

SKILL/JOB RECOMMENDER APPLICATION

PROJECT REPORT

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KONERIPALLI, HOSUR-635117

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BONAFIDE CERTIFICATE

Certified that this mini project report “**SKILL/JOB RECOMMENDER APPLICATION**” is the bonafide work of “**MADHU BALAN K (610819104023), BHARATH V(610819104001), SRIKANTH B(610819104047) , MADHAN R(610819104022)**” who carried out the project under my supervision.

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INTERNAL EXAMINER

EXTERNAL EXAMINER

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SKILL/JOB RECOMMENDER APPLICATION

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1. INTRODUCTION

In the last years, job recommender systems have become popular since they successfully reduce information overload by generating personalized job suggestions. Although in the literature exists a variety of techniques and strategies used as part of job recommender systems, most of them fail to recommending job vacancies that fit properly to the job seekers profiles. Thus, the contributions of this work are threefold, we: i) made publicly available a new dataset formed by a set of job seekers profiles and a set of job vacancies collected from different job search engine sites; ii) put forward the proposal of a framework for job recommendation based on professional skills of job seekers; and iii) carried out an evaluation to quantify empirically the recommendation abilities of two state-of-the-art methods, considering different configurations, within the proposed framework. We thus present a general panorama of job recommendation task aiming to facilitate research and real-world application design regarding this important issue.

1.1 Project Overview

Having lots of skills but wondering which job will best suit you ? Don't need to worry! we have come up with a skill recommender solution through which the fresher or the skilled person can login and find the jobs by using search option or they can directly interact with the chatbot and get their dream job.

To develop an end-to-end web application capable of displaying the current job openings based on the skillset of the users. The users and their information are stored in the Database. An alert is sent when there is an opening based on the user skillset. User will interact with the chatbot and can get the recommendations based on his skills. We can use job search API to get the current job openings in the market which will fetch the data directly from the webpage.

1.2 Purpose

Aim is to come up with a job recommender system, which takes the skills from LinkedIn and jobs from Indeed and throws the best jobs available for you according to your skills.

2.Literature Survey

S.No	TITLE	Author	Year	PROPOSED WORK	ADVANTAGES/ DISADVANTAGES
1	The Remainder Effect:How Automation Complements Labour Quality .	<ul style="list-style-type: none"> • James Bessen. • Erick Denk. •Chen Meng. 	2022	<ul style="list-style-type: none"> • Automation • Income inequality • Skills • Information technology • Software 	Cost reducing , quality-enhancing and replace labour some tasks while it increases demand for skills on others.
2	Predictive motivators of cloud computing adoption : A developing country perspective.	<ul style="list-style-type: none"> • SK Sharma. • AH Al-Badi. • SM Govindaluri. • Mohammed H. AL-kharusi. 	2016	<ul style="list-style-type: none"> • Literature review and hypothesis development • Research methodology • Discussion • Limitations and future research. 	The primary goal of this research was to develop and test an empirical model for understanding the impact of determinants , job opportunity , self-efficacy and Trust.

S.NO	TITLE	Author	Year	Proposed work	ADVANTAGES/ DISADVANTAGES
3	Education Cloud : On-the-fly Employability Skills as a service.	<ul style="list-style-type: none"> • Sonia Shahzadi. • Muddesar Iqbal. •Tasos Dagiuklas. 	2018	<ul style="list-style-type: none"> • Mobile Edge Computing • Cloud • Skills as a service • STEM 	<ul style="list-style-type: none"> • Graphical illustration of the test result. • Education - cloud Network system • Education - cloud Image system.
4	Modelling job rotation in manufacturing systems: The study of employees boredom and skill variations.	<ul style="list-style-type: none"> • Nader Azizi. •Saeed Zolfaghari. •Ming liang. 	2009	<ul style="list-style-type: none"> • job rotation • Boredom • Manufacturing • Search algorithm 	It attempts to balance the positive effects of rotation intervals on workers boredom/motivation and unavoidable cost of workers skill variations.

S . No	TITLE	Author	Year	PROPOSED WORK	ADVANTAGES/ DISADVANTAGES
5	Block chain-Engineering Wanted : An Empirical Analysis on Required Skills, Education and Experience	<ul style="list-style-type: none"> •Mohammad Kassab. • Giuseppe Destefanis. • Joanna DeFranco. • Prince Pranav. 	2021	<ul style="list-style-type: none"> • Block chain. • Industry practices. • Job ad. • Block chain engineer. • Exploratory Study. 	<ul style="list-style-type: none"> • Job ads can be published . • Analysing profile for Skills ,education, Experience.
6	Changing Patterns in IT Skill sets : A content Analysis of Classified Advertising.	<ul style="list-style-type: none"> • Michael J. Gallivan. • Duane P.Trux. • Lynette Kvasny. 	2004	<ul style="list-style-type: none"> • Career paths • Job skills • IT careers • Content analysis 	<ul style="list-style-type: none"> • Hiring well – rounded employees with good business knowledge and soft skills.

