



INSTITUTE FOR ADVANCED COMPUTING ANDSOFTWARE DEVELOPMENT (IACSD), AKURDI, PUNE

Documentation On

Online Job Portal

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ABSTRACT

The Job Portal Service was created to design an engaging job vacancy form for candidates. This web app handles updates from both job seekers and companies its distinct development approach gathers client and candidate data and organizes them based on job needs online access reveals comprehensive job information. Registered employers can utilize these services. Authorized users can post job vacancies, look for potential employees, and search candidates by key skills

They provide during registration. This platform enhances the job Search experience for both employers and job seekers.

ACKNOWLEDGEMENT

I take this occasion to thank God, almighty for blessing us with his grace and taking our endeavor to a successful culmination. I extend my sincere and heartfelt thanks to our esteemed guide, Mr. Harshal Waghchaure & Mrs.Monika Madam for providing me with the right guidance and advice at the crucial juncture sand for showing me the right way. I extend my sincere thanks to our respected Centre Co-Ordinator Mr.Rohit Puranik, for allowing us to use the facilities available. I would like to thank the other faculty members also, at this occasion. Last but not the least, I would like to thank my friends and family for the support and encouragement they have given me during the course of our work.

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INTRODUCTION

In today's fast-changing job market, finding the right job or candidate can be challenging. That's why we've created the "Online Job Portal" project. This is a user-friendly website that makes it easy for people looking for jobs and companies looking for employees to connect.

Technology has changed how we do everything, including job hunting and hiring. Our project uses this technology to help job seekers find opportunities and employers find the right people. The goal is to make the process faster and more convenient for everyone.

With the "Online Job Portal," you can search for jobs that match your skills and preferences, and employers can list job openings and find candidates that fit their needs. This project aims to make job searching and hiring more efficient and effective. This report explains all the important details about how the project works and why it matters in today's job market.

Features: -

- 1. Job seekers and employers can create accounts and build detailed profiles with their information, skills, and preferences.
- 2. Job seekers can easily search for relevant job openings using filters such as location, job type, industry, and experience level.
- 3. Employers can post detailed job listings, including job descriptions, requirements, and application instructions.
- 4. Job seekers can submit applications directly through the given platform

1.1 PROJECT OBJECTIVE

The primary objective of the online job portal project is to establish a user-friendly digital Platform that seamlessly connects job seekers with suitable employment opportunities and Assists employers in efficiently finding the right candidates. This project aims to streamline The job search and recruitment processes, enhance user experiences, and provide real-time Interactions while maintaining data security and privacy

1.2 PROJECT OVERVIEW

The project aims to develop an online job portal that revolutionizes the way job seekers and employers interact. This platform serves as a dynamic hub, enabling job seekers to easily search and apply for relevant positions while empowering employers to post job vacancies, review applications, and streamline their recruitment process. With a user-centric approach, the portal enhances user experiences, accelerates talent matching, and offers real-time communication, all while ensuring data security and privacy. Through its intuitive design and advanced features, the online job portal seeks to reshape the employment landscape by providing an efficient, transparent, and effective solution for both job seekers and employers.

1.3 PROJECT SCOPE

The project scope encompasses the creation and implementation of a comprehensive online job portal. The portal will cater to job seekers, employers, and administrators, offering features such as job searching, application submission, job posting, candidate shortlisting, and user account management. The portal's scope also includes personalized job recommendations, real-time notifications, and secure data handling. The project aims to develop user-friendly interfaces for web and mobile platforms, ensuring compatibility across devices. While the primary focus is on job seekers and employers, the portal's administrative features will allow for user account oversight and system management. The project scope is designed to enhance the efficiency and convenience of job searches and recruitment processes, promoting seamless interactions between users and the system.

1.4 STUDY OF THE SYSTEM

1.4.1 MODULES:

The system after careful analysis has been identified to be presented with the following modules and roles.

The modules involved are:

- > Admin
- Jobseeker
- > Recruiter

1.4.1.1 Admin:

Admin Can Manage Employee and Employer Details. Admin observed Users Action like job posting, candidate details false or not

This module is divided into different sub modules.

- Admin sign in, sign out, create account
 This feature is provided to admin so he can sign in, sign out and create account
 for admin
- The Admin can manage users (add, update, delete) and manage job listings (add, update, delete).

