 Logo: select from browser	Register successfully	Register successfully	pass
TC-CR-03	checking the validation in company registration form	Enter same validate data which is already registered	Name: ABC company Address: ktm PAN: AABBC1234A Email: abc@gmail.com Password: #abcComp Phone: 9823456892	This account is already existing	Already have an account	Pass

			Logo: select from browser			
TC-CR-04	checking the validation in company registration form	Enter data in specific fields	Name: jobspace company Address: PAN: xxxx Email: jobspace@gmail.com Password: Jobspace@ Phone: 9823456892 Logo: select from browser	Signup fail	Please fill all the fields	pass

Table 5: Testing for company login

Test ID	Test Description	Test step	Test data	Excepted outcome	Actual outcome	Remarks
TC-CL-01	checking the validation in login form by company	Enter the invalid company email and password	Email: jobspace@gmail.com Password: #abcComp	Login Failed	Login Failed	Pass
TC-CL-02	checking the validation in login form by company	Enter valid company email and invalid password	Email: jobspace@gmail.com Password: Jobspace@	Login Failed	Login Failed	pass
TC-CL-03	checking the validation in login form by company	Enter the valid company email and password	Email: abc@gmail.com Password: #abcComp	Login successful to company Dashboard	Login successful to Admin Dashboard	pass

#### 4.2.3. Test cases for system testing

Table 6: Testing for system

Test ID	Test Description	Test step	Test data	Excepted outcome	Actual outcome	Remarks
TC-ST-01	User should register the system if they have not registered yet.	❖ You have to enter all the required fields such as username, email, password, phone and address.	Username: Jaster Email: jaster12322@gmail.com Password: Abcd123@ Phone:9812346732 Address: Pokhara	Register successfully	Register successfully	Pass
TC-ST-02	User should login into the system	❖ Enter valid and existing email and password	Email: jaster12322@gmail.com Password: Abcd123@	Login successfully	Login successful to homepage	pass
TC-ST-03	View job	<ul style="list-style-type: none"> <li>❖ Fill the registration form</li> <li>❖ Login into the system</li> <li>❖ Click on view jobs section in nav bar</li> </ul>	<p>For user registration</p> <p>Username: Jaster Email: jaster12322@gmail.com Password: Abcd123@ Phone:9812346732 Address: Pokhara</p> <p>For user login Email: jaster12322@gmail.com Password: Abcd123@</p> <p>User can view the available jobs</p>	All the available Jobs will appear	All the available jobs successfully appeared	pass

TC-ST-04	Apply for job	<ul style="list-style-type: none"> <li>❖ Click on view jobs section in nav bar</li> <li>❖ Then available jobs will appear and click on more details button on any job</li> <li>❖ Job's details will appear and before applying upload cv</li> </ul>	Fill the given form	Job Successfully Applied	Jobs Successfully Applied	pass
TC-ST-05	Login by admin	<ul style="list-style-type: none"> <li>❖ Enter valid email and password</li> </ul>	Email: poudelshisham@gmail.com Password: Shisham123@	Login successful to Admin Dashboard	Login successful to Admin Dashboard	pass
TC-ST-06	Delete Company	<ul style="list-style-type: none"> <li>❖ Go to admin dashboard</li> <li>❖ Click on Company Info</li> <li>❖ Click on delete button to delete the company</li> </ul>	Admin can directly delete company by clicking delete button from the list of company info.	Company gets deleted along with the jobs it has posted	Company gets deleted along with the jobs it has posted	pass

