

PROJECT REPORT

IBM-Project-39053-1660390054

TITLE:

Skill / Job Recommender Application

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PNT2022TMID31532

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1 INTRODUCTION

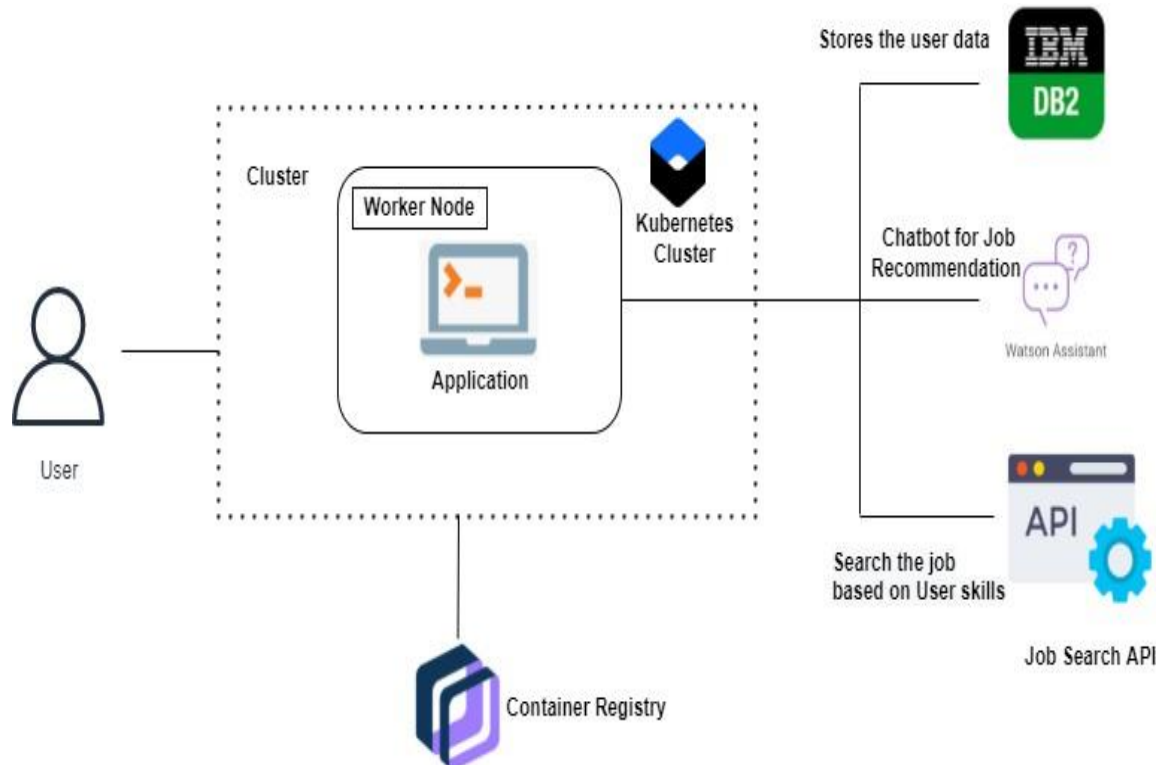
Project Overview

Purpose

A good job recommender system not only makes it possible to advise a higher paid job that is most aligned with the skill set of the existing employment, but also makes suggestions about how to pick up a few extra abilities that are necessary to fill the new role.

to develop a piece of software that filters jobs according to the qualifications of applicants.

The candidates are then suggested for that filtered job depending on their skill set.



2 LITERATURE SURVEY

The modern recruitment sector values the task of job recommendations. A good job recommender system not only makes it possible to advise a higher paid job that is most aligned with the skill set of the existing employment, but also makes suggestions about how to pick up a few extra abilities that are necessary to fill the new role. In this study, we developed three different types of information networks from the historical employment data: (i) a network for job transitions; (ii) a network for job-skills; and (iii) a network for skill co-occurrences. In order to jointly learn the representation of the jobs and skills in the common k -dimensional latent space, we offer a representation learning model that can make use of the data from all three networks. By simultaneously learning the representation for the occupations and in our experiments, we demonstrate that our approach offers more accurate job and skill recommendations. We also provide several case studies that support our assertion to create a complete web application that can show available jobs based on the user's skill set. The database contains both the user and their data. Based on the user's skill set, an alert is delivered when a position becomes available. The chatbot will be used by users, who can engage with it and receive recommendations depending on their skill set. To obtain the most recent job vacancies on the market, we can utilise a job search API that will retrieve the information straight from the website.

Existing problem

When an applicant submits their profile to a job search engine, this occurs. Most of the time, their academic credentials and professional experience are taken into consideration while making employment recommendations. A study of job recommendation engines, International Journal of Physical Sciences, Shaha Alotaibi, July 2012. The recommender system technology, which successfully addresses issues linked to information overload in e-commerce applications, attempts to assist consumers in choosing products that fit their own preferences. This article will provide a survey of the electronic hiring process and current methods for creating customised recommender systems for matching jobs and candidates. Cheng Yang, Yingya Zhang, and Zhixiang Niu, 2014 Seventh International Symposium on Computational Intelligence and Design, December 2014; "A Research of Job Recommendation System Based on Collaborative Filtering." It examines the résumé of the applicant and the hiring policies of the companies to compare and reach a more informed decision after identifying the job candidates with the finest qualification.

References

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Collaborative _ltering recommender systems[M]//The
adaptive web. Springer Berlin Heidelberg, 2007: 291-324.
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collaborative _ltering recommendation
algorithms[C]//Proceedings of the 10th international conference on World Wide Web. ACM,
2001: 285-295.
- [4] Nikolaos D. Almalis ,Prof. George A. Tsihrintzis ,
Nikolaos Karagianniset al."FoDRA - A New Content-Based
Job Recommendation Algorithm for Job Seeking and
Recruiting".
- [5] Anika Gupta, Dr. Deepak Garg. "Applying Data Mining
Techniques in Job Recommender System for Considering
Candidate Job Preferences".
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surprise and coincidence[J]. Computational linguistics,
1993, 19(1): 61-74.
- [7] Emmanuel Malherbe , Mamadou Diaby , Mario Cataldi
et al. "Field Selection for Job Categorization and

Recommendation to Social Network Users". 2014

IEEE/ACM International Conference on Advances in Social Networks Analysis and Mining (ASONAM 2014).