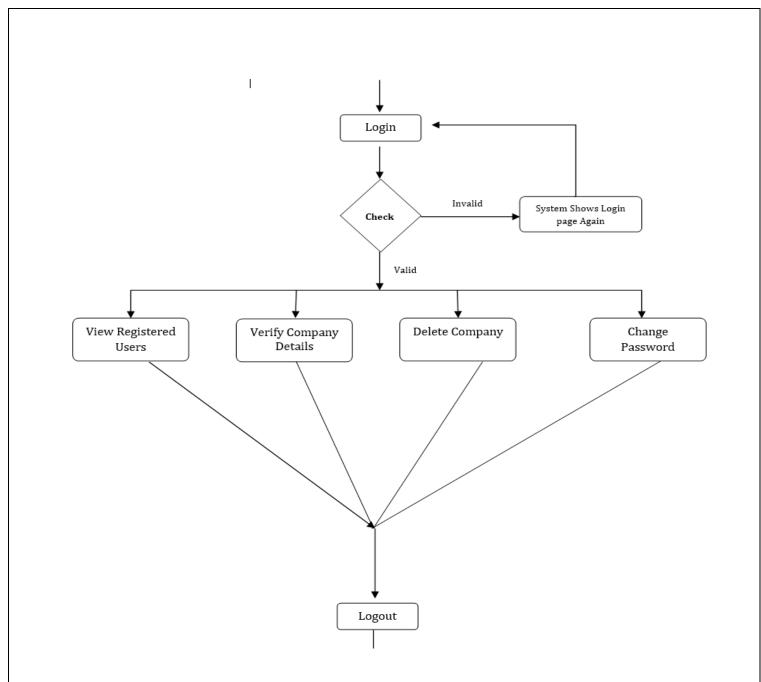


Figure 1 Admin Activity Diagram

> Job Post

Employer post job for their organization. And include job vacancy, salary details, working hours, designation details, experienced details.

Employee can also delete his/her account anytime.

Admin Can Manage Employee and Employer Details. Admin observed Users Action like job posting, candidate details false or not.

> Registration

Employee or Employer can register with valid details like contact details, experience details, profile details.

> Job Post

Employer post job for their organization. And include job vacancy, salary details, working hours, designation details, experienced details.

> Manage Account

Employer can also delete his/her account anytime.

Admin Can Manage Employee and Employer Details. Admin observed Users Action like job posting, candidate details false or not.

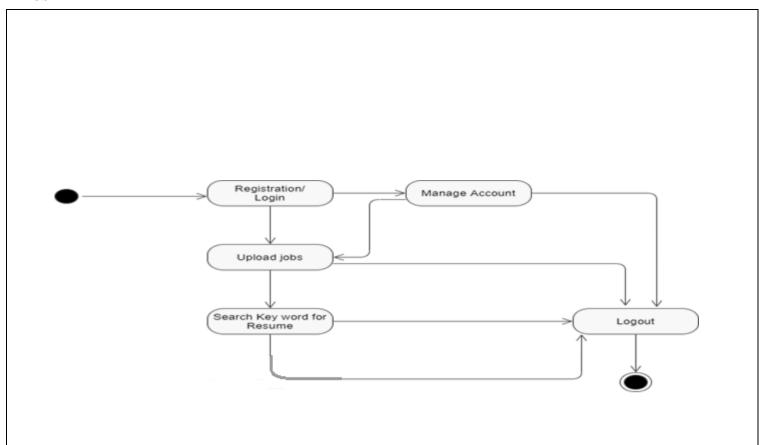


Figure 2 Recruiter Activity Diagram

Online Job Portal

Edit Jobs

Recruiter can edit his added jobs.

Delete jobs

Recruiter can delete the jobs details which is not required.

> Post jobs

Recruiter can add new jobs details in web-site.

> Recruiter sign in, sign out, create account

This feature is provided to Recruiter so he can sign in, sign out and create account fornew Recruiter.

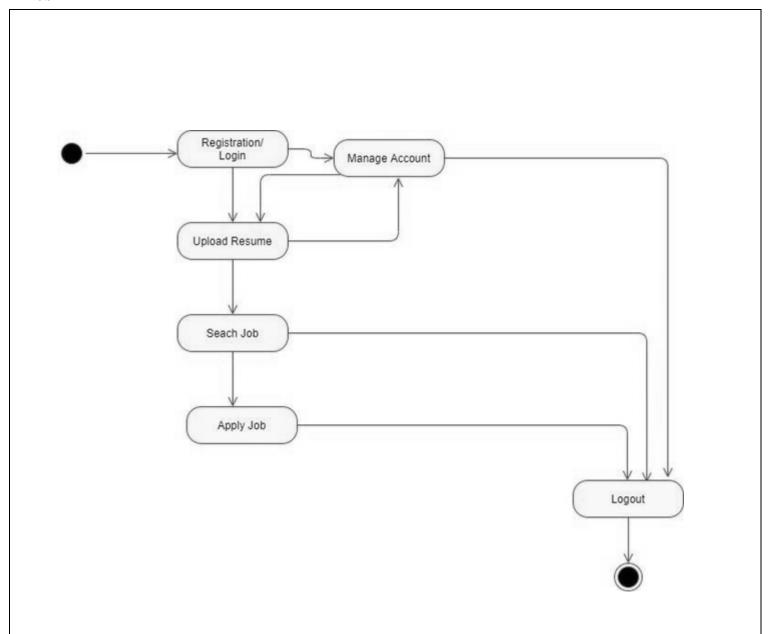


Figure 3 Freelancer Activity Diagram

> Freelancer sign in, sign out, create account

This feature is provided to customer so he can sign in, sign out and create account fornew customer.

> Search Jobs

Customer can search the product as per his wish in specific category.

> Apply for jobs

Freelancer can apply jobs to which he wants to eligible.

