



IJRASET

International Journal For Research in
Applied Science and Engineering Technology



INTERNATIONAL JOURNAL FOR RESEARCH

IN APPLIED SCIENCE & ENGINEERING TECHNOLOGY

Volume: 9 Issue: XI Month of publication: November 2021

DOI: <https://doi.org/10.22214/ijraset.2021.38825>

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Online Job Portal- A Better Way for Finding Jobs in the COVID-19 Pandemic

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Abstract: Due to the COVID-19 pandemic unemployment broke all the previous records. Due to the pandemic students cannot go to colleges and have no option of campus placements. The only option available for them is to find a job through online job portals. In this paper we present the online recruitment framework that enables different companies to post their job vacancies, which jobseekers can consider while searching for jobs. This portal can also capture job requirements dependent on employers' needs. A survey was conducted to identify the problems and requirements of the users with the current job portals and the findings of the survey are incorporated in this portal. The main aim of this job portal is to connect the employers and jobseekers as an e-recruitment to help jobseekers find the right jobs.

Keywords: Job Seeker, Employer, Online Job Portal, Online Recruitment, Knowledge Sharing, COVID-19 Pandemic

I. INTRODUCTION

Unemployment is currently one of the biggest problems faced by the world especially due to the COVID-19 pandemic. Dorn et al [1] stated that one of the major reasons behind this problem is the lack of information on job vacancies. It means that there are job vacancies, but job seekers do not know about them. In Europe, the rate of unemployment has been increasing due to the pandemic. There are some online job portals that provide an effective way to search for online job vacancies [2]. Today, the internet has changed almost every aspect of our life including the way we find jobs [3]. Nowadays Online recruitment has become the standard method between companies and candidates. Online recruitment is done not only by most of large corporations but even by the small ones. [4] defines the online recruitment as the use of the internet to find jobs which are advertised electronically. If a person wants to find a new job, he/she can submit the resume by uploading on the web browser. Companies post jobs vacancies and communicate with applicants via the e-mails.

Technology is becoming increasingly important in today's world. The internet, the most important technology of today's world, is helping to run businesses online. This eventually contributes to a positive incline in organization's revenues and it changes the way the business is conducted. It does not matter what is the size of the businesses, there is always some need for information technology.

The usage of internet is continuously increasing because of the development of gadgets like computers, mobile phones, and tablets. The prices of these gadgets are also becoming more and more affordable. Businesses now very well know that promoting their products and services through the internet is so much easier and has tremendous effect on people. Back in the day, the price for internet subscription was also high, but nowadays it has also become very affordable. Nowadays, the internet is available free of cost at cafeteria, airports, railway stations, restaurants etc. Internet helps to broaden their audiences all over the world. Smart phone is also a device that has almost changed everything. It has the features that are similar to a computer. The subscription cost of the portable modem is not as much different as subscribing for a cellular phone services. The smart phone is also affordable and that is why very popular.

The life style of people and functioning of the organizations in the world have been revolutionized in the last few decades. The number of persons using internet has almost become equal to the total population of the world [7]. The working of many companies totally depends on internet [6]. The internet is evolving according to the global changes [5]. Nowadays, people rely on internet for all kinds of information. Online job portals are a collection of job vacancies from companies and profiles of various candidates. It serves as a platform for posting and searching a job, applying for various posts and selection of applicants [8]. Internet facilitates people for finding jobs and processing application via job portals.

There exists a positive relationship between job quality parameters and variety of job search methods on internet [12]. Generally different methods are used by job seekers for finding jobs, so employers use various job posting and hiring methods [10]. Everyone in three of the job applicants reported using online job portals regularly [11]. In US, job vacancies posted online sees more activity than those in printed media [9].

The revolution of technologies especially internet has resulted into great impact on our day-to-day life. Educational institutions focused on web development led to the development of online job portals, which provide great opportunities to job applicants. Many aspects of job search are transformed due to these portals [17]. Due to the online job portals the ways for searching jobs have been totally changed. These portals are adopted by large number of candidates for matching skills required by jobs [16]. This produced a desire in the applicants to pursue qualifications demanded by the industry [13-15].

The usage of internet for job searching is increasing. It is highly predictable that use of internet for job searching in the future will grow. Using online job portals also lead to new prospects of analyzing data to capture the trends related to market demand with respect to required skills [18]. Job portals are main source for collecting data to know the demands of the numerous industries [21]. It can be done by data mining, data processing, empirical analysis, data collection, data analysis etc [20]. The biggest problem faced by the market is production of graduates with outdated skills. Therefore, there exists a major need to train graduates in the college according to demands of the market [19, 20].