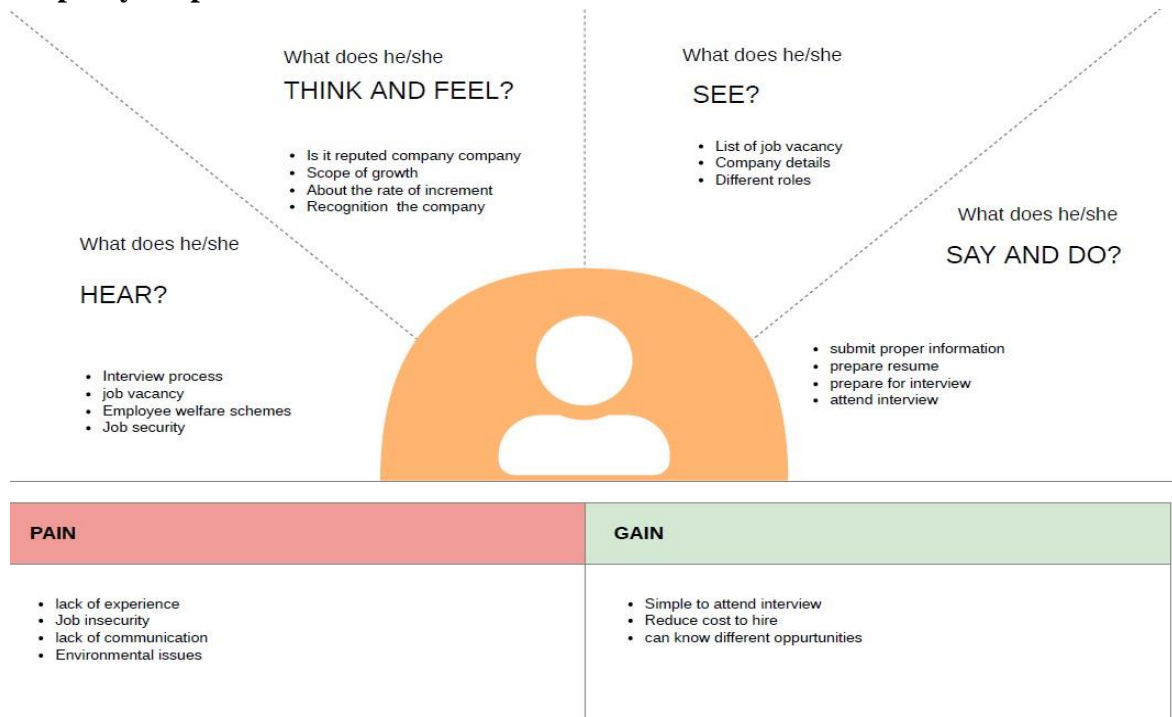
Problem Statement Definition

Having a variety of abilities but unsure of which position would be best for you? No need to be concerned! We have developed a talent recommender solution through which both experienced and inexperienced users can sign up, look for employment, or speak with the chatbot directly to land their dream job.

To create a complete web application that can show available jobs based on the user's skill set. The database contains both the user and their data. Based on the user's skill set, an alert is delivered when a position becomes available. The chatbot will be used by users, who can engage with it and receive recommendations depending on their skill set. To obtain the most recent job vacancies on the market, we can utilise a job search API that will retrieve the information straight from the website.

3 IDEATION & PROPOSED SOLUTION

Empathy Map Canvas



Ideation & Brainstorming

Vasanth

Validating Resumes	Generating notifications for job alerts	Filteration based on job requirements
Verifying whether the given details or valid or invalid	Aking for users feedback	Security
Providing companys' Recruitment Process		

Sathyan

Providing companys' specific resume builder	Displaying companys' rating	Providing company specific question
Finding job posting based on location	Profile privacy	Providing alert of particular companys' vacancy

Prabhu

Providing chatbot	Reducing job seeking time	Proper resumes with updated skills and job needs
Survey based on information provided	Asking for users queries	Asking for Ratings
Providing Company's Details		

Sri ram karthi

Checking certification Courses	Testing Communication skills	Live chat
Filteration based on Job credentials	Checking for falsified information	Notifying job alerts

Proposed Solution

S.No.	Parameter	Description
1.	Problem Statement (Problem to be solved)	<p>Having a variety of abilities but unsure of which position would be best for you? No need to be concerned! With our skill recommender solution, either a skilled or a fresher user can sign up, search for jobs using the search bar, or speak with the chatbot directly to land their ideal position.</p> <p>to create a complete web application that can show available jobs based on the user's skill set. The database contains both the user and their data. Based on the user's skill set, an alert is delivered when a position becomes available. The chatbot will be used by users, who can engage with it and receive recommendations depending on their skill set. To obtain the most recent job openings on the market, we can use a job search API, which will retrieve the information directly from the website.</p>

2.	Idea / Solution description	The three contributions of this work are as follows: i) We made a new dataset, comprised of a collection of job seeker profiles and a set of job openings, publicly available. ii) present a framework for employment recommendations based on job seekers' professional skills iii) completed an analysis to quantify
		The proposed framework empirically compares two state-of-the-art methods' capacities for recommendations while taking various configurations into account. As a result, we provide a broad overview of the job recommendation task in an effort to facilitate research and the design of practical applications for this crucial issue.
3.	Novelty / Uniqueness	Any person is recommended for the best position based on her skills. While assuming the position of known profiles