> Job Details

Freelancer have a privilege to his applied jobs he can see his applied job details.

SYSTEM ANALYSIS

System analysis is the process of gathering and interpreting facts, diagnosing problems, and using the information to recommend improvements on the system. System analysis is a problem-solving activity that requires intensive communication between the system users and system developers.

System analysis or study is an important phase of any system development process. The system is viewed as a whole, the inputs are identified, and the system is subjected to close study to identify the problem areas. The solutions are given as a proposal. The proposal is reviewed on user request and suitable changes are made. This loop ends as soon as the user is satisfied with the proposal.

2.1 EXISTING SYSTEM

The current system for job portal is to visit the company manually and from the available jobs choose the role want and applying the job by offline location.

- ✓ It is less user-friendly.
- ✓ User must go to company and apply jobs.
- ✓ It is difficult to identify the required jobs.
- ✓ Description of the jobs limited.
- ✓ It is a time-consuming process
- ✓ Not in reach of distant users.

2.2 PROPOSED SYSTEM

The proposed system entails the development of a sophisticated online job portal that addresses the existing challenges in job searching and recruitment. This innovative platform will feature an intuitive interface for job seekers to effortlessly navigate and search for relevant positions based on their skills, preferences, and experience. For employers, the system will provide a streamlined process to post job vacancies, review applications, and identify potential candidates. The platform will offer personalized job recommendations, real-time notifications, and robust data security measures to protect user information. By leveraging advanced technology, the proposed system aims to revolutionize the way job seekers and employers interact, fostering efficient connections and promoting a transparent and engaging job market experience.

2.3 SYSTEM REQUIREMENT SPECIFICATION

2.3.1 GENERAL DESCRIPTION

Product Description:

The Online Job Portal is a cutting-edge digital platform designed to revolutionize the job search and recruitment experience for both job seekers and employers. This user-centric solution provides an intuitive and efficient way for job seekers to discover and apply for relevant job opportunities while enabling employers to post vacancies, review applications, and identify top talent. With its advanced features and user-friendly interface, the Online Job Portal streamlines the job search process, offers personalized job recommendations, and facilitates real-time communication between job seekers and employers. By embracing the power of technology, this platform aims to bridge the gap between job seekers and employers, creating a dynamic ecosystem that fosters career growth and organizational success.

Problem Statement:

In today's dynamic job market, job seekers and employers often face challenges in efficiently connecting with each other. Job seekers struggle to find suitable positions that align with their skills and preferences, while employers grapple with identifying the right candidates amidst a vast pool of applicants. Traditional recruitment methods are time-consuming, lack transparency, and can result in mismatches between job openings and candidate profiles. Additionally, the lack of a centralized platform hinders effective communication between job seekers and employers.

2.3.2 SYSTEM OBJECTIVES

When an online Job portal web application implemented freelancer can apply job in an efficient manner.

2.3.3 SYSTEM REQUIREMENTS

2.3.3.1 NON-FUNCTIONAL REQUIREMENTS

i. EFFICIENCY REQUIREMENT

When an online Job portal web application implemented freelancer can apply job in an efficient manner.

ii. RELIABILITY REQUIREMENT

The system should provide a reliable environment to both Freelancer and Recruiter. All jobs should be reaching at the admin without any errors.

iii. USABILITY REQUIREMENT

Implementation of the system using React in front end with Spring Boot as back end and it will be used for database connectivity. And the database part is developed by MySQL. Responsive web designing is used for making the website compatible for any type of screen.

iv. DELIVERY REQUIREMENT

The whole system is expected to be delivered in one months of time with a weekly Evaluation by the project guide.

2.3.3.2 FUNCTIONAL REQUIREMENTS

Functional Requirement

- Job seekers can register and create an account.
- Employers can post jobs.
- Job seekers can search for jobs.
- Job seekers can apply for jobs.
- Employers can manage their jobs.
- Job seekers and employers can message each other.
- Job seekers and employers can manage their accounts.
- The system administrator can manage the portal.

SYSTEM DESIGN

System design is the solution for the creation of a new system. This phase focuses on the detailed implementation of the feasible system. Its emphasis on translating design. Specifications to performance specification. System design has two phases of development.

- Logical Design
- Physical Design

During logical design phase the analyst describes inputs (sources), outputs (destinations), databases (data sores) and procedures (data flows) all in a format that meets the user requirements. The analyst also specifies the needs of the user at a level that virtually determines the information flow in and out of the system and the data resources. Here the logical design is done through data flow diagrams and database design. The physical design is followed by physical design or coding. Physical design produces the working system by defining the design specifications, which specifyexactly what the candidate system must do. The programmers write the necessary programs that accept input from the user, perform necessary processing on accepted data and produce the required report on a hard copy or display it on the screen.