TC-ST-07	Delete user	<ul style="list-style-type: none"> <li>❖ Go to admin dashboard</li> <li>❖ Click on user Info</li> <li>❖ Click on delete button to delete the user</li> </ul>	Admin can directly delete user info by clicking delete button from the list of users	user gets deleted along with them apply info	user gets deleted along with them apply successfully	pass
TC-ST-08	Approve Company	<ul style="list-style-type: none"> <li>❖ Go to admin dashboard</li> <li>❖ Click on Approve Company</li> <li>❖ Click on Approve or Reject the company</li> </ul>	❖ Click on approve button to approve the company	Company gets Approved and can now login.	Company gets Approved and can now login.	pass
TC-ST-09	checking the validation in company registration form	❖ Enter all the fields with valid data	Name: ABC Address: ktm PAN: AABBC1234A Email: abc@gmail.com Password: #abcComp Phone: 9823456892 Logo: select from browser	Register successfully	Register successfully	pass

TC-ST-10	checking the validation in login form by company	❖ Enter the valid company email and password	Email: abc@gmail.com Password: #abcComp	Login successful to company Dashboard	Login successful to Admin Dashboard	pass
TC-ST-11	Post Jobs	❖ On Company dashboard, click on Posted Jobs ❖ Now click on add job button	❖ Fill all the fields on New Job Form and submit	A new job vacancy gets posted	A new job vacancy gets posted	pass

## **CHAPTER 5: CONCLUSION AND FUTURE RECOMMENDATION**

### **5.1. Conclusion**

This job portal can help job seekers and recruiters overcome the challenges of today's labor market. This project proposal seeks to create a user-friendly, secure job portal that connects job seekers to a diverse variety of job opportunities across industries and sectors. Recruiters will also be able to use the employment portal to submit job openings, manage their candidate database, and communicate with job seekers. We think that this project will benefit both job seekers and recruiters and will help to grow the job market.