Problem Solution fit

Problem-Solution fit canvas 2.0 Skill/Job recommender Team ID - PNT2022TMID23025

Define CS, fit into CC	1. CUSTOMER SEGMENT(S) CS Who is your customer? i.e. working parents of 0-5 y.o. kids The main customers for our project are : <ul style="list-style-type: none"> Persons who are seeking employment Persons that recruit job candidates 	6. CUSTOMER CONSTRAINTS CC What constraints prevent your customers from taking action or limit their choices of solutions? i.e. spending power, budget, no cash, network connection, available devices. <ul style="list-style-type: none"> Concern about misuse of personal information Worry about unreliable connections Inadequate product knowledge Potential Scam Time consuming 	5. AVAILABLE SOLUTIONS AS Which solutions are available to the customers when they face the problem or need to get the job done? What have they tried in the past? What pros & cons do these solutions have? i.e. pen and paper is an alternative to digital notetaking <table border="1"> <tr> <th>Pros</th> <th>Cons</th> </tr> <tr> <td>Promotion of people's skillset</td> <td>Delivering false information</td> </tr> <tr> <td>Marketing of company infrastructure</td> <td>Occurrence of fraudulent activity</td> </tr> <tr> <td>Cultivate commercial relationship</td> <td>Intense competition</td> </tr> </table>	Pros	Cons	Promotion of people's skillset	Delivering false information	Marketing of company infrastructure	Occurrence of fraudulent activity	Cultivate commercial relationship	Intense competition	Explore AS, differentiate
	Pros	Cons										
Promotion of people's skillset	Delivering false information											
Marketing of company infrastructure	Occurrence of fraudulent activity											
Cultivate commercial relationship	Intense competition											
2. JOBS-TO-BE-DONE / PROBLEMS J&P Which jobs to be done (or problems) do you address for your customers? There could be more than one, explore different sides. <ul style="list-style-type: none"> Create a platform to facilitate job searching A platform to make it simpler to identify people with the necessary skills Make the job-filtering process simpler Profile with safe personal data 	9. PROBLEM ROOT CAUSE RC What is the real reason that this problem exists? What is the back story behind the need to do this job? i.e. customers have to do it because of the change in regulations. <ul style="list-style-type: none"> Jobs that are listed on unreliable platforms may be fraudulent Companies fail to disclose their true infrastructure Some job portals want payment in advance of the job starting. Users post false credentials Users pretend to have expertise in a skillset they lack 	7. BEHAVIOUR BE What does your customer do to address the problem and get the job done? i.e. directly related: find the right solar panel installer, calculate usage and benefits; indirectly associated: customers spend free time on volunteering work (i.e. Greenpeace) <ul style="list-style-type: none"> When Users apply for fraudulent jobs, they get unhappy due to wasted time Users were not satisfied when platforms allowed hirers to post jobs that were not real Cheating during online recruitment process When candidates with inadequate qualifications apply for a position, employers become irritated. 	Focus on J&P, keep RC, BE									
3. TRIGGERS TR What triggers customers to act? i.e. seeing their neighbour installing solar panels, reading about a more efficient solution in the news. <ul style="list-style-type: none"> Employment opportunities Branding Endorsement and connections Get job alerts 	10. YOUR SOLUTION SL If you are working on an existing business, write down your current solution first, fill in the canvas, and check how much it fits reality. To develop an end-to-end web application which in default have a lot of current job openings through job search API out of which appropriate job will be recommended based on user skill set. At the same time students can develop their skills side by side with various courses and webinars offered by reputed organization. In addition to this a smart chat bot will be available for 24*7 which can help users in finding the right job.	8. CHANNELS OF BEHAVIOUR CH 8.1 ONLINE What kind of actions do customers take online? Extract online channels from #7 <ul style="list-style-type: none"> Apply for jobs Review job applications Attend initial level assessment 8.2 OFFLINE What kind of actions do customers take offline? Extract offline channels from #7 and use them for customer development. <ul style="list-style-type: none"> Final level interview Checkout location and infrastructure of company Finalize paperwork 		Extract online & offline CH of BE								
4. EMOTIONS: BEFORE / AFTER EM How do customers feel when they face a problem or a job and afterwards? <table border="1"> <tr> <th>Emotions-Before</th> <th>Emotions-After</th> </tr> <tr> <td>Lack of knowledge about job vacancy.</td> <td>User receive updates on job vacancies.</td> </tr> <tr> <td>No proper platform to showcase skillset</td> <td>Exhibit skillset in profile</td> </tr> <tr> <td>More paperwork during recruitment</td> <td>Easy recruitment process</td> </tr> </table>	Emotions-Before	Emotions-After	Lack of knowledge about job vacancy.		User receive updates on job vacancies.	No proper platform to showcase skillset	Exhibit skillset in profile	More paperwork during recruitment	Easy recruitment process			
Emotions-Before	Emotions-After											
Lack of knowledge about job vacancy.	User receive updates on job vacancies.											
No proper platform to showcase skillset	Exhibit skillset in profile											
More paperwork during recruitment	Easy recruitment process											

4 REQUIREMENT ANALYSIS

Functional requirement

Functional Requirements:

Following are the functional requirements of the proposed solution.

FR No.	Functional Requirement (Epic)	Sub Requirement (Story / Sub-Task)
FR-1	Sign in / Login	Register with username, password
FR-2	Profile Registration	Register with username, password, email, qualification, skills. This data will be stored in a database.
FR-3	Job profile display	Display job profiles based on availability, location, skills.
FR-4	Chatbot	A chat on the webpage to solve user queries and issues.
FR-5	Job Registration	The company's registration/Description details will be sent to the registered email id of the user.
FR-6	Logout	Use logout option after completing job registration process.

Non-Functional requirements

Non-functional Requirements:

Following are the non-functional requirements of the proposed solution.

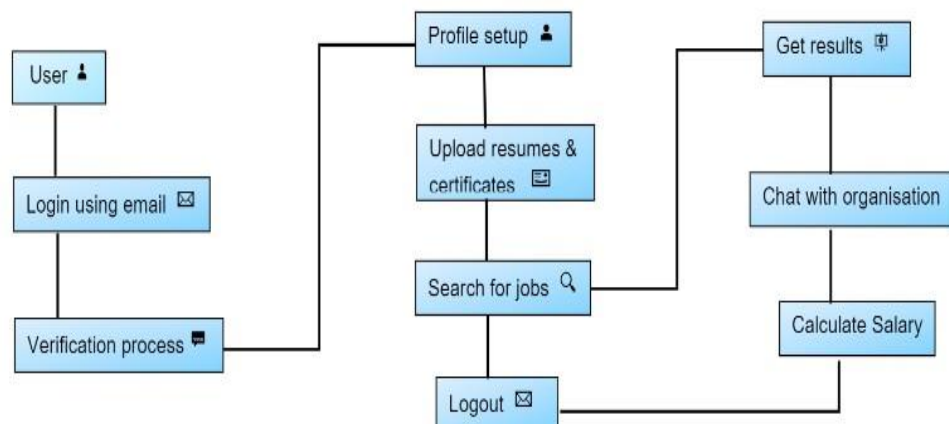
FR No.	Non-Functional Requirement	Description
NFR-1	Usability	The webpage will be designed in such a way that any non-technical user can easily navigate through it and complete the job registration work. (easy and simple design)
NFR-2	Security	Using of python flask to cloud connect will provide security to the project. Database will be safely stored in DB2.
NFR-3	Reliability	To make sure the webpage doesn't go down due to network traffic.
NFR-4	Performance	Focus on loading the webpage as quickly as possible irrespective of the number of user/integrator traffic.
NFR-5	Availability	The webpage will be available to all users (network connectivity is necessary) at any given point of time.
NFR-6	Scalability	Increasing the storage space of database can increase the number of users. Add some features in future to make the webpage unique and attractive.