II. LITERATURE REVIEW

Job searching involves different ways to look for jobs such as through scanning online job vacancies, phone calls to companies, personal contacts, job agencies etc [22]. Before online job portals came into the picture, job seekers used to spend a lot of time in finding jobs. But today, job seekers use online portals which are user-friendly and save a lot of time. There are many different ways which were previously used like management consultants, existing employee contacts, recruitment agencies, workers or professional referrals, job fairs, advertising in the mass media such as newspapers, colleges or universities student services departments, advertisement in television and radio. These methods are very slow, stressful, challenging and also lack quality [25]. Moreover, the applicants have to consider the cost and time to get the information they need. Finding all available job vacancies is a main step in the job seeking process. The internet is a very useful tool that job seekers can use to find a job. Today, there are many online job portals which advertise job vacancies to be filled by skilled and educated candidates. Most organizations are using online job portals for staff recruitment. The Internet has made the process of job seeking very easy.

Today the internet has become the major tool for finding jobs. Large companies and universities include information on job prospects on their websites. According to a survey, 70% of people use online job portals to find jobs. These portals provide a search engine to access information on job vacancies [26]. [27] found that most employers are eager to use online job portals for getting staff. It is because online job portals have the ability to identify the best candidates. That is why most organizations have started to use online job portals to recruit people. A survey in 2006, indicated that 21% of internet users in the European Union countries used online job portals to find jobs and it increased to 67% in 2007 [24]. Most companies post job vacancies on their website or online job portals. Mochol et al [28] stated that the use of this web technology gives higher transparency and reduced cost. People also find internet a great communication tool. And that is why, in a report in 2005, it was found that 90% of job seekers in Germany use online job portals to find jobs. A reason behind this high rate of internet usage is that applicants are educated and qualified, and most companies publish job vacancies on online job portals.

Today Job portals have become the starting point for job seekers to find jobs, so some job portals charge employers high cost to publish information related to job openings. Despite of that fact, most organization publish information related to job vacancies on these portals, because they know that today's young candidates first of all use these portal to find jobs.

A good job portal not only helps users find jobs but also supports knowledge sharing among them. The number of job portals is continuously increasing and it is believed that 75% people around the world use them to find jobs. The online recruitment has many advantages like organizations can have a greater number of eligible job seekers than any other offline method [23]. And thus they have a pool of candidates from which they can make a better choice. These portals provide organizations a better way to attract a higher number of candidates. With these portals, people have access from any corner of the world, while newspapers and jobs fair provide access at the local level only. The biggest advantage of these jobs portals is that they are very affordable in compare to other methods such as newspaper or job fairs. The other big advantage of online recruitment is that it is very fast and saves a lot of time. Once organizations post the job openings, job seekers are able to see and send their resume. Just after uploading resume, the companies are able to view it. [24] stated that the internet is a tool without limits, and is a method to reach the audience around the world.

One way to improve employment rate is to provide online job offers. Online job portals can help job seekers a lot because they contain all required information about job vacancies at a single point. These portals can enhance efficiency of job recruitment process as candidates can match their qualifications with the requirements of the company.

A good job portal always shares its experiences with users. Due to this facility, better decisions can be made [29]. Companies' requirements for job vacancies can be matched to an applicant's qualifications. In this way, job portals return the precise matches. The European Commission stated that every online job portal should have some common features like: facility to upload CVs, companies must have the ability to publish and manage job vacancies, extra instructions for working in foreign countries, email alerts of when users' profile matches job requirements, the online contact with job seekers, search a CV from the database, and a database of positions for job seekers.

III. METHODOLOGY

The first task was to select a suitable topic of research that was not only of my field of interest but also something fruitful for the society. Due to the COVID-19 pandemic unemployment was at its peak all over the world. Most countries of the world were facing highest unemployment of their history. During the pandemic students could not go to colleges and had no option of campus placements. Even today, many countries especially European countries are preparing for lockdown due to the fourth wave of the COVID-19. In this situation students have only one option for finding jobs and it is online job portals. That is why I decided to do research on online job portals.

After finalizing the topic of research, my next step was to do proper research on online job portals. While doing research I came to know that many people are there who are not satisfied with the current job portals. According to them, they have problem to get the required information while finding a job. They want a knowledge sharing system and that's why we developed a new job portal based on their requirements.



