

ONLINE JOB PORTAL USING DJANGO

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ABSTRACT

Our current generation uses the internet for everything right from shopping to getting hired. In this project, we attempt to address and minimize the gap between the job seeker and the recruiter through this ONLINE JOB PORTAL (Web Application) using python Django. This is done by considering details of both the job seeker and the recruiter and by applying a variety of filters to satisfy their requirements. Job seekers can search for vacancies according to their qualifications, skills, and experience as well as a recruiter can easily find suitable and eligible candidates using the job seeker’s resume and profile details. In addition to this, there will be an administrator to manage and authenticate the system services. We are using MVT, a software designing architecture, to design this system. In the existing system, they have the book store feature, where users can access books based on their requirements but in our project, we are providing informative videos on how to face interviews and videos regarding their career necessities; the existing system provides updates on new job availabilities posted (within 2-3 days) but we are going to provide updates on all job availabilities posted within the past 15 days along with their opening and closing dates and also add the feature of detecting the search errors using LIKE operator (pattern matching) and string matching algorithm.

Keywords: Job seeker, Recruiter, Administrator, Job portal, Python django, LIKE Operator, MVT, String matching algorithm.

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INTRODUCTION

Nowadays various problems can be solved using portals of different applications or services. One such is a portal of requirements for the person who is seeking a job. Nowadays, online recruitment has become the standard method for employers. As of today, an infinite number of online job portals are available dividing the labor market into information rooms, making it a path to find a job. Yet the current system needs to be upgraded to make the portals work easier for the recipients. Hence, we have added the feature of detecting the search error using A.I and we also provided informative videos to uplift their career [1,2]. This Project is done by using Python Django, HTML, CSS, JavaScript, and Bootstrap 5. We have used MVT (Models, Views, Template) to design this project.

EXISTING SYSTEM

In the existing system, the employer can post a job, and job seekers can apply for a job based on their qualifications and skills. It also contains a resume-building feature through which the job seeker can build his resume. Job seekers could find a job matching their resumes with any company’s requirements [3]. The job seekers were able to find a job as per their qualifications, skills, and requirements. Numerous filters were provided to categorize the job seeker and employer needs. Recruiters can maintain their profiles, track how many job seekers have applied, and manage a database of available candidates. Added automated mailing system feature [4]. Improved user interface and usage of keyword search techniques to enhance the functionality [5]. From user-generated content, micro-blogging websites provide invaluable unknown knowledge. By detecting events, important information can be determined [6,1]. It is essential to have a proper cloud infrastructure to store and analyze massive amounts of data from social media, companies, organizations, government sectors, and more [7].

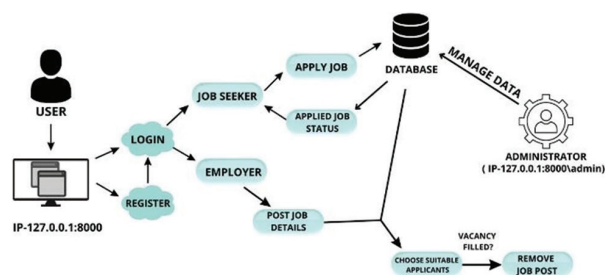
FAQs page and informative guidelines were not available to help the job seekers. The search technique used was not very efficient.

In our proposed system, we are intended to provide more features to make the portal more user-friendly.

PROPOSED SYSTEM

In the proposed system, we are intended to add extra features to make the portal user-friendly. We are providing informative videos on how-to-face interviews and videos regarding their career necessities, and provide updates on all job availabilities posted within the past 15 days along with their opening and closing dates on the home page. In this project, we are going to add the feature of detecting the search error using the LIKE operator (Pattern Matching) and string matching algorithm. We are using Models-Views-Template (MVT), software designing architecture, to design our system where ‘Models’ connect the frontend and backend, “Views” provides business logic for manipulating data, and “Template” acts as an interface (GUI) that facilitates the user and system interaction. MVT architecture is provided by Django which is scalable and reusable.