### **5.2. Future Recommendation**

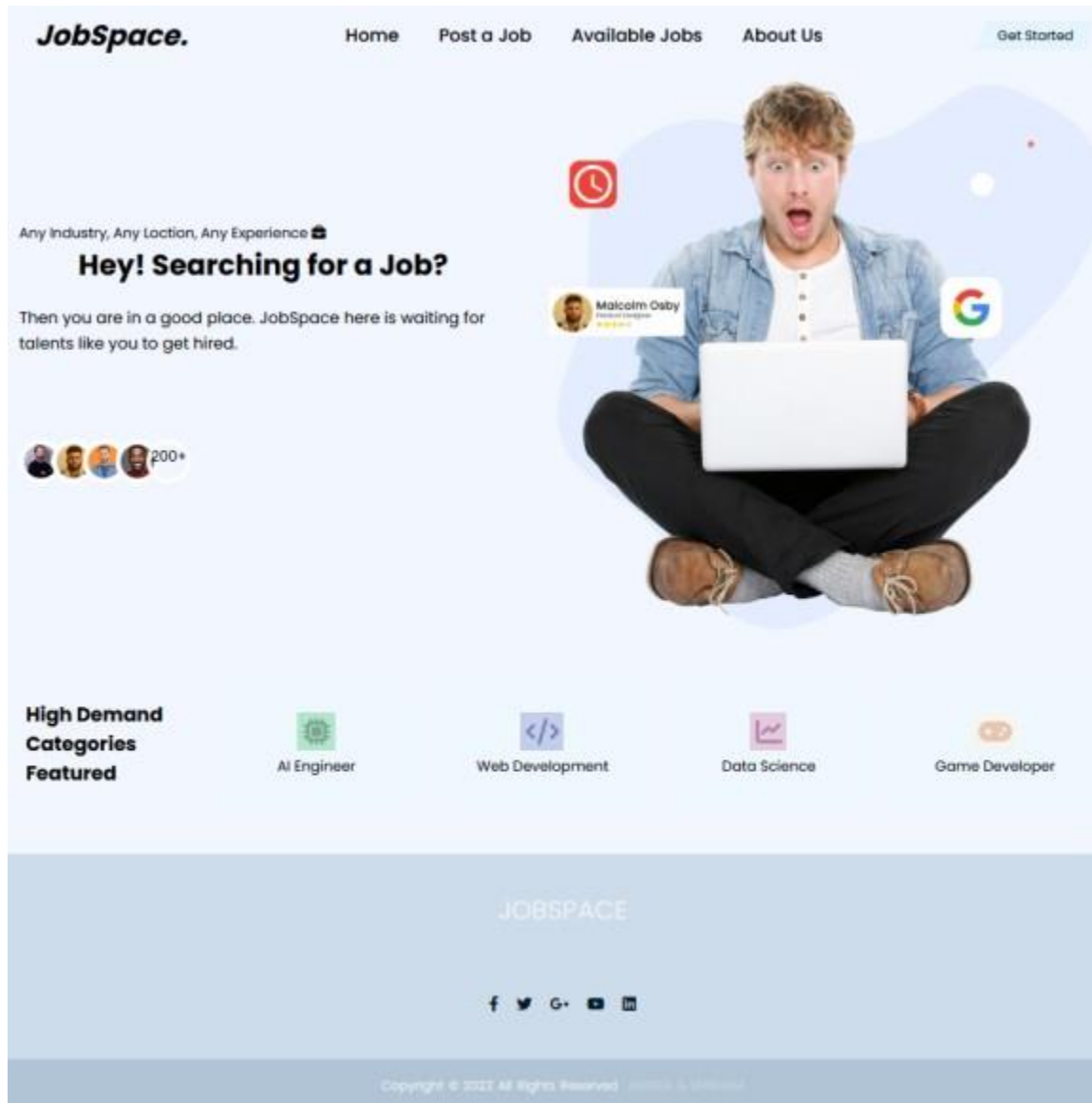
Looking ahead, online job portals are gearing up for some exciting transformations to make your job search experience more personalized and user-friendly. Imagine job recommendations that truly understand your skills, aspirations, and even your personality, thanks to advanced AI algorithms. These platforms will become your trusted career companions, not just matching qualifications but also finding positions that align with your values and long-term goals. User-friendliness will be a top priority, with sleek mobile apps, easy-to-navigate interfaces, and even cool features like virtual reality and augmented reality for immersive job previews and interviews. Finding the perfect job will be as simple as a few taps on your screen. In a world where remote work and freelancing are on the rise, these portals will seamlessly connect you with opportunities that fit your lifestyle. Whether you're looking for a full-time remote gig or a short-term project, they'll have you covered. Plus, job portals of the future are committed to fairness and diversity. They'll use AI to spot and eliminate biased language in job postings and make sure everyone has an equal shot at their dream job. In short, the future of online job portals promises to be all about making your job search more personal, convenient, and fair, adapting to the ever-changing job market to help you find the perfect fit.