5 PROJECT DESIGN

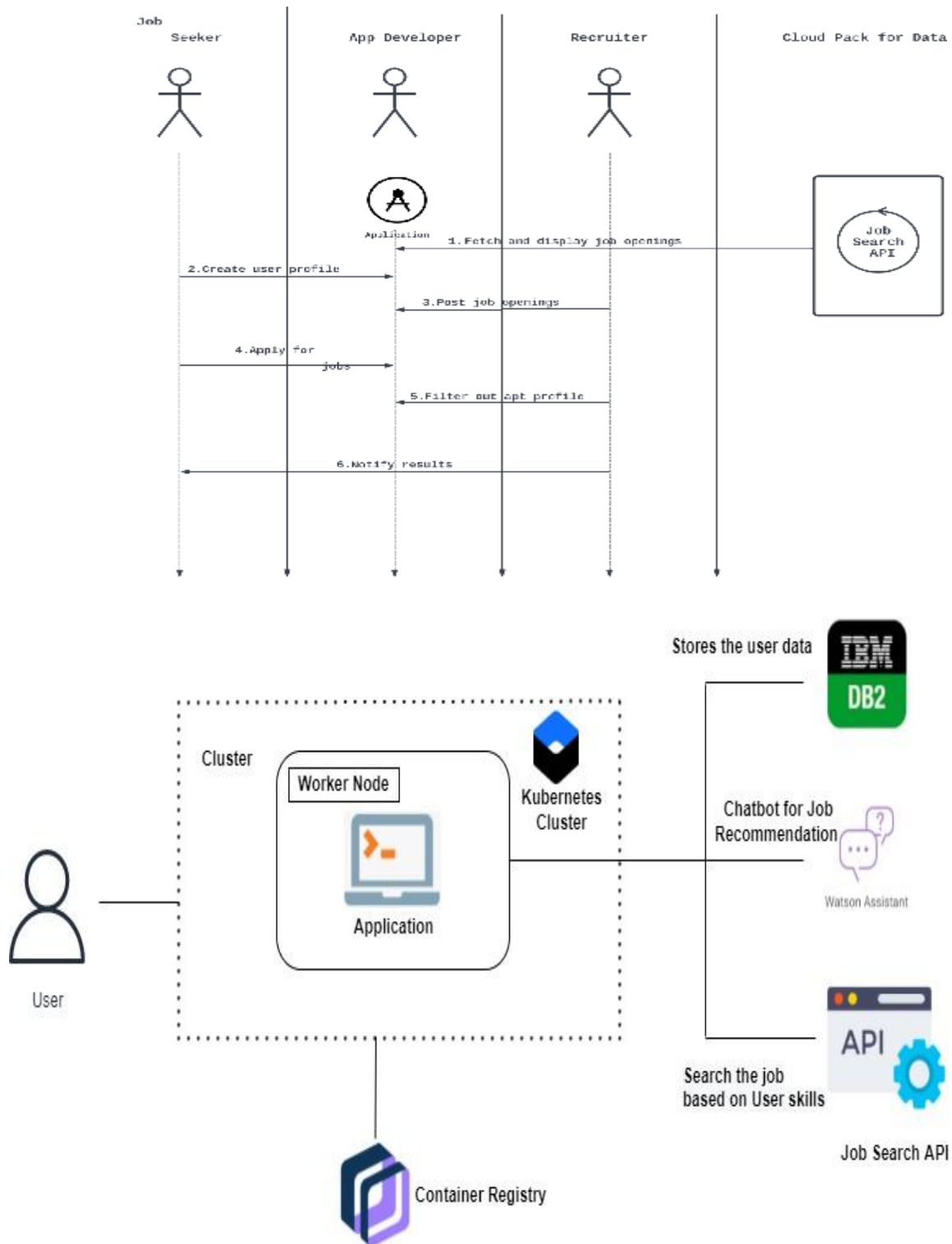
Data Flow Diagrams

Data Flow Diagrams:

A Data Flow Diagram (DFD) is a traditional visual representation of the information flows within a system. A neat and clear DFD can depict the right amount of the system requirement graphically. It shows how data enters and leaves the system, what changes the information, and where data is stored.



Solution & Technical Architecture



User Stories

User Stories

Use the below template to list all the user stories for the product.

User Type	Functional Requirement (Epic)	User Story Number	User Story / Task	Acceptance criteria	Priority	Release
Customer (Mobile user)	Registration	USN-1	As a user, I can register for the application by entering my email, password, and confirming my password.	I can access my account / dashboard	High	Sprint-1
		USN-2	As a user, I will receive confirmation email once I have registered for the application	I can receive confirmation email & click confirm	High	Sprint-1
		USN-3	As a user, I can register for the application through Facebook	I can register & access the dashboard with Facebook Login	Low	Sprint-2
		USN-4	As a user, I can register for the application through Gmail		Medium	Sprint-1
	Login	USN-5	As a user, I can log into the application by entering email & password		High	Sprint-1
	Dashboard	USN-5	As a user, I can access my dashboard after signing in.	I can access my account / dashboard	High	Sprint-1
Customer (Web user)	Access	USN-6	As a user, I can setup a profile, and basic details by signing in.			
		USN-7	As a user, I will upload my resume, certificates, and other requirements.	I can perform several task in the application	Medium	Sprint-1
Customer Care Executive	Chatbot	USN-8	As a user, I can seek guidance from the customer care executive.		High	Sprint-1
Administrator	DBMS	USN-9	As a administrator, I can keep the applications of your organization relies on running.	I can perform various modifications in the applications.	High	Sprint-1

6 PROJECT PLANNING & SCHEDULING

Sprint Planning & Estimation

Product Backlog, Sprint Schedule, and Estimation (4 Marks)