3.1 INPUT AND OUTPUT DESIGN

3.1.1 INPUT DESIGN:

Input design is the link that ties the information system into the world of its users. The input design involves determining the inputs, validating the data, minimizing the data entry and provides a multi-user facility. Inaccurate inputs are the most common cause of errors in data processing. Errors entered by the data entry operators can be controlled by input design. The user-originated inputs are converted to a computer-based format in the input design. Input data are collected and organized into groups of similar data. Once identified, the appropriate input media are selected for processing. All the input data are validated and if any data violates any conditions, the user is warned by a message. If the data satisfies all the conditions, it is transferred to the appropriate tables in the database. In this project the student details are to be entered at the time of registration. A page is designed for this purpose which is user friendly and easy to use. The design is done such that users get appropriate messages when exceptions occur.

3.1.2 OUTPUT DESIGN:

Computer output is the most important and direct source of information to the user. Output design

is a very important phase since the output needs to be in an efficient manner. Efficient and intelligible output design improves the system relationship with the user and helps in decision making. Allowing the user to view the sample screen is important because the user is the ultimate judge of the quality of output. The output module of this system is the selected notifications.

DATABASE DESIGN

3.2 DATABASE

Databases are the storehouses of data used in the software systems. The data is stored in tables inside the database. Several tables are created for the manipulation of the data for the system. Two essential settings for a database are

- Primary key the field that is unique for all the record occurrences
- Foreign key the field used to set relation between tables

Normalization is a technique to avoid redundancy in the tables.

3.3 SYSTEM TOOLS

The various system tools that have been used in developing both the front end and the back end of the project are being discussed in this chapter.

3.3.1 FRONT END:

React is a library which is developed by Facebook are utilized to implement the frontend. React (also known as React.js or ReactJS) is a free and open-source front-end JavaScript library for building user interfaces or UI components. It is maintained by Facebook and a community of individual developers and companies. React can be used as a base in the development of single page or mobile applications. However, React is only concerned with state management and rendering that state to the DOM, so creating React applications usually requires the use of additional libraries for routing, as well as certain client-side functionality.

3.3.2 BACKEND:

The back end is implemented using MySQL which is used to design databases.

MySQL:

MySQL is the world's second most widely used open-source relational database management system (RDBMS). The SQL phrase stands for Structured Query Language.

Spring-Boot:

This is used to connect MYSQL and fetch data from database and store the data in database. The Spring Framework is an application framework and inversion of control container for the Java platform. The framework's core features can be used by any Java application, but there are extensions for building web applications on top of the Java EE (Enterprise Edition) platform. Although the framework does not impose any specific programming model, it has become popular in the Java community as an addition to the Enterprise JavaBeans (EJB) model. The Spring Framework is Open-source Framework.

1 Level DFD Admin

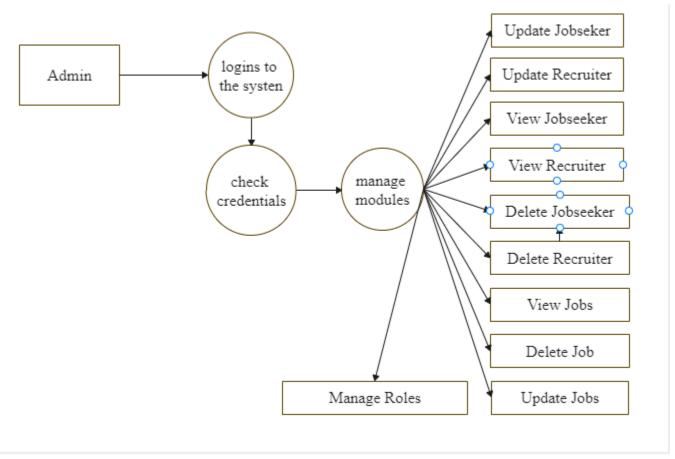


Figure 4 Level DFD Admin

1Level DFD for Jobseeker

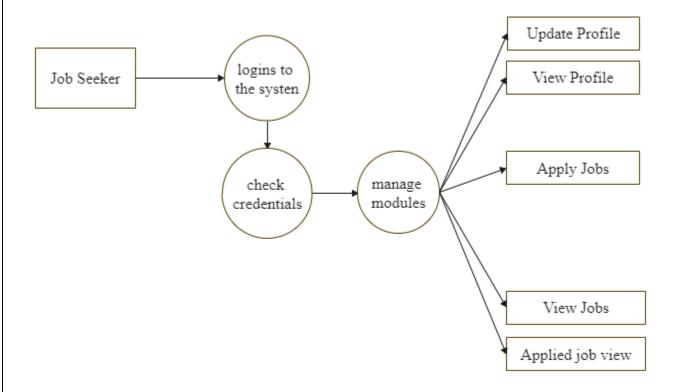


Figure 5 1 Level DFD for Job seeker

1 Level DFD for Recruiter

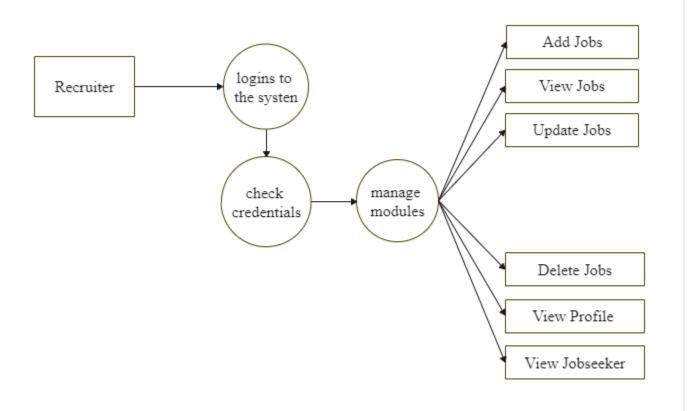


Figure 6 1 Level DFD for Recruiter

E-R Diagram:

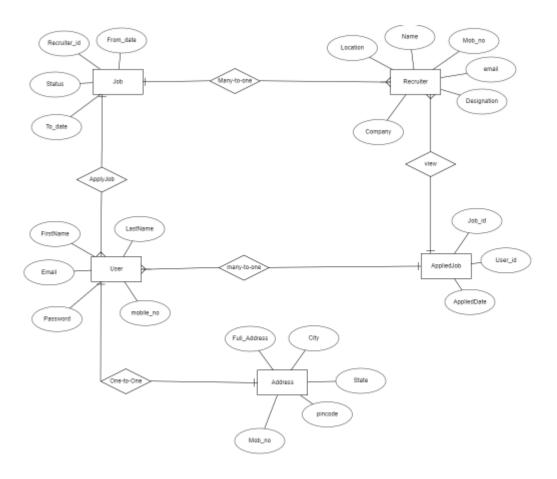


Figure 8 E-R Diagram

Class Diagram

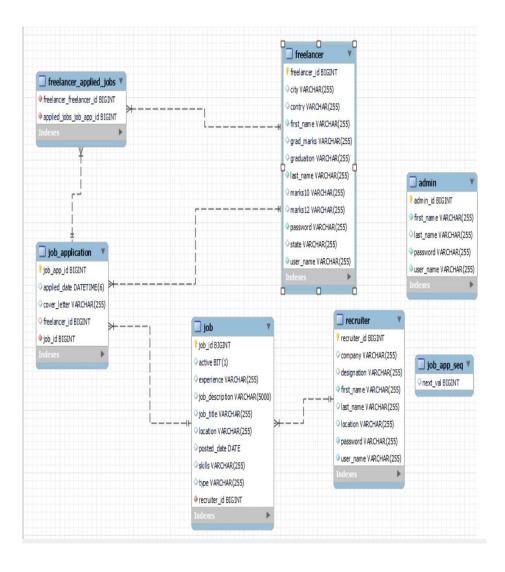


Figure 9 Class Diagram

TABLE STRUCTURE:

Tables:

Address:

Field	Туре	+ Null	 Key	Default	Extra
addr_id	bigint	NO	PRI	NULL	auto_increment
adr_line1	varchar(50)	YES	j i	NULL	
adr_line2	varchar(50)	YES	j j	NULL	i i
city	varchar(20)	YES		NULL	
country	varchar(20)	YES		NULL	
state	varchar(20)	YES		NULL	
zip_code	varchar(20)	YES		NULL	

Admin:

```
mysql> desc admin;
                              Null | Key |
 Field
                                          Default |
              Type
 admin_id
              bigint
                              NO
                                     PRI |
                                           NULL
                                                     auto_increment
              varchar(255)
 first_name
                              NO
                                           NULL
              varchar(255)
                              YES
 last_name
                                           NULL
 password
              varchar(255)
                              NO
                                           NULL
 user_name
              varchar(255)
                              NO
                                     UNI
                                           NULL
5 rows in set (0.01 sec)
```

Freelancer:

*		+	+·	+	!
Field	Туре	Null	Key	Default	Extra
freelancer_id	 bigint	+ I NO	PRI	NULL	auto_increment
city	varchar(255)	YES	i	NULL	
contry	varchar(255)	YES	i	NULL	
first_name	varchar(255)	NO	I	NULL	
grad_marks	varchar(255)	YES	l	NULL	
graduation	varchar(255)	YES	l	NULL	
last_name	varchar(255)	NO	l	NULL	
marks10	varchar(255)	YES	l	NULL	
marks12	varchar(255)	YES	l	NULL	
password	varchar(255)	NO	l	NULL	
state	varchar(255)	YES	ı	NULL	
user_name	varchar(255)	NO	UNI	NULL	

j<u>ob :</u>

nysql> desc job; 	+	.		.	
Field	Туре	Null	Key	Default	Extra
job_id	+ bigint	NO	PRI	 NULL	auto_increment
active	bit(1)	YES		NULL	i –
experience	varchar(255)	YES		NULL	Ì
job_description	varchar(5000)	YES		NULL	l
job_title	varchar(255)	YES		NULL	I
location	varchar(255)	YES		NULL	I
posted_date	date	YES		NULL	l
skills	varchar(255)	YES		NULL	I
type	varchar(255)	YES		NULL	I
recruiter_id	bigint	NO	MUL	NULL	I

Job application:

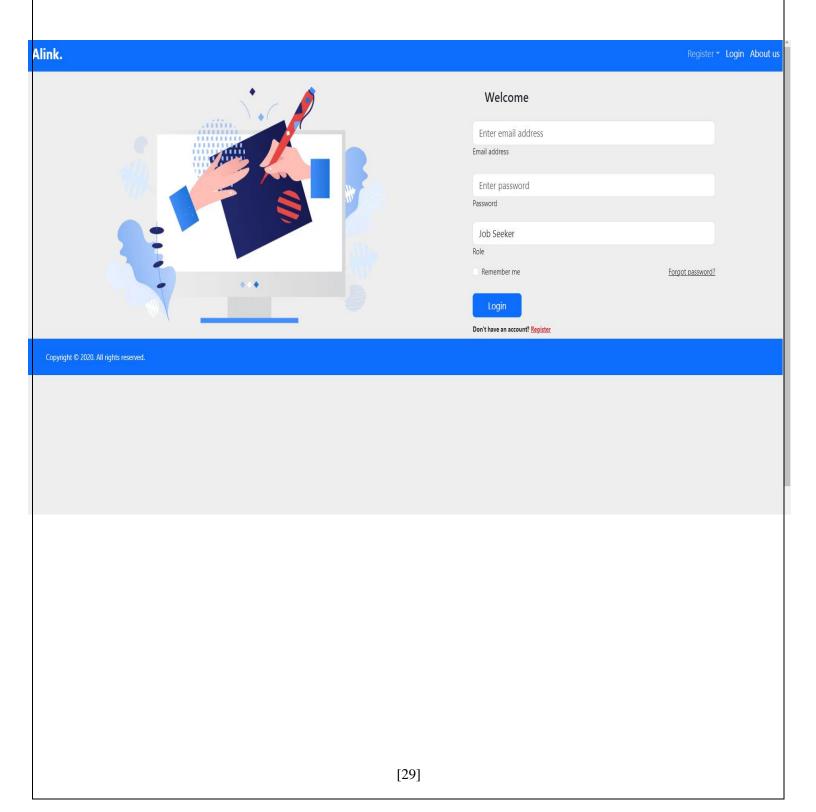
mysql> desc job_a + Field	<u></u>	+ Null	 Key	 Default	+ Extra
+	bigint datetime(6) varchar(255) bigint bigint	NO YES YES YES NO	PRI PRI MUL MUL	NULL NULL NULL NULL NULL	
5 rows in set (0	.01 sec)	+	H		+

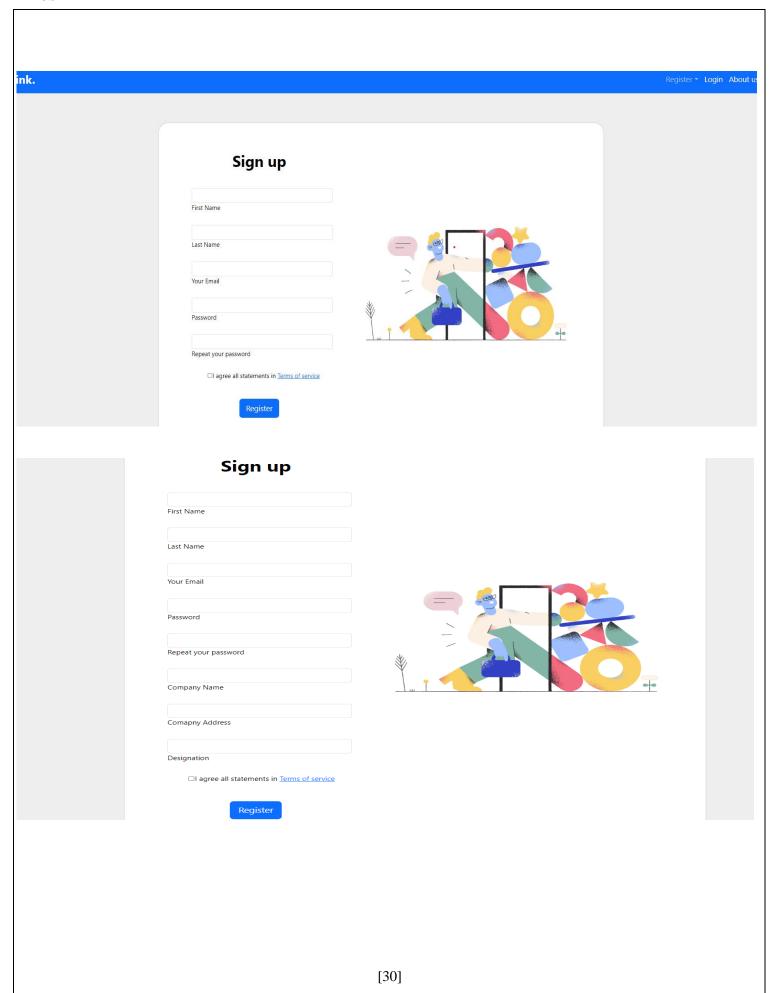
Recruiter:

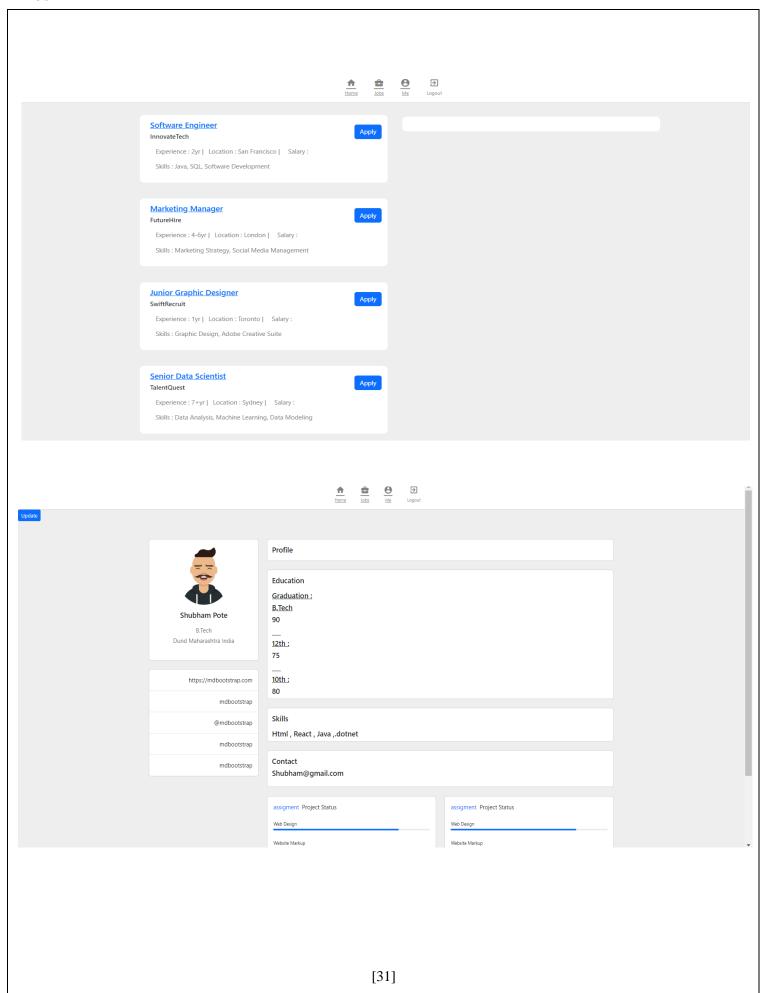
Field	Type	Null	Key	Default	Extra
recruiter_id	bigint	NO	PRI	NULL	auto_increment
company	varchar(255)	YES		NULL	
designation	varchar(255)	YES		NULL	
first_name	varchar(255)	NO		NULL	
last_name	varchar(255)	YES		NULL	
location	varchar(255)	YES		NULL	
password	varchar(255)	NO		NULL	
user_name	varchar(255)	NO	UNI	NULL	