## **REFERENCES**

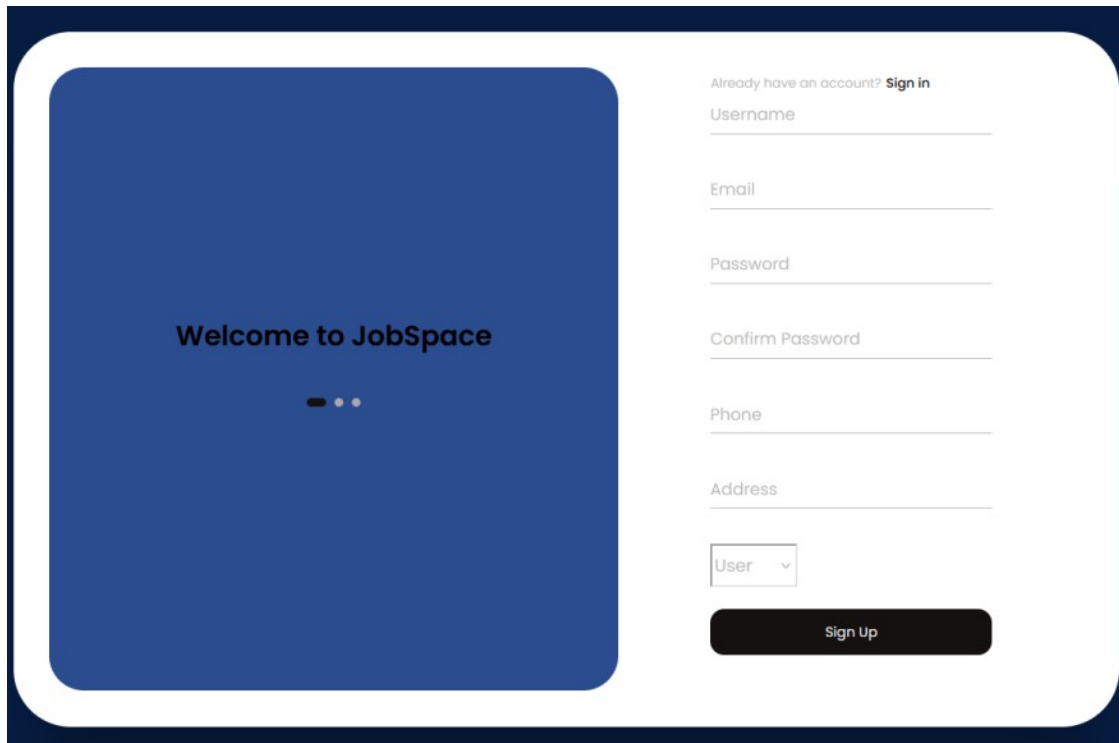
- [1] JobAxle, "Jobaxle a step and beyond," 17 07 2019. [Online]. Available: <https://jobaxle.com/>.
- [2] [Online]. Available: <https://kantipurjob.com/>.
- [3] [Online]. Available: <https://www.easyjoblink.com.np/>.
- [4] Neplai Trends, "Job Portal Websites of Nepal," 27 April 2018. [Online]. Available: <https://www.nepalitrends.com/>.



## APPENDIX



### Home Page



The Register Page features a dark blue header and a white main content area. On the left, a large blue square contains the text "Welcome to JobSpace" and three small white dots. On the right, a white registration form is set against a dark blue background. The form includes a link "Already have an account? Sign in", input fields for Username, Email, Password, Confirm Password, Phone, and Address, a dropdown menu labeled "User", and a black "Sign Up" button.

Already have an account? [Sign in](#)