ARCHITECTURE DIAGRAM



Explanation

The user logs in to the main page of the web application. A registered user can log in to his/her profile through their login credentials. If not, then he needs to register first and then log in. The user of this application is either a job seeker or an employer. The roles of the job seeker are applying for the job, viewing the status of the applied job as well seek guidance from the available video resources. The role of the employer is to post available jobs and access the information from the database that contains the information about the job seeker and choose the eligible applicants. Once the employer has chosen the employee

then he can change the status of the job from “vacant” to “filled” and remove the job post. The administrator accesses his dashboard and be able to view and manage the details of both the job seeker and employer from the database.

Algorithm

The algorithm that we have used in our web application is a string matching algorithm that uses the logic of the Naïve Bayes string matching algorithm and Rabin karpalgo algorithm which matches the pattern of the string and checks it. With the help of a like operator, we match similar occurrences in a given word and suggest the exact words that the user is looking for. For example, if the user searches for a word that is wrongly typed or has its letters jumbled, then the string matching algorithm corrects the wrongly typed word with the correct spelling.

Software Designing Architecture: MVT

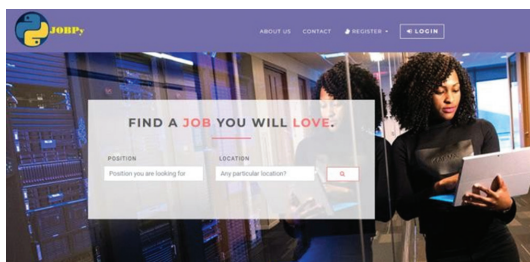
The model acts as an interface for the data. Its responsibility is to maintain the data. It makes up the logical data structure of the entire application and is represented by a database. The view is your web browser’s user interface a website’s rendering produces the view. It is represented by HTML/CSS/JavaScript and Jinja files. The static part of the desired HTML output is the Template. However, it has some special syntax that defines how to insert dynamic content.

Modules

- i. Login
- ii. Registration
- iii. Employer
- iv. Jobseeker
- v. Administrator

LOGIN

The login module gets the username and password of the user. If the user is already a registered user, then it leads to the user’s dashboard. In the case of a new user, he/she needs to sign up by giving his/her details.



REGISTRATION

This module gets the required details of the user (name, mail, password, etc.,) to register the account to make the user an authenticated one to access the web application.

NEW ACCOUNT

Not registered yet?

If you have any questions, please feel free to [contact us](#), our customer service center is waiting for you 24/7.

Company Name

Company Address

Email

Password

Confirm Password

[REGISTER](#)

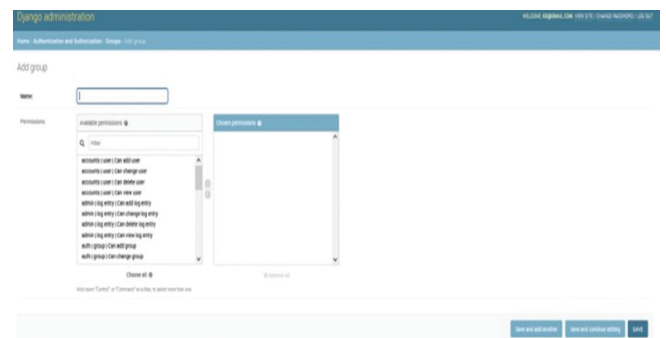
EMPLOYER

1. The employer first logs into his/her account.
2. He/she can post the details of the job such as skill requirements, specifications, working hours, salary details, and mode of job (online or offline).
3. They choose the suitable applicants till the vacancies are full and remove the posted job details.

Job title	Position filled	Date posted	Date expiring	Applicants	Actions
Marketing Coordinator	NOT FILLED	June 21, 2022, 1:38 p.m.	June 30, 2022, midnight	1 APPLICANTS	EDIT, MARK AS FILLED, DELETE
Medical Assistant	NOT FILLED	June 21, 2022, 1:43 p.m.	June 27, 2022, midnight	0 APPLICANTS	EDIT, MARK AS FILLED, DELETE
Web Designer	NOT FILLED	June 21, 2022, 1:46 p.m.	July 8, 2022, midnight	0 APPLICANTS	EDIT, MARK AS FILLED, DELETE