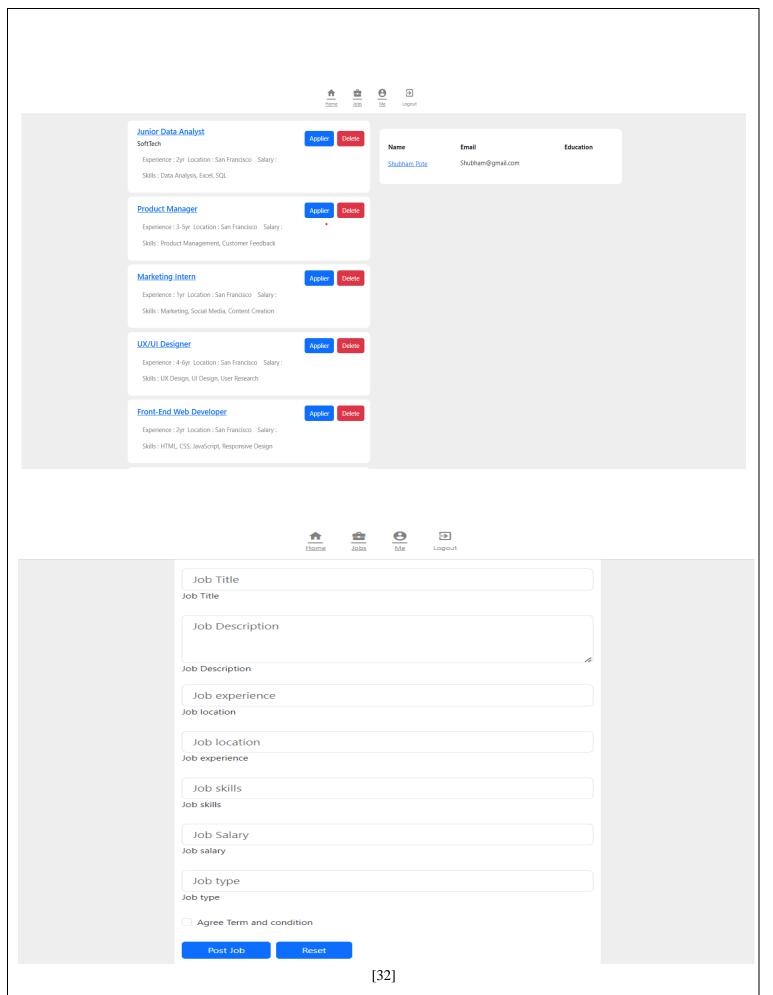
PROJECT DIAGRAMS

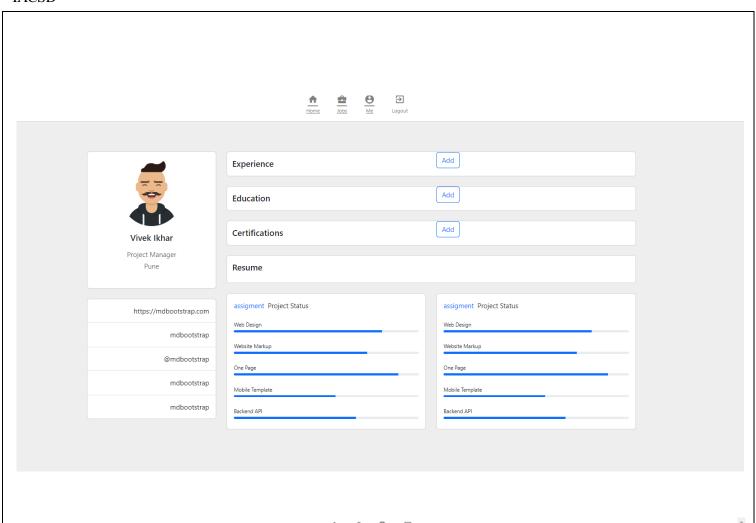
> Job Portal Module

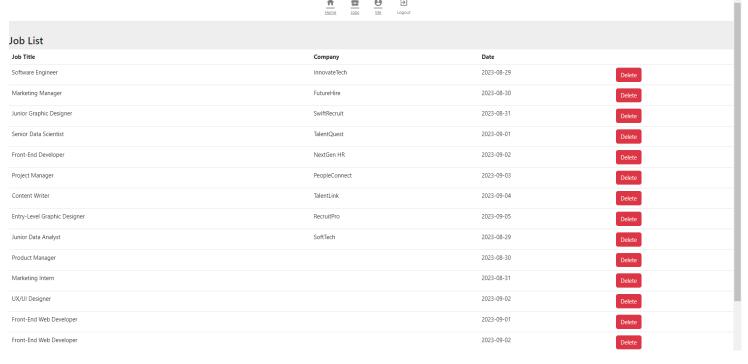














Recruiter List			
Company	Recruiter	Designation	
SoftTech	Vivek Ikhar	Project Manager	Delete
XYZ Corporation	Jane Smith	HR Manager	Delete
Tech Solutions	Michael Johnson	Senior Recruiter	Delete
Global HR	Emily Brown	Talent Acquisition Specialist	Delete
InnovateTech	David Miller	Recruitment Lead	Delete
FutureHire	Sophia Wilson	HR Coordinator	Delete
SwiftRecruit	William Davis	Recruiting Manager	Delete
TalentQuest	Olivia Martinez	Technical Recruiter	Delete
NextGen HR	Ethan Garcia	HR Specialist	Delete
PeopleConnect	Ava Lopez	Recruitment Consultant	Delete
TalentLink	Noah Harris	Senior HR Partner	Delete
RecruitPro	Mia Clark	Recruitment Director	Delete



User List			
Name	UserName	Location	
Shubham Pote	Shubham@gmail.com	Dund	Delete
Sophie Williams	sophie.williams	London	Delete
Elijah Smith	elijah.smith	Toronto	Delete
Isabella Brown	isabella.brown	Sydney	Delete
Sora Tanaka	sora.tanaka	Tokyo	Delete
Liam Müller	liam.mueller	Berlin	Delete
Ava Dubois	ava.dubois	Paris	Delete
Noah Silva	noah.silva	São Paulo	Delete
Mia Ivanova	mia.ivanova	Moscow	Delete
William Kim	william.kim	Seoul	Delete
Olivia García	olivia.garcia	Mexico City	Delete
James Moloi	james.moloi	Cape Town	Delete

CONCLUSION

The project entitled **Online Job Portal** was completed successfully.

The system has been developed with much care and free of errors and at the same time it is efficient and less time consuming. The purpose of this project was to develop a web application and an android application for purchasing items from a shop.

This project helped us in gaining valuable information and practical knowledge on several topics like designing web pages using React.js, usage of responsive templates, designing of android applications, and management of database using MySQL. The entire system is secured. Also, the project helped us understanding about the development phases of a project and software development life cycle. We learned how to test different features of a project.

This project has given us great satisfaction in having designed an application which can be implemented to any jobseeker who want job in various fields.

The online job portal serves as a dynamic platform connecting job seekers and employers. By streamlining the job search process, it empowers candidates to explore diverse opportunities and submit applications efficiently. Simultaneously, employers can effortlessly post job listings.

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- 4. https://www.freshersworld.com/