Username

Email

Password

Confirm Password

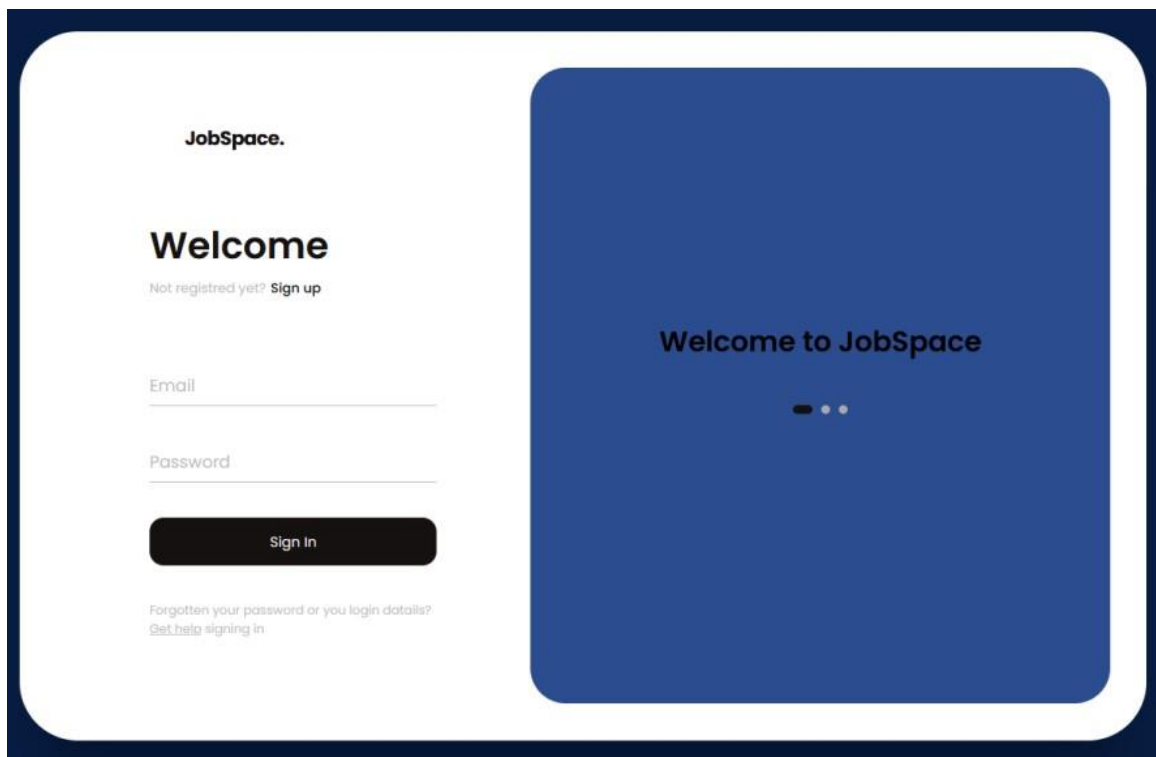
Phone

Address

User

Sign Up

## Register Page



The Login Page features a dark blue header and a white main content area. On the left, a white login form is set against a dark blue background. The form includes the "JobSpace." logo, a "Welcome" heading, a link "Not registered yet? Sign up", input fields for Email and Password, a black "Sign In" button, and a link "Forgotten your password or you login details? Get help signing in". On the right, a large blue square contains the text "Welcome to JobSpace" and three small white dots.

JobSpace.

Welcome

Not registered yet? [Sign up](#)

Email

Password

Sign In


Forgotten your password or you login details?  
[Get help signing in](#)

Welcome to JobSpace

## Login Page


# Jobs

Search here...




No of Vacancy: 2

## Ruby on rails


 Kathmandu

More Details




No of Vacancy: 1

## Data Analyst


 Kathmandu

More Details




No of Vacancy: 2

## Social Media Manager


 Bhaktapur

More Details




No of Vacancy: 2

## Blockchain Engineer


 Kathmandu

More Details




No of Vacancy: 1

## Node JS Developer


 Kathmandu

More Details



No of Vacancy: 1

## Noaoao

 xcvbnm

More Details

Job list

**Php Developer**

ABC Tech      kathmandu      100000

**Job Description**

We are currently seeking a skilled and experienced Mid-Level Business Analyst to join our team. As a Java Developer, you will be responsible for designing, developing, and maintaining high-quality software solutions using Java technologies. You will work on both new projects and existing applications, collaborating with a team of developers, testers, and business analysts. You will be leading a team of Java developers and will be responsible for providing technical guidance, managing task among the team and ensuring the successful execution of projects.

**Required Knowledge**

- Experience with Spring and Hibernate frameworks.
- Knowledge of Git or other version control systems.
- Experience in creating Restful Web Services.
- Strong knowledge of Java programming language and related frameworks
- Proficient in writing efficient and optimized code
- Experience with relational databases (eg: MYSQL, Oracle, PostgreSQL)
- Good understanding of software development principles, lifecycle, design patterns, and best practices
- Prior experience of leading and supervising a software development team
- Excellent communication skills and ability to work collaboratively in a team environment
- Strong problem-solving and analytical skills
- Leadership and ability to take ownership of assigned tasks
- Some familiarity with Cloud Services (AWS / Azure)

**Education + Experience**

- Bachelor's degree in Computer Science, Computer Engineering or a related field preferred.
- 3+ years of hands-on experience in Java development

**Job Overview**

Posted date : 2023-09-28

Location : kathmandu

Vacancy : 2

Job nature : full\_time

Salary : 100000

Application date : 2023-10-05

**Upload CV:** No file selected.

**JobSpace.**

- Home
- My Info
- Applied Jobs

[Log Out](#)