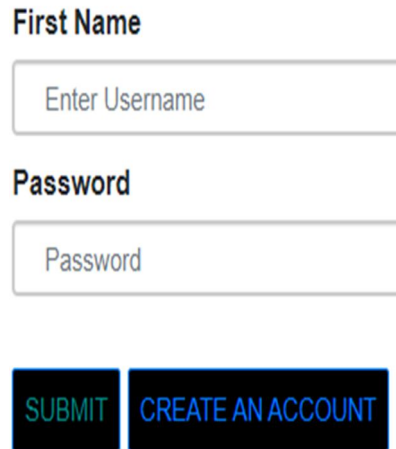
Fig-1 Home Page of the online job portal system

In figure 1, the homepage allows the users to see the jobs that are posted by different companies. First of all, the user needs to create an account before applying for any job. After creating the account, the user can make the profile. The user can show his/her skills, knowledge and other qualifications in the profile.

Sr. No	Company	Title	Location	Post_Date	Last_date	Action
1	amazon	java developer	pune	May 30, 2020	June 20, 2020	Apply
2	HCL	Python Developer	Nagpur, Maharashtra	May 30, 2020	June 10, 2020	Apply
3	facebook	PROJECT MANAGER	Delhi, India	June 9, 2020	June 13, 2020	Apply
4	facebook	R language	mesoor	June 6, 2020	June 7, 2020	Apply
5	XYZ Academy	Java Developer	Bhopal	Sept. 8, 2020	Sept. 30, 2020	Apply

Fig-2 View Job List Page

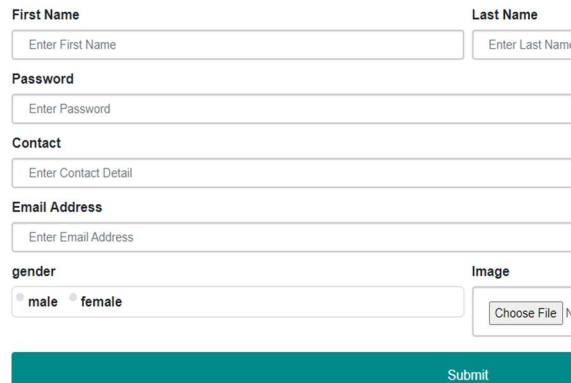
In figure 2, the latest jobs page shows the list of the available jobs which suit the user's profile. The user can apply for any available job by clicking on 'Login to apply'.



The form contains two input fields: 'First Name' with a placeholder 'Enter Username' and 'Password' with a placeholder 'Password'. Below the fields are two buttons: 'SUBMIT' and 'CREATE AN ACCOUNT'.

Fig 3- User Log In page

In figure 3, users will log in the website through the credentials those were used during creating the account. After logging in, the users will be able to see the jobs that are suitable for him/her. The user will also be able to put the profile picture in the account.



The form includes fields for 'First Name' (placeholder: Enter First Name), 'Last Name' (placeholder: Enter Last Name), 'Password' (placeholder: Enter Password), 'Contact' (placeholder: Enter Contact Detail), and 'Email Address' (placeholder: Enter Email Address). It also features a 'gender' section with radio buttons for 'male' and 'female', and an 'Image' section with a 'Choose File' button. A 'Submit' button is located at the bottom right.

Fig 4- User Sign Up Page

In figure 4, the user can sign up the website using the personal details.



The page displays a profile picture of a man in a suit. Below the picture, the following user details are listed:

First Name	qwe
Last Name	asd
Email ID	qwe3@gmail.com
Contact NO.	3333333333
Gender	male

An [Edit Profile](#) button is located at the bottom.

Fig 5- User Home Page

In figure 5, the data the user enters while creating the account will be visible on the home page. The user can also edit the profile by using this page. The user can also change the password from this page.



Fig 6- Apply for the Job Page

On this page, the user can see the details of the vacancies listed by the company and can apply for the post by just clicking on 'Apply Now'.

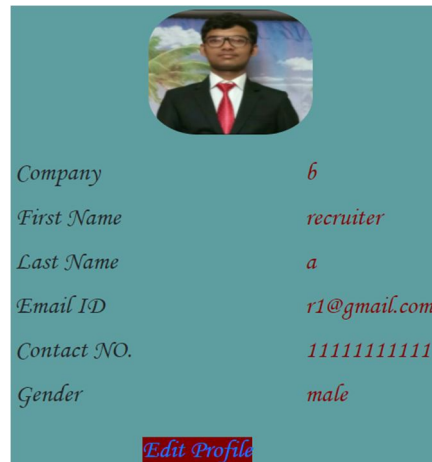


Fig 7- The Recruiter Home Page

On this page, the recruiter can add the list of available vacancies in the company and qualifications required for those jobs. The recruiter can also edit the profile from this page.

