iJRASET
International Journal For Research in Applied Science and Engineering Technology



INTERNATIONAL JOURNAL FOR RESEARCH

IN APPLIED SCIENCE & ENGINEERING TECHNOLOGY

Volume: 7 **Issue:** X **Month of publication:** October 2019

DOI: http://doi.org/10.22214/ijraset.2019.10122

www.ijraset.com

Call: 08813907089 | E-mail ID: ijraset@gmail.com

International Journal for Research in Applied Science & Engineering Technology (IJRASET)
ISSN: 2321-9653; IC Value: 45.98; SJ Impact Factor: 7.177
Volume 7 Issue X, Oct 2019- Available at www.ijraset.com

Innovative Recruitment Techniques in Job Portal with MERN Stack

Pavan Kavade[1], Sangharsh Raut[2], Yogesh Mane[3], Apurva Raut[4], Ganesh Rathod[5]
[5]*Assistant Professor,* [1, 2, 3, 4]*Department of Computer Science Engineering, Dr. J. J. Magdum College of Engineering Jaysingpur, India.*

Abstract: ***"Innovative Recruitment Techniques with MERN Stack", is a web-based application, which gives the right recruiters and right job seekers a platform to interact with each other. This computerized on-line Job Search System is developed to provide jobs to job seekers and employees to employers. Employers will be able to Create/ Edit Profile Information, Post Job Vacancies, and Search for Employees as per requirement match. Employee will be able to search th preferred job as per his area of interest, contact the Employer to get the job, create/ Edit Profile Information. In this application, we will focus on providing the most user friendly interactive interface while making use of the most popular technologies in the market. It will enhance the user's experience along with providing an easy to access portal where they can look for work at the time of their need from any device. Giving every user maximum amount of features so that they can do the basic tasks of finding and posting the jobs is the main purpose of this application, along with providing extra features that'll work behind the screen and improve the performance and reliability of the web app and provide seamless experience.***
Keywords: Job Portal, Job Seeker, Recruitment, Employer, MERN stack.

I. INTRODUCTION

The Employment landscape changes rapidly with technological advancement, automation, and adoption of artificial intelligence (AI) in various spheres; there is an impending fear of labor displacement. India Skill Report 2018, however, argues that these underlying disturbances won't just improve the efficiency of employments over the long-run yet additionally make numerous new job positions of exceptionally skilled, management and even the entry-level and low-skilled workers [7]. According to research firm Gartner, 1.8 million jobs will be eliminated by 2020, but 2.3 million new jobs will be created by then. Nevertheless, building a skilling system that responds well to business needs and opens opportunities for people is pertinent.

"Innovative Recruitment Techniques in Job Portal With MERN Stack" – is an application that will give the workers and companies an edge in this ever growing technologically advancing market.

The fear of technology and automation is a very real issue but the same technology can be used to solve that issue by expanding onto the traditional structure of job searching and providing technology in it.

We have done research on the Unemployment reports provided by Maharashtra government and came to conclusion that the there are several reasons for the unemployment rate to increase and one of which we are planning to tackle is lack of modernization in the traditional job searching techniques, most of the unemployed people depend on the advertisement sections for jobs in newspapers and some middlemen who look for work for them, with this application the workers will be in direct contact with the employers.

II. DRAWBACKS OF CURRENT SYSTEM

Old ways of job seeking usually involves different ways to look for jobs such as through personal contacts, direct telephone calls to employers, job agency office, etc.[2]. these methods have been used for searching for jobs by job-seekers before the internet became popular.

These old job seeking methods are too slow, stressful, challenging and also lack quality[6]. In addition, the applicants have to consider the cost and the amount of time to get the information they need, and other preparations they have to make.

Today, with the new way of job-seeking there are many sites advertising job positions to be filled by people with certain skills in various fields.

The Internet plays an important role in the area of human resource planning and development [3][5]. There are still many job seekers who look for jobs through newspaper advertisements even if they have internet connectivity to look for jobs on job portals. Also, many employers prefer doing job posting adverts in newspapers since their target audience mainly looks for a job in the newspaper [4].