Job Title	Company	Company Email	Applied Date
Ruby on rails	Nepal Tech	npotech@gmail.com	2023-09-25 14:04:37
Ruby on rails	Nepal Tech	npotech@gmail.com	2023-09-27 09:22:00
Node JS Developer	AB Tech	arbeen123@gmail.com	2023-09-27 11:01:11
Php Developer	ABC Tech	abc@gmail.com	2023-09-29 08:38:03
Php Developer	ABC Tech	abc@gmail.com	2023-09-29 08:42:15
Java Developer	Apple	apple@gmail.com	2023-10-01 00:30:26

- Dashboard
- Posted Jobs
- Applied Jobs
- Settings
- Logout

Search...

Dashboard

Apple > Home

1 Active Jobs

1 Applied Jobs

Recent Jobs







User	Date	Status
Ram sharma	01-10-2023	Completed
Sita Thapa	20-8-2023	Pending

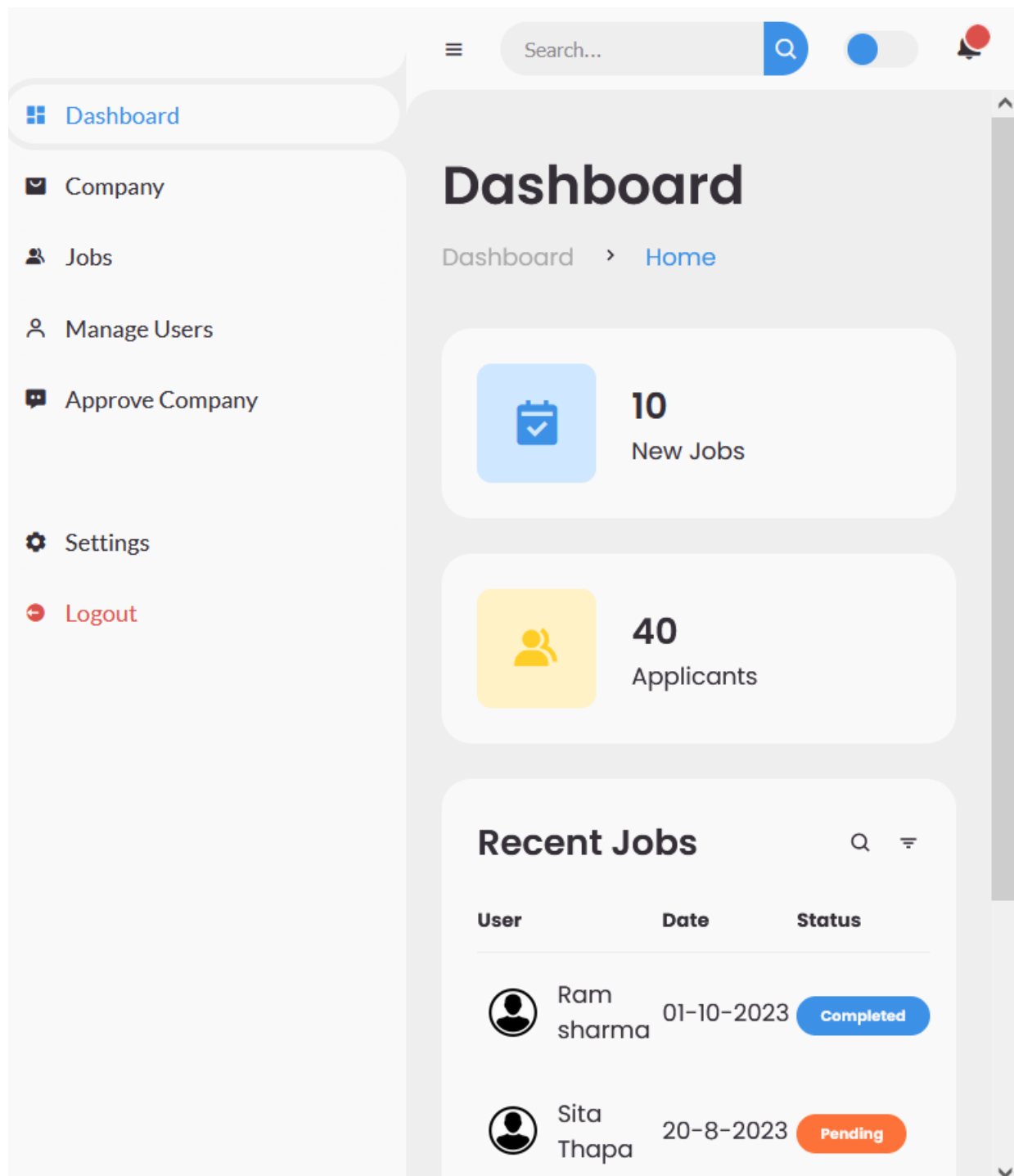
Company Dashboard


Search...

# Company

Company > Home

Logo	Name	Email	Phone	Address	Options
	Nepal Tech	nptech@gmail.com	014523654	Kathmandu	<a href="#">Delete</a>
	ABC Tech	abc@gmail.com	9840921277	Bhaktapur, Thimi	<a href="#">Delete</a>
	AB Tech	arbeen123@gmail.com	9987474512	ktm	<a href="#">Delete</a>
	Apple	apple@gmail.com	977952545	Kathmandu	<a href="#">Delete</a>
	Sulav Tech	ab@gmail.com	9898987976	asdfgh	<a href="#">Delete</a>
	Kalel	kale@blackmail.com	9876516131	Basundhara	<a href="#">Delete</a>





Dashboard

Posted Jobs

Applied Jobs

Settings

Logout

Search...

Q

Jobs

Jobs > Home

Job Seeker	Job title	Email	Applied Date	CV
Bisham	gupta@yahoo.com	Java Developer	2023-10-01 00:30:26	<a href="#">Download CV</a>