Company Name

Job Title

Start Date

End Date

Salary

Company Logo
 No file chosen

Experience

Location

Skills

Description

Fig 8- The Job Add Page

On this page, the recruiter can add new job vacancy in the company along with the educational qualification, skills, and experience required by that post.

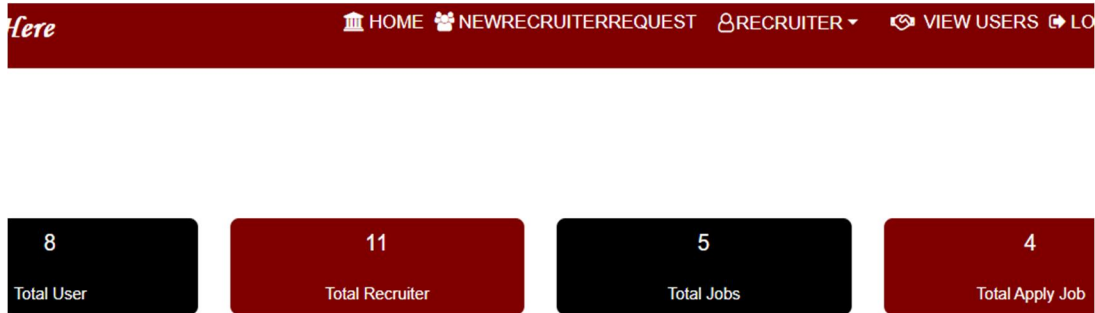


Fig 9- Admin Home Page

The Admin home page is used by admin only and can view everything total users, total recruiters, total jobs available as well as total job applied. The admin can also accept or reject the recruiters' signup request.

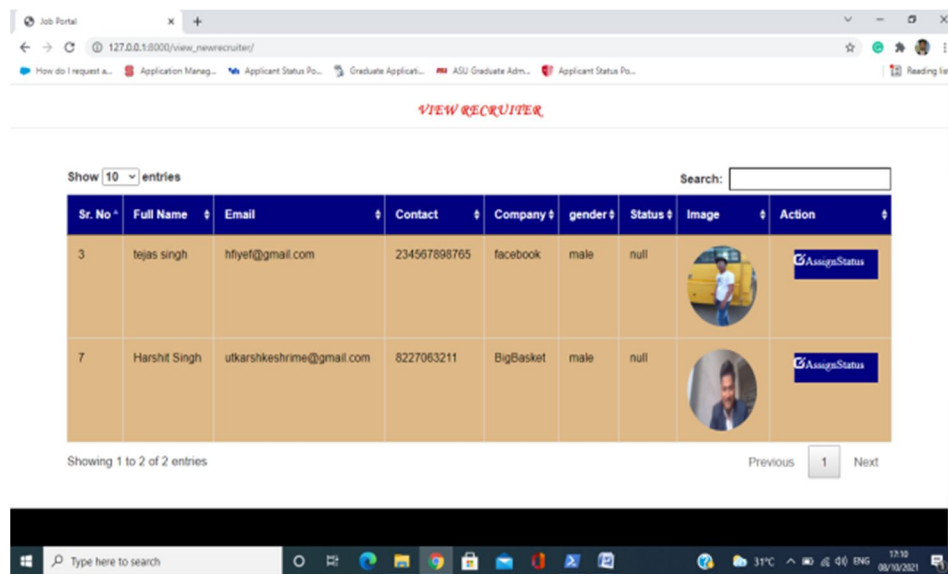


Fig 10- View Recruiters Page

The admin can see the total job recruiters and can also edit the status of the vacancy of the company.

Sr. No	Full Name	Email	Contact	gender	Image	Action
1	rakhu singh	lodhi5580@gmail.com	456386737482	female		
2	hema sisodiya	hfiyef@gmail.com	456789	female		
3	vanu singh	asd@gmail.com	45674893	female		

Fig 11- View All Users Page

On this page, the admin can see all the active job seekers and can also delete the user's application.