Use the below template to create product backlog and sprint schedule

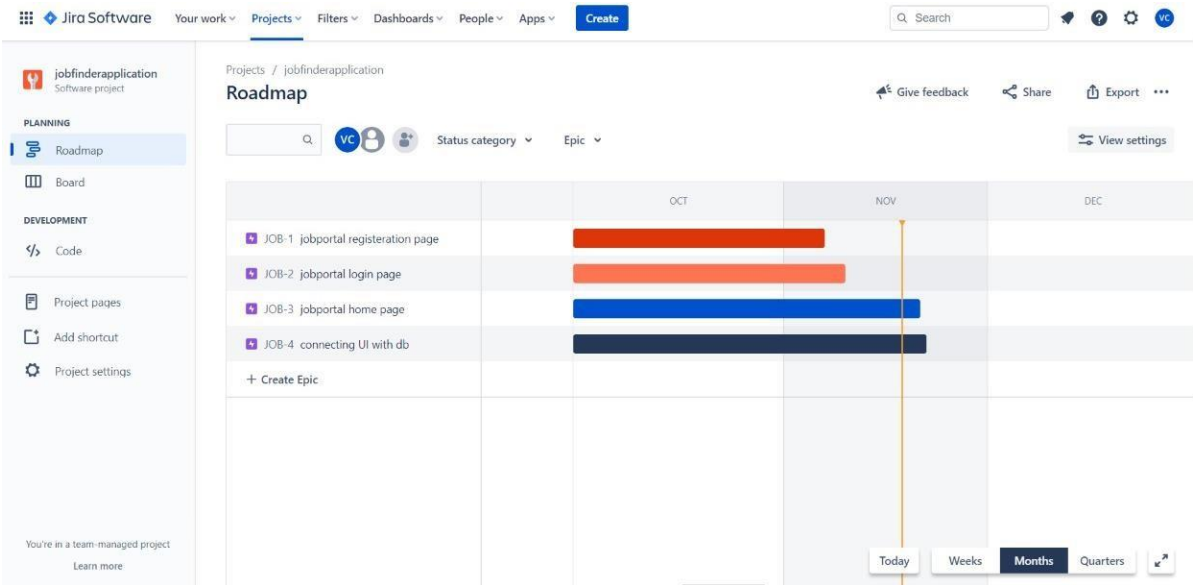
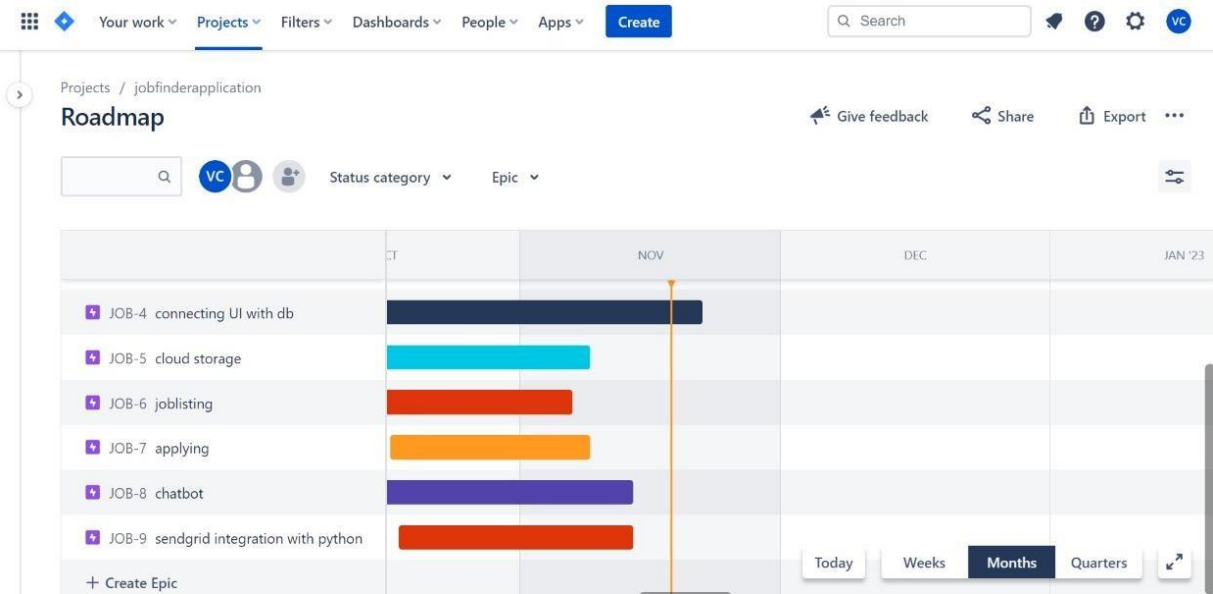
Sprint	Functional Requirement (Epic)	User Story Number	User Story / Task	Story Points	Priority
Sprint-1	Registration	USN-1	UI Creation Creating Registration page, Login page	10	Medium
Sprint-1	Database Connectivity	USN-2	Viewing and applying jobs Connecting UI with Database	10	High
Sprint-2	SendGrid Integration	USN-3	SendGrid Integration with Python Code	10	Low
Sprint-2	Chatbot Development	USN-4	Building a chatbot	10	High
Sprint-3	Integration and Containerisation	USN-5	Integrating chatbot to the HTML page and containerizing the app	20	Medium

Sprint-4	Upload Image and deployment	USN-6	Upload the image to the IBM Registry and deploy it in the Kubernetes Cluster.	20	High
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Sprint Delivery Schedule

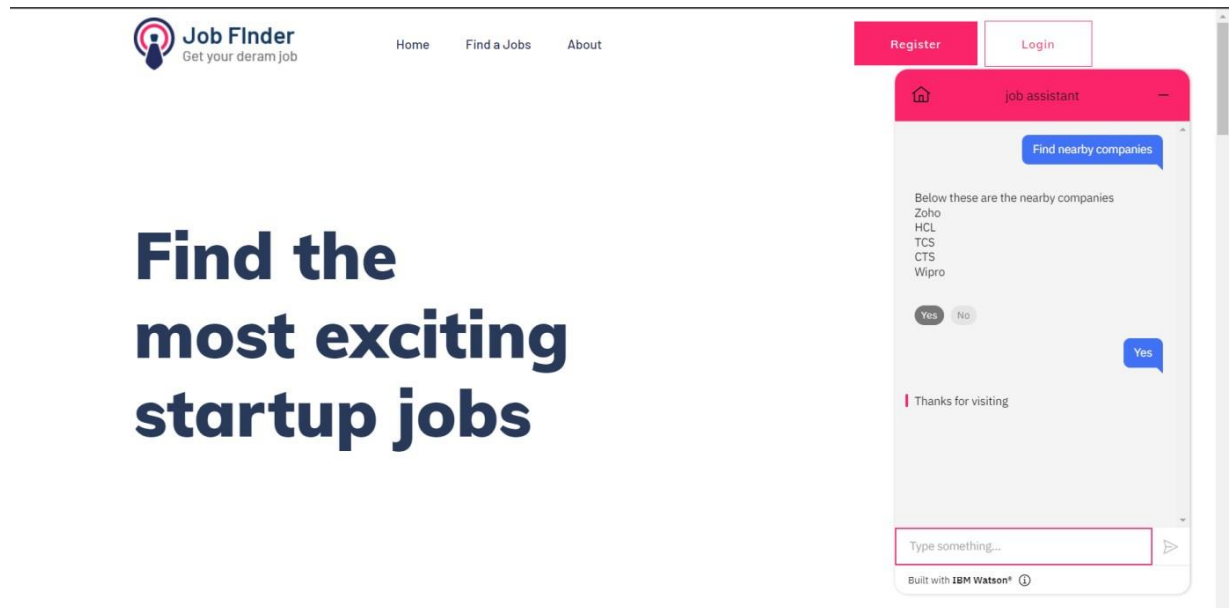
Sprint	Total Story Points	Duration	Sprint Start Date	Sprint End Date (Planned)	Story Points Completed (as on Planned End Date)	Sprint Release Date (Actual)
Sprint-1	18	6 Days	24 Oct 2022	29 Oct 2022	18	29 Oct 2022
Sprint-2	27	6 Days	31 Oct 2022	05 Nov 2022	27	05 Nov 2022
Sprint-3	29	6 Days	07 Nov 2022	12 Nov 2022	29	12 Nov 2022
Sprint-4	14	6 Days	14 Nov 2022	19 Nov 2022	14	19 Nov 2022

Reports from JIRA



7 CODING & SOLUTIONING

Feature 1



The software has an integrated "Chat Bot" that can help with ongoing inquiries, offer quick fixes to user issues that may arise, and direct management attention if there are any complications. Customer service will be available 24 hours a day, seven days a week to help in case any contentious issues arise.

Feature 2

To view the jobs that are available and to make it easier to access the website, we created the dashboard page for this project.

- They communicate information quickly.
- They display information clearly and efficiently.
- They show trends and changes in data over time.
- They are easily customizable.
- The most crucial widgets and data elements are succinctly displayed in a constrained area.


[Home](#) [Find a Job](#) [About](#)
[Register](#) [Login](#)

**Find the
most exciting
startup jobs**

RECENT JOB

Featured Jobs



Digital Marketer

Creative Agency

1 Chennai, Tamil Nadu

RS.20000 - RS.40000

Full Time

7 hours ago



8 TESTING

Test Cases

Software testing is the process of assessing and confirming that a software application or product performs as intended. Testing has advantages such as bug prevention, lower development costs, and better performance.