Dashboard

Company

Jobs

Manage Users

Approve Company

Settings

Logout






Search...

Q

Search...

Approve Company

Approve Comoaany > Home

Logo	Name	Pan	Email	Phone	Status	Action
	Chiran Furniture	4131421	cf@yahoo.com	9817656565	pending	<a href="#">Approve</a> <a href="#">Reject</a>
	Bisham Tech	84511554	arbeen@yahoo.com	9849169785	pending	<a href="#">Approve</a> <a href="#">Reject</a>
	Sulav Tech2	2312	sulav@gmail.com	9878787676	pending	<a href="#">Approve</a> <a href="#">Reject</a>
	Sulav Tech 3	143	s@gmail.com	9876161616	pending	<a href="#">Approve</a> <a href="#">Reject</a>
	Sulav Tech4	12312	b@gmail.com	9876789221	pending	<a href="#">Approve</a> <a href="#">Reject</a>



Dashboard

Company

Jobs

Manage Users

Approve Company

Settings

Logout

Search...

Manage Users

Name	Email	Phone	Address	Options
Bisham	gupta@yahoo.com	9108104423	Bihar	Delete
axlrose	axlrose@gnr.com	9874142514	New York	Delete
freddie	mercury@queen.com	5126928774	London	Delete
chiran	chiran7@gmail.com	9874562211	Nepaltar	Delete
shisham12345	shisham123@gmail.com	9874152600	Gongabu	Delete
Anisha231	anisha@gmail.com	9841483442	Kathmandu	Delete
rojinal234	rojinal234@gmail.com	9874745125	Kalanki	Delete
manik23	manik@gmail.com	3214569784	ktm	Delete
Jaster123	jaster12322@mail.com	9874525285	1234567jbfdsdsv .	Delete
shisham	arbeentimilsina@gmail.com	9874512563	ktm	Delete
a1235	a1235@gmail.com	9874101012	Kathmandu	Delete