©IJRASET: All Rights are Reserved

III.PROPOSED WORK

This system will be used to connect the new and old ways of seeking jobs. With the help of technologies like OCR and machine learning the data from newspaper classified ads will be extracted and stored in the database used for the modern job portal.
This job portal will make it easier for the job seeker to access the information given in the newspaper and also sort it through filters to look for the job well suited for their skill.
Web application will provide following functionalities

1) Choose workers faster and easier in one place.
2) Unemployed people save time of traveling while looking for work.
3) It will help employers to expand their level of efficiency.
4) A user-friendly interface will help people who are not too comfortable with using the internet access the application without any confusion.
5) Job-seekers get work as per their skill
6) Employer gets workers as per their requirement of skills.
7) Recruiters and Work seekers will have a common platform.
8) The search system will provide workers and recruiters result as per their requirement [1].
9) The use of newer technologies like React and Node.js will make the website run faster and more efficiently.
10) Multilanguage Support

Architecture of Job Portal

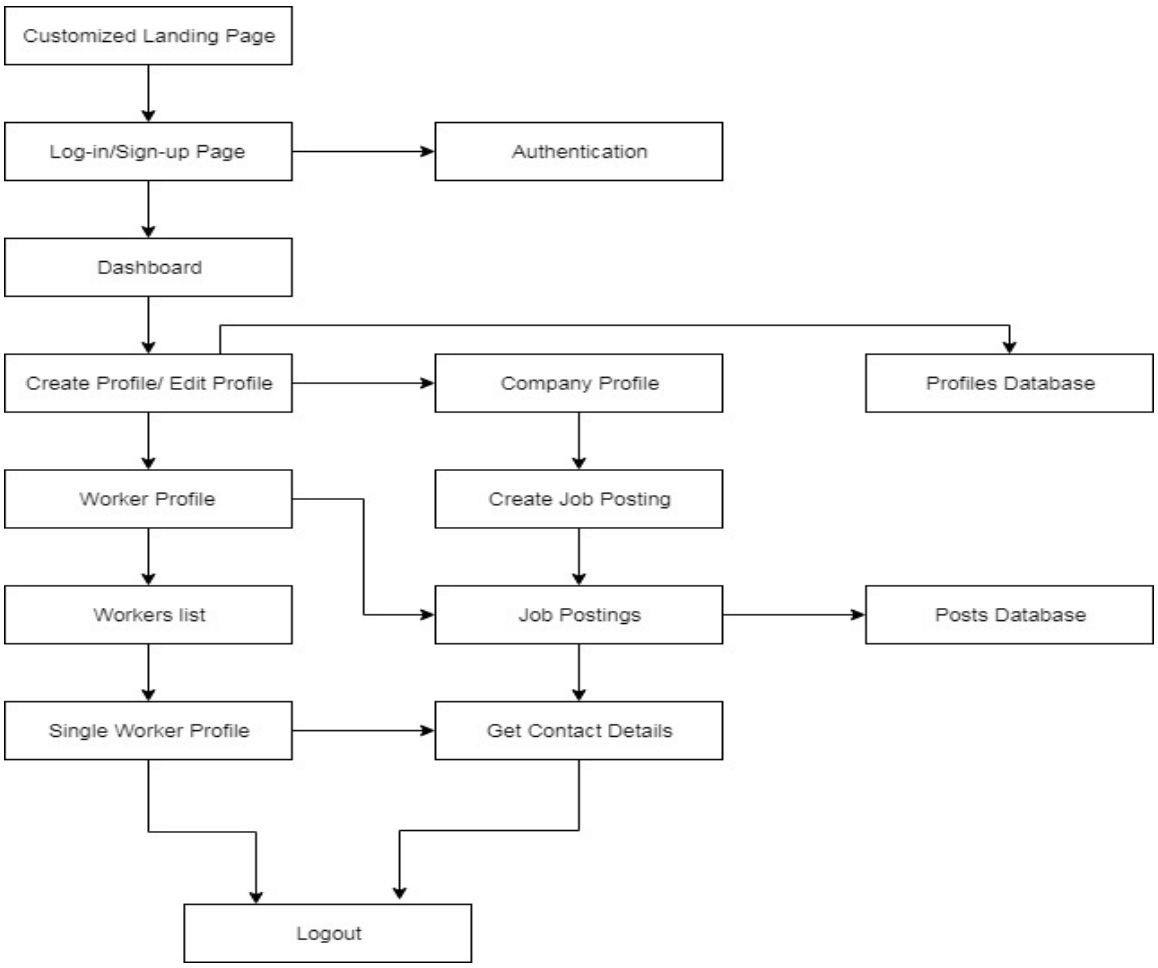


Fig. 1: Steps in working of the job portal web application

©IJRASET: All Rights are Reserved

ISSN: 2321-9653; IC Value: 45.98; SJ Impact Factor: 7.177
Volume 7 Issue X, Oct 2019- Available at www.ijraset.com