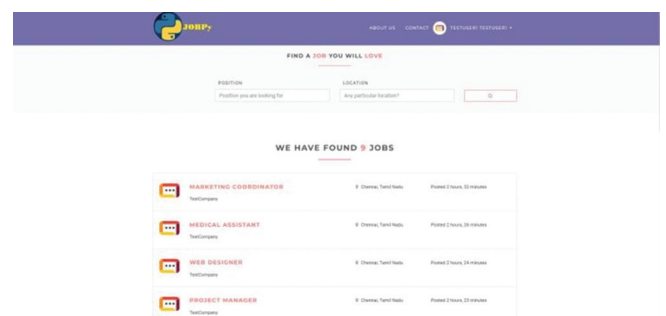
ADMINISTRATOR

1. The administrator collects the information and maintains the databases containing the details of the employer and the job seeker.
2. The administrator can view the data, manage them, and alter the data in correspondence with the varying demands of the employer and job seeker.

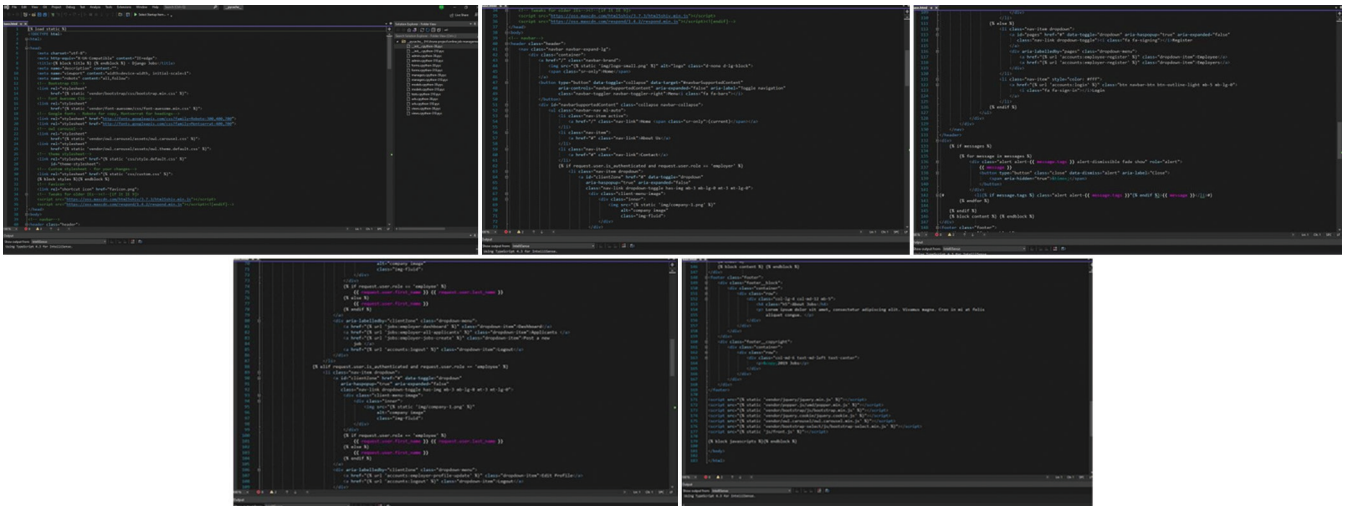


JOB SEEKER

1. The job seeker enters the home page using the login credentials.
2. He/she searches through the list of available job openings and also accesses the videos related to their career necessity.
3. They can apply for a job that fulfills the requirements and also check the status of the applied job [2].



CODE



CONCLUSION

Using this job portal (web application), both the job seeker and the recruiter can log in using their authenticated details. This portal helps the job seeker by providing the past 15 day’s updates of jobs, provides informative videos and it will also provide the user’s application status. This portal will be beneficial not only for the job seeker but also for the recruiter who wants to recruit eligible candidates using this portal.

FUTURE ENHANCEMENT

The future enhancement can be an improvement in the features of this job portal including conducting interviews by providing the facility of video conferencing and also by providing the language-translation facility to make the portal more user-friendly.

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