IV. RESULTS AND DISCUSSION

Analysis of the data collected from different surveys regarding online job portals indicate that many candidates are not satisfied with the current job portals. According to them, they have problem to get the required information while finding a job. They want a knowledge sharing system to get such information. That's why we developed a new job portal based on the feedback from the surveys.

Based on information from the literature review and surveys, a new job portal is proposed. The created portal serves as a job searching tool which fulfills the needs of users who are already employed, unemployed jobseekers and companies as the employers. The admin manages and views the entire process in the portal. This research concerns about the development of a knowledge sharing system to implement e-recruitment in a better way. This portal is a knowledge sharing system, which means it provides information to job seekers to help them in finding the right job. It also contains information on the industries. Thus, the job portal that shares knowledge and information is highlighted in this portal. It creates a better job searching environment for users. This portal provides a new link between jobseekers and companies. This relationship illustrates how a knowledge sharing system helps to find jobs. We have developed a job portal for jobseekers which will provide them with enough information to choose the right job. This portal is also an online recruitment system to help fresh graduates or final year students find jobs. The link between colleges and organizations by a knowledge sharing system can improve the quality of the educational environment. In today's era, the availability of knowledge is an important component of students' learning. When fresh graduates are not able to find jobs, it becomes a major problem. This situation currently exists in many countries of the world especially due to the COVID-19 pandemic. It is noted that 40% of graduates, who finished their graduation are not able to find a job especially due to the pandemic. This shows the importance of right information to find a job. It is especially important for the universities which provide information to jobless graduates about jobs. Thus, it is very important for the universities to pay more attention to their knowledge management system. Fig. 12 shows the conceptual diagram of the proposed portal.

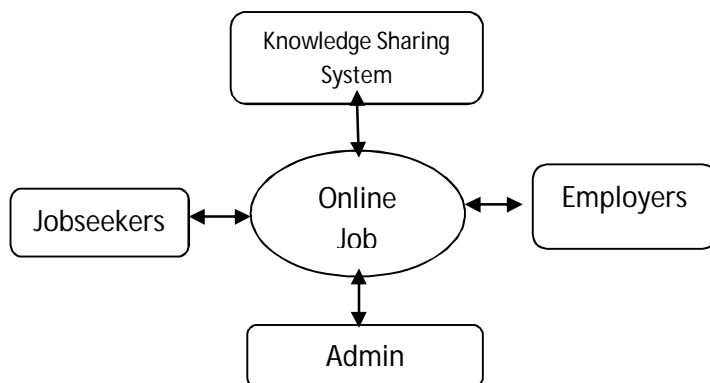


Fig. 12 The relationship between job portal, jobseekers and employers

This portal provides information about job vacancies and how they relate to future jobs in the industry. It represents online information and services to the users. This portal is a perfect medium for the jobseekers to establish a link with the companies. It provides updated information about job vacancies in a good way to satisfy job seekers' requirements. The biggest advantage of this portal is it provides information from authenticated sources.

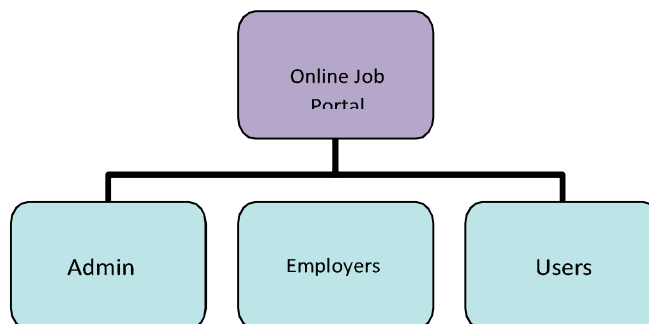


Fig. 13 The Framework for the Proposed Job Portal

V. CONCLUSION

We challenged different problems that are currently faced by job seekers and companies to develop a new system. The main intention of this work is to develop a new web portal. The main advantages of this new portal are high level management, flexibility, and standard content, services and display. This work has focused on reducing the issues that existed in the current online job portals and thus improving them by developing a knowledge system. This portal is more beneficial with enhancements in the services and features. It can be inferred that created portal is successful in choosing skilled candidates inside a shorter time period.

VI. FUTURE SCOPE

Due to the COVID-19 pandemic, students cannot go to the college and have no option of campus placements. The major option available for them is to find a job through online job portals. Further research is required to improve the quality of this job portal with the use of various targeted jobs, larger samples and organizations. We divided the future enhancement of this portal into three different areas like graphic improvements, contents improvements and, technical improvements.

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