Architecture of Job Posting extraction from newspaper

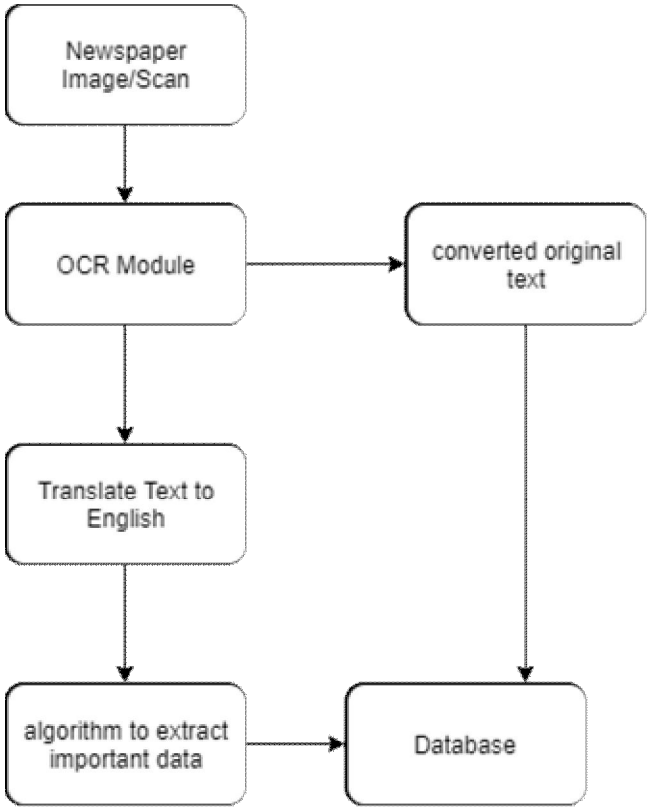


Fig. 2: Steps in extracting job posts from newspaper adverts

IV. METHODOLOGY

Following are the modules used in web application.

1) *Module 1:* User Account/Profile Module. In this module, the information about the user account like log-in details is stored and used for authenticating every time the user logs back in. User accounts management module maintains the information about all the users like personal details, experience detail and education details. This information is very useful for a successful e-commerce market.
2) *Module 2:* Dashboard Module. A dashboard is required to manage the account information, in dashboard user gets links to edit profile information, delete an account.
3) *Module 3:* Suggested Job Module. It's a feature that'll be available in the dashboard which will show a list of job posting that are related to or exactly matching the skills that the user has put on his profile
4) *Module 4:* Post Feed Module. Post Feed contains a basic social feed which can be seen by every logged in user, it contains post with like/unlike button and comment feature. Every logged in user can create a post.
5) *Module 5:* Worker Profiles Module. Pin this module list of cards containing information about all the workers is displayed. This list can be used to find workers appropriate for the employers need and the employer can search for a specific type of worker by using the search bar.
6) *Module 6:* Job Search Module. This module will help job seekers and employers search each other as per their requirement, searching will be done for both job seekers and employers on their concerned page.
7) *Module 7:* Job Vacancies Extraction Module. This module will focus on extracting job vacancies from newspaper adverts for wanted positions with the help of OCR technology and machine learning and storing the scrapped data in a cloud database server.

©IJRASET: All Rights are Reserved

V. RESULTS AND DISCUSSION

By using the MERN (MongoDB, Express.js, React.js, Node.js) stack we have developed the first 5 modules that are essential for a job portal to work along with the 6th job search module that is still under work and searches jobs based on one single criterion, we are working on adding multiple filters for user to search jobs/job seekers based on their need. Such as search by name, city, skill-set and education.