This software has undergone successful testing and evaluation.

User Acceptance Testing

Purpose of Document

This document's goal is to provide a concise explanation of the project's test coverage and open issues as of the time of User Acceptance Testing (UAT)

Acceptance by users The testing is done in a different testing environment. A modification, an upgrade, or a new feature is asked for and created. There are both unit and integration tests. Things appear to be in order. But after it is made available to the public, significant issues start to emerge. When that occurs, rework and retesting are not the most costly outcomes. Reputational damage

9 RESULTS

Performance Metrics

We evaluate the effectiveness of all the methods stated above based on the two categories of user recommendations mentioned above. The occupations that are subsequently suggested to

each new user are compared to the jobs that they were initially in according to the test dataset. The model appends 1 for yes and 0 for no depending on whether the original user job is advised in the model result.

This array of 0's and 1's thus received is then checked for accuracy by computing the count of 1's from the total user predictions

The cosine similarity based job recommendation system model beat all other models created with the addition of various similarity measures. Accuracy, precision, recall, and F1-score are the measures used to evaluate the performance of the model. This is due to the fact that while computing similarity, cosine takes duplicate phrases into account. Additionally, because only non-zero dimensions are taken into account, cosine has a low computing complexity and is simple to handle when dealing sparse data vectors.

Analyzing the result table, we see that even after scoring highly, several similarity metrics fall short when recommending the top 5 and highest-score based jobs. Similarity scores are a result of people being perceived to have different jobs from those suggested by the models, leading to 6–10% mistake rates.

10 ADVANTAGES

- The model doesn't need any data about other users, since the recommendations are specific to this user.
- This makes it easier to scale to a large number of users.
- The model can capture the specific interests of a user, and can recommend niche items that very few other users are interested in.

DISADVANTAGES

- Since the feature representation of the items are hand-engineered to some extent, this technique requires a lot of domain knowledge. Therefore, the model can only be as good as the hand-engineered features.
- The model can only make recommendations based on existing interests of the user.
- In other words, the model has limited ability to expand on the users' existing interests

11 CONCLUSION

This project compares collaborative filtering vs content-based filtering of recommendations. A method that combines aggregation and recommenders has also been developed.

While collaborative filtering makes recommendations based on matching the user's personal preferences with the given material, content-based filtering bases those recommendations on other users' preferences. A hybrid approach that combines both of these methods eliminates the drawbacks of both and improves ranking, it was determined after examining both of these methods. Cold start issues, sparse database issues, scalability issues, and trend suggestion issues have all been resolved. The idea is to create a Job Recommender system that places an emphasis on quality rather than quantity. Despite the fact that websites and job listing portals already suggest jobs to job searchers based on their profiles, this research on aggregate quality recommendations has been made possible by selectively crawling, which gets around the problems. To put it all together and provide a seamless user experience, a completely functional user interface was created.

FUTURE SCOPE

In the case of Personalized Job Recommendation, upcoming tasks Systems exploit the user's preferred location to provide employment recommendations based on openings at businesses located nearby. The user-preferred location's latitudes and longitudes can be extracted, and the euclidean distances between those latitudes and longitudes and the organisation location can be calculated, to do this.

This eliminates other jobs that are located too far from the user's selected location and produces a job recommender that is more accurate.

We intend to use features of comparable applicants and positions in sequence information as part of our future effort. Currently, non-machine learning based suggestions include recommendations utilising similar applicants and occupations, and the preliminary results appear promising. Finally, expanding our methods to include other recommender systems might be interesting.

12 APPENDIX

Source Code

```
<!DOCTYPE html>
<html class="no-js" lang="zxx">
  <head>
    <meta charset="utf-8">
    <meta http-equiv="x-ua-compatible" content="ie=edge">
    <title>Job Finder</title>
    <meta name="description" content="">
    <meta name="viewport" content="width=device-width, initial-scale=1">
    <link rel="manifest" href="site.webmanifest">

    <link rel="shortcut icon" type="image/x-icon" href="http://s3.jp-
tok.cloud-object-storage.appdomain.cloud/jobportalwebsite/assets/img/favicon.ico">
    <link rel="stylesheet" href="http://s3.jp-tok.cloud-object-
storage.appdomain.cloud/jobportalwebsite/assets/css/bootstrap.min.css">
    <link rel="stylesheet" href="http://s3.jp-tok.cloud-object-
storage.appdomain.cloud/jobportalwebsite/assets/css/owl.carousel.min.css">
    <link rel="stylesheet" href="http://s3.jp-tok.cloud-object-
storage.appdomain.cloud/jobportalwebsite/assets/css/flaticon.css">

    <link rel="stylesheet" href="http://s3.jp-tok.cloud-object-
storage.appdomain.cloud/jobportalwebsite/assets/css/price_rangs.css">
    <link rel="stylesheet" href="http://s3.jp-tok.cloud-object-
storage.appdomain.cloud/jobportalwebsite/assets/css/slicknav.css">
    <link rel="stylesheet" href="http://s3.jp-tok.cloud-object-
storage.appdomain.cloud/jobportalwebsite/assets/css/animate.min.css">
    <link rel="stylesheet" href="http://s3.jp-tok.cloud-object-
storage.appdomain.cloud/jobportalwebsite/assets/css/magnific-popup.css">
```

```

<link rel="stylesheet" href="http://s3.jp-tok.cloud-object-
storage.appdomain.cloud/jobportalwebsite/assets/css/fontawesome-all.min.css">
<link rel="stylesheet" href="http://s3.jp-tok.cloud-object-
storage.appdomain.cloud/jobportalwebsite/assets/css/themify-icons.css">
<link rel="stylesheet" href="http://s3.jp-tok.cloud-object-
storage.appdomain.cloud/jobportalwebsite/assets/css/slick.css">

<link rel="stylesheet" href="http://s3.jp-tok.cloud-object-
storage.appdomain.cloud/jobportalwebsite/assets/css/nice-select.css">
<link rel="stylesheet" href="http://s3.jp-tok.cloud-object-
storage.appdomain.cloud/jobportalwebsite/assets/css/style.css">
<body>

<header>
  <!-- Header Start -->

  <div class="header-area header-transparent">
    <div class="header-top header-sticky">
      <div class="container">
        <div class="row align-items-center">
          <div class="col-lg-3 col-md-2">
            <!-- Logo -->
            <div class="logo">
              <a href="index.html"></a>
            </div>
          </div>
          <div class="col-lg-9 col-md-9">
            <div class="menu-wrapper">
              <!-- Main-menu -->
              <div class="main-menu">
                <nav class="d-none d-lg-block">

                  <ul id="navigation">
                    <li><a href="/index">Home</a></li>
                    <li><a href="/job_listing">Find a Jobs </a></li>
                    <li><a href="/about">About</a></li>

                  </ul>
                </nav>
              </div>
            <!-- Header-btn -->

```

```

        <div class="header-btn d-none f-right d-lg-block">
            <a href="/registration" class="btn head-btn1">Register</a>
            <a href="/login" class="btn head-btn2">Login</a>
        </div>
    </div>
</div>
<!-- Mobile Menu -->
<div class="col-12">

    <div class="mobile_menu d-block d-lg-none"></div>
</div>
</div>
</div>
</div>
</div>
<!-- Header End -->
</header>
<main>
    <!-- slider Area Start-->
    <div class="slider-area ">
        <!-- Mobile Menu -->
        <div class="slider-active">

            <div class="single-slider slider-height d-flex align-items-center" data-
background="http://s3.jp-tok.cloud-object-
storage.appdomain.cloud/jobportalwebsite/assets/img/hero/h1_hero.jpg">
                <div class="container">
                    <div class="row">
                        <div class="col-xl-6 col-lg-9 col-md-10">
                            <div class="hero_caption">
                                <h1>Find the most exciting startup jobs</h1>
                            </div>
                        </div>
                    </div>
                </div>

            </div>
        </div>
    </div>
    <!-- slider Area End-->
    <!-- Featured_job_start -->
    <section class="featured-job-area feature-padding">

```

```

<div class="container">
  <!-- Section Tittle -->
  <div class="row">
    <div class="col-lg-12">

      <div class="section-tittle text-center">
        <span>Recent Job</span>
        <h2>Featured Jobs</h2>
      </div>
    </div>
  </div>
  <div class="row justify-content-center">
    <div class="col-xl-10">
      <!-- single-job-content -->
      <div class="single-job-items mb-30">
        <div class="job-items">
          <div class="company-img">
            <a href="#"></a>
          </div>

          <div class="job-tittle job-tittle2">
            <a href="#">
              <h4>Digital Marketer</h4>
            </a>
            <ul>
              <li>Creative Agency</li>
              <li><i class="fas fa-map-marker-
alt"></i>Chennai,TamilNadu</li>
              <li>RS.35000 - RS.40000</li>
            </ul>
          </div>
          <div class="items-link items-link2 f-right">
            <a href="/job_details">Full Time</a>
            <span>7 hours ago</span>
          </div>
        </div>
      </div>
      <!-- single-job-content -->

      <div class="single-job-items mb-30">

```



```

<div class="job-items">
  <div class="company-img">
    <a href="#"></a>
  </div>
  <div class="job-tittle job-tittle2">
    <a href="#">
      <h4>Back End Developer</h4>
    </a>
    <ul>
      <li>Mentee Chain</li>
      <li><i class="fas fa-map-marker-
alt"></i>Chennai,TamilNadu</li>
      <li>RS.41500 - RS.72000</li>
    </ul>
  </div>
</div>
<div class="items-link items-link2 f-right">
  <a href="/job_details">Full Time</a>
  <span>5 hours ago</span>
</div>
</div>
<!-- single-job-content -->
<div class="single-job-items mb-30">
  <div class="job-items">
    <div class="company-img">
      <a href="#"></a>
    </div>
    <div class="job-tittle job-tittle2">
      <a href="#">
        <h4>SQL Developer</h4>
      </a>
      <ul>
        <li>Sutherland</li>
        <li><i class="fas fa-map-marker-
alt"></i>Chennai,TamilNadu</li>
        <li>RS.82500 - RS.44000</li>
      </ul>
    </div>
  </div>
<div class="items-link items-link2 f-right">
  <a href="/job_details">Full Time</a>

```

```

        <span>2 hours ago</span>
    </div>
</div>
<!-- single-job-content -->
<div class="single-job-items mb-30">
    <div class="job-items">
        <div class="company-img">
            <a href="#"></a>
        </div>
        <div class="job-tittle job-tittle2">
            <a href="#">
                <h4>TIBCO Developer</h4>
            </a>
            <ul>

                <li>Infosys</li>
                <li><i class="fas fa-map-marker-
alt"></i>Chennai,TamilNadu</li>
                <li>RS.53500 - RS.40000</li>
            </ul>
        </div>
    </div>
    <div class="items-link items-link2 f-right">
        <a href="/job_details">Full Time</a>
        <span>1 hours ago</span>
    </div>

</div>
<!-- single-job-content -->
<div class="single-job-items mb-30">
    <div class="job-items">
        <div class="company-img">
            <a href="#"></a>
        </div>
        <div class="job-tittle job-tittle2">
            <a href="#">
                <h4>Hadoop Developer</h4>

                </a>
            <ul>
                <li>Capgemini</li>

```

```

        <li><i class="fas fa-map-marker-
alt"></i>Chennai,TamilNadu</li>
        <li>RS.33500 - RS.24000</li>

    </ul>
</div>
</div>
<div class="items-link items-link2 f-right">
    <a href="/job_details">Full Time</a>
    <span>3 hours ago</span>
</div>
</div>
<!-- single-job-content -->
<div class="single-job-items mb-30">
    <div class="job-items">
        <div class="company-img">
            <a href="#"></a>
        </div>
        <div class="job-tittle job-tittle2">

            <a href="#">
                <h4>Full stack Developer</h4>
            </a>
            <ul>
                <li>VCW Limited</li>
                <li><i class="fas fa-map-marker-
alt"></i>Chennai,TamilNadu</li>
                <li>RS.45500 - RS.24000</li>

            </ul>
        </div>
    </div>
</div>
<div class="items-link items-link2 f-right">
    <a href="/job_details">Full Time</a>
    <span>4 hours ago</span>
</div>
</div>
<!-- single-job-content -->

<div class="single-job-items mb-30">
    <div class="job-items">
        <div class="company-img">

```

```

        <a href="#"></a>
    </div>
    <div class="job-tittle job-tittle2">
        <a href="#">
            <h4>Senior FinOps Engineer</h4>
        </a>
        <ul>
            <li>WPP</li>

            <li><i class="fas fa-map-marker-
alt"></i>Chennai,TamilNadu</li>
            <li>RS.33500 - RS54000</li>
        </ul>
    </div>
</div>
<div class="items-link items-link2 f-right">
    <a href="/job_details">Full Time</a>
    <span>6 hours ago</span>
</div>
</div>
</div>
</section>
<!-- Featured_job_end -->
<!-- How Apply Process Start-->
<div class="apply-process-area apply-bg pt-150 pb-150" data-
background="http://s3.jp-tok.cloud-object-
storage.appdomain.cloud/jobportalwebsite/assets/img/gallery/how-applybg.png">

    <div class="container">
        <!-- Section Tittle -->
        <div class="row">
            <div class="col-lg-12">
                <div class="section-tittle white-text text-center">

                    <span>Apply process</span>
                    <h2>How it works</h2>
                </div>
            </div>
        </div>
        <!-- Apply Process Caption -->
        <div class="row">
            <div class="col-lg-4 col-md-6">