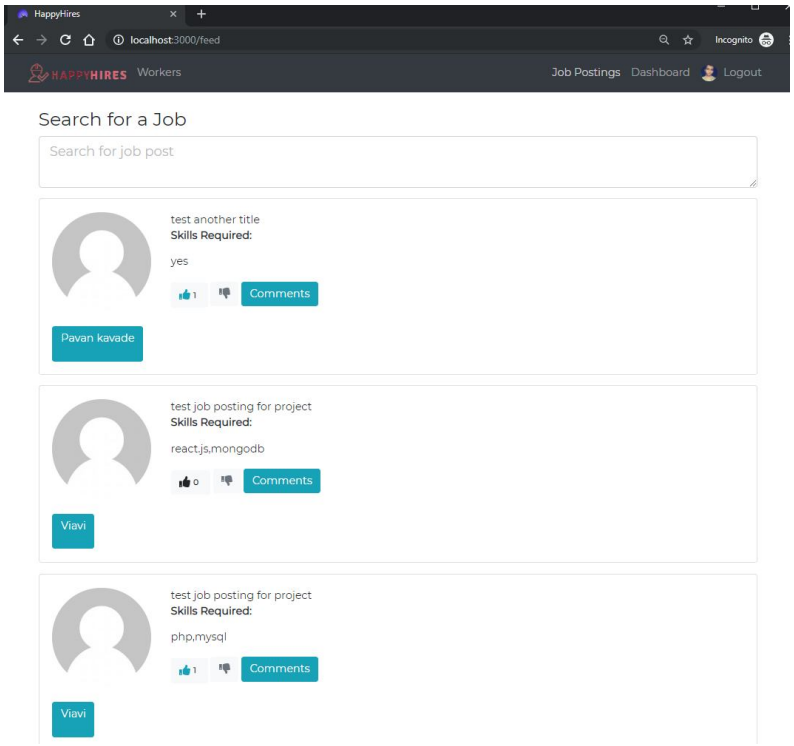


Fig. 1: Jobs feed for Job Seeker profile

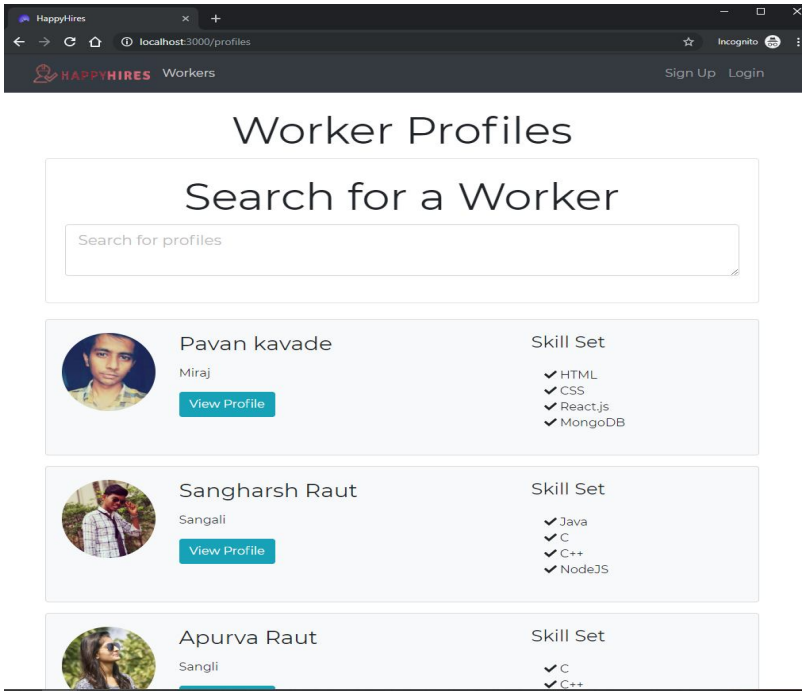


Fig. 1: Job Seeker Profiles Feed

©IJRASET: All Rights are Reserved

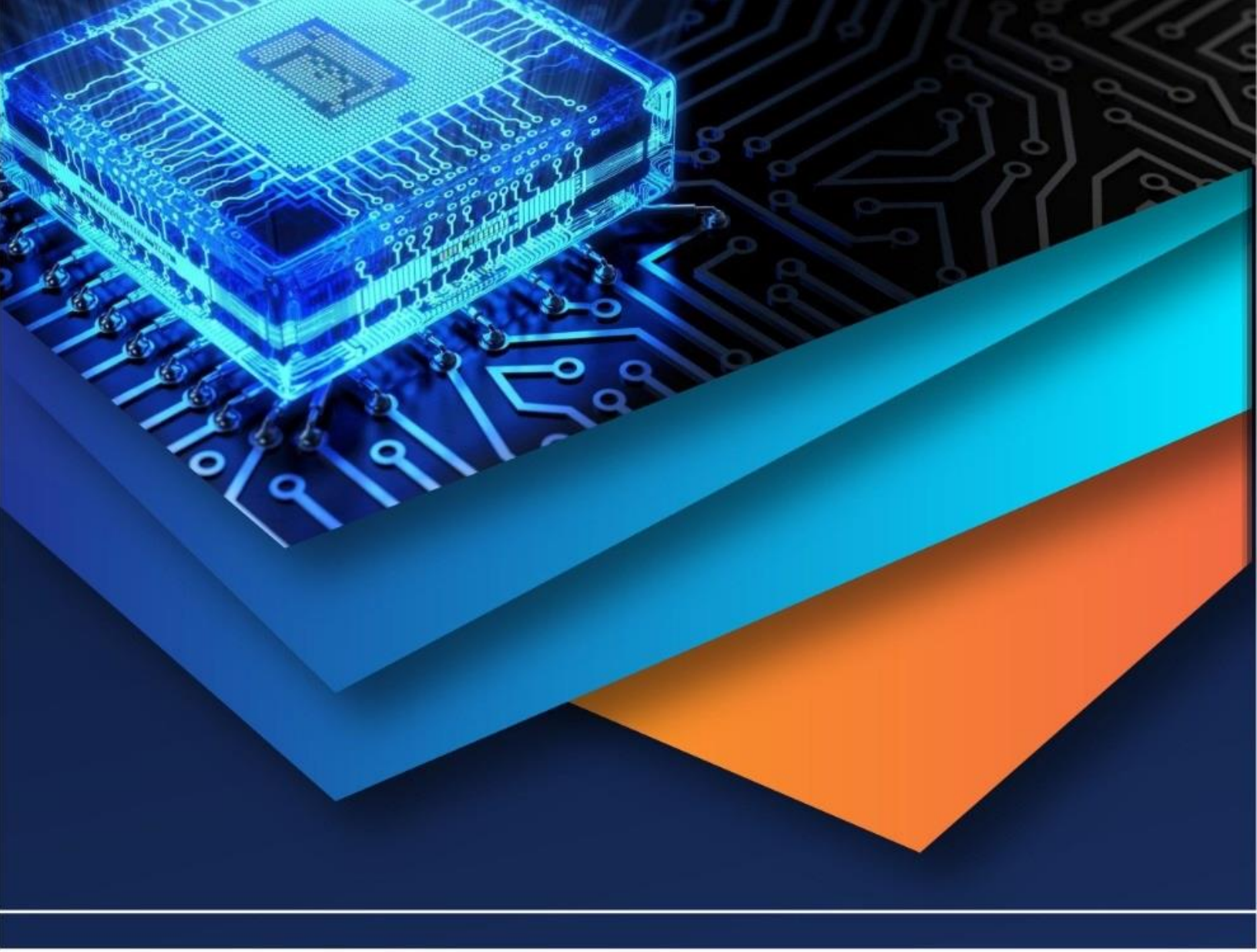
VI. CONCLUSIONS

This paper is the implementation of MERN stack web application that provides jobs to the job seekers and lets employers find workers. We have finished 5 modules so far in this project and these modules make up for a working job portal, but to make this project unique we will be adding another module that will extract job vacancies from newspaper ads and add it to the database. This new module will require a sound knowledge of machine learning and python programming which we are planning on learning and implementing in the next phase of this project. This project has also provided us knowledge about the latest technology used in developing web enabled applications and client server technology that will be great demand in the future.

REFERENCES

[1] Divyanshu chauhan,(2013) "Efficiency of job portals and social media on organisational business." International Journal of Advanced Research in Management and Social Sciences, ISSN: 2278-6236