```

```

<div class="single-process text-center mb-30">

    <div class="process-ion">
        <span class="flaticon-search"></span>
    </div>
    <div class="process-cap">
        <h5>1. Search a job</h5>
        <p></p>
    </div>
</div>
<div class="col-lg-4 col-md-6">
    <div class="single-process text-center mb-30">

        <div class="process-ion">
            <span class="flaticon-curriculum-vitae"></span>
        </div>
        <div class="process-cap">
            <h5>2. Apply for job</h5>

            <p></p>
        </div>
    </div>
<div class="col-lg-4 col-md-6">
    <div class="single-process text-center mb-30">
        <div class="process-ion">
            <span class="flaticon-tour"></span>
        </div>
        <div class="process-cap">
            <h5>3. Get your job</h5>

            <p></p>
        </div>
    </div>
</div>
</div>
<!-- How Apply Process End-->

</main>
<footer>

```

```

<!-- Footer Start-->
<div class="footer-area footer-bg footer-padding">
  <div class="container">
    <div class="row d-flex justify-content-between">
      <div class="col-xl-3 col-lg-3 col-md-4 col-sm-6">
        <div class="single-footer-caption mb-50">

          <div class="single-footer-caption mb-30">
            <div class="footer-tittle">
              <h4>About Us</h4>
              <div class="footer-pera">

                <p> Connect the world's professionals to make them more
productive and successful.</p>

              </div>
            </div>
          </div>
        </div>
      </div>
    </div>
  </div>
  <div class="col-xl-3 col-lg-3 col-md-4 col-sm-5">
    <div class="single-footer-caption mb-50">

      <div class="footer-tittle">
        <h4>Contact Info</h4>
        <ul>
          <li>
            <p>Address :<br>
              2, jobfinds ltd,
              <br>
              Anna Nagar,
              <br>madurai</p>

            </li>
            <li><a href="#">Phone : +99999 99999</a></li>

            <li><a href="#">Email : info@jobfinder.com</a></li>
          </ul>
        </div>
      </div>
    </div>
  </div>
  <!-- footer-bottom area -->
<div class="footer-bottom-area footer-bg">

```

```

<div class="container">
  <div class="footer-border">
    <div class="row d-flex justify-content-between align-items-center">
      <div class="col-xl-10 col-lg-10 ">

        <div class="footer-copy-right">
          <p>
Copyright &copy;<script>document.write(new Date().getFullYear());</script> All
rights reserved
</p>
          </div>
        </div>

      </div>
    </div>

    </div>
  </div>
</div>
<!-- Footer End-->
</footer>
<!-- JS here -->

<!-- All JS Custom Plugins Link Here here -->

<script src="http://s3.jp-tok.cloud-object-
storage.appdomain.cloud/jobportalwebsite/assets/js/vendor/modernizr-
3.5.0.min.js"></script>
<!-- JQuery, Popper, Bootstrap -->
<script src="http://s3.jp-tok.cloud-object-
storage.appdomain.cloud/jobportalwebsite/assets/js/vendor/jquery-
1.12.4.min.js"></script>
<script src="http://s3.jp-tok.cloud-object-
storage.appdomain.cloud/jobportalwebsite/assets/js/popper.min.js"></script>
<script src="http://s3.jp-tok.cloud-object-
storage.appdomain.cloud/jobportalwebsite/assets/js/bootstrap.min.js"></script>
<!-- JQuery Mobile Menu -->
<script src="http://s3.jp-tok.cloud-object-
storage.appdomain.cloud/jobportalwebsite/assets/js/jquery.slicknav.min.js"></script>
<!-- JQuery Slick , Owl-Carousel Plugins -->

```

```

<script src="http://s3.jp-tok.cloud-object-
storage.appdomain.cloud/jobportalwebsite/assets/js/owl.carousel.min.js"></script>
<script src="http://s3.jp-tok.cloud-object-
storage.appdomain.cloud/jobportalwebsite/assets/js/slick.min.js"></script>
<script src="http://s3.jp-tok.cloud-object-
storage.appdomain.cloud/jobportalwebsite/assets/js/price_rangs.js"></script>
<!-- One Page, Animated-HeadLin -->
<script src="http://s3.jp-tok.cloud-object-
storage.appdomain.cloud/jobportalwebsite/assets/js/wow.min.js"></script>
<script src="http://s3.jp-tok.cloud-object-
storage.appdomain.cloud/jobportalwebsite/assets/js/animated.headline.js"></script>
<script src="http://s3.jp-tok.cloud-object-
storage.appdomain.cloud/jobportalwebsite/assets/js/jquery.magnific-popup.js"></script>
<!-- Scrollup, nice-select, sticky -->
<script src="http://s3.jp-tok.cloud-object-
storage.appdomain.cloud/jobportalwebsite/assets/js/jquery.scrollUp.min.js"></script>
<script src="http://s3.jp-tok.cloud-object-
storage.appdomain.cloud/jobportalwebsite/assets/js/jquery.nice-select.min.js"></script>
<script src="./assets/js/jquery.sticky.js"></script>

<!-- contact js -->
<script src="http://s3.jp-tok.cloud-object-
storage.appdomain.cloud/jobportalwebsite/assets/js/contact.js"></script>
<script src="http://s3.jp-tok.cloud-object-
storage.appdomain.cloud/jobportalwebsite/assets/js/jquery.form.js"></script>
<script src="http://s3.jp-tok.cloud-object-
storage.appdomain.cloud/jobportalwebsite/assets/js/jquery.validate.min.js"></script>
<script src="http://s3.jp-tok.cloud-object-
storage.appdomain.cloud/jobportalwebsite/assets/js/mail-script.js"></script>
<script src="http://s3.jp-tok.cloud-object-
storage.appdomain.cloud/jobportalwebsite/assets/js/jquery.ajaxchimp.min.js"></script>

<!-- JQuery Plugins, main JQuery -->
<script src="http://s3.jp-tok.cloud-object-
storage.appdomain.cloud/jobportalwebsite/assets/js/plugins.js"></script>
<script src="http://s3.jp-tok.cloud-object-
storage.appdomain.cloud/jobportalwebsite/assets/js/main.js"></script>

<script>
window.watsonAssistantChatOptions = {
  integrationID: "65c01ed6-9fc1-4883-979a-3676279ebe44", // The ID of this
integration.
  region: "us-south", // The region your integration is hosted in.

```



```
        serviceInstanceID: "8fcd017f-a192-420a-aafc-18cb0330efca", // The ID of your
service instance.
        onLoad: function(instance) { instance.render(); }
    };
    setTimeout(function(){
        const t=document.createElement('script');
        t.src="https://web-chat.global.assistant.watson.appdomain.cloud/versions/" +
(window.watsonAssistantChatOptions.clientVersion || 'latest') +
"/WatsonAssistantChatEntry.js";
        document.head.appendChild(t);
    });
</script>

</body>
</html>
```

GitHub Link:

<https://github.com/IBM-EPBL/IBM-Project-39053-1660390054>

Project Demo Link:

https://youtu.be/Yz_kIA-FEP0