[2] Marjan Mansourvar and Norizan Binti Mohd Yasin, (2014) "Development of a Job Web Portal to Improve Education Quality" International Journal of Computer Theory and Engineering, Vol. 6, No. 1.
[3] Nidhi Kala Arora, (2015) "A study on innovative recruitment techniques and its impact on job seekers "Shri Jagdishprasad Jhabarmal Tibarewala UniversityReg.15712134.
[4] Salathiel Bogle1 and Suresh Sankaranarayanan2, (2012)"Job search system in android environment application of intelligent agents."International Journal of Information Sciences and Techniques (IJIST) Vol.2, No.3.
[5] Thirupathi Chellapalli and D.V. Srinivas Kumar,(2018) "A Study On Online Recruitment (E-Recruitment) Portals Adoption" IUJ Journal Of Management.
[6] Pooja T. Killewale, (2017) "A Review on: Job Portal- A Web Application for Distributed Clients" International Journal of Advanced Research in Computer and Communication Engineering, Vol. 6, Issue 5, ISSN 2278-1021.
[7] Sougata Roy Choudhury, (2018) "India Skills Report 2019", Wheebox.

©IJRASET: All Rights are Reserved



10.22214/IJRASET

45.98

IMPACT FACTOR: 7.129

IMPACT FACTOR: 7.429

INTERNATIONAL JOURNAL FOR RESEARCH

IN APPLIED SCIENCE & ENGINEERING TECHNOLOGY

Call : 08813907089 (24*7 Support on Whatsapp)