CHAPTER 3

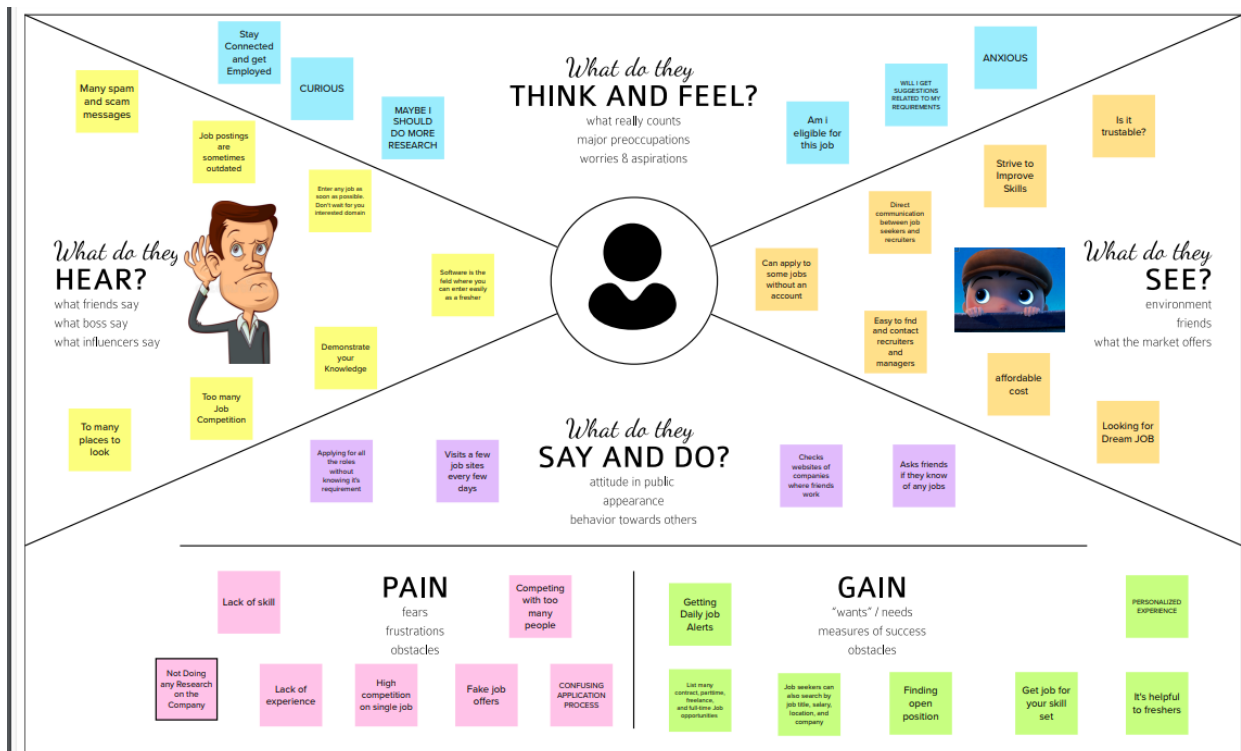
IDEATION & PROPOSED SOLUTION

3.1 Empathy Map Canvas:

An empathy map is a simple, easy-to-digest visual that captures knowledge about a user's behaviours and attitudes.

It is a useful tool to help teams better understand their users.

Creating an effective solution requires understanding the true problem and the person who is experiencing it. The exercise of creating the map helps participants consider things from the user's perspective along with his or her goals and challenges.



3.2 Ideation & Brainstorming:

Brainstorming provides a free and open environment that encourages everyone within a team to participate in the creative thinking process that leads to problem solving. Prioritizing volume

over value, out-of-the-box ideas are welcome and built upon, and all participants are encouraged to collaborate, helping each other develop a rich amount of creative solutions.

Use this template in your own brainstorming sessions so your team can unleash their imagination and start shaping concepts even if you're not sitting in the same room.

Step-1: Team Gathering, Collaboration and Select the Problem Statement

Step-2: Brainstorm, Idea Listing and Grouping



3.3 Proposed Solution:

Proposed Solution Template:

Project team shall fill the following information in proposed solution template.

S.No.	Parameter	Description
1.	Problem Statement (Problem to be solved)	Devise an end-to-end web application capable of displaying the current job openings based on the user skillset. Users must interact with the chatbot and can get the recommendations based on their skills.
1.	Idea / Solution description	The user can get the job recommendation via notification by providing the info in portal that simplify the searching process. By using the assessment process the user will get the notification accordingly for “Jobs & Skills”.
1.	Novelty / Uniqueness	By uploading the user info in the portal of the application the user can get the required job recommendations as prioritized way.
1.	Social Impact / Customer Satisfaction	Application has the responsive user interface that allows the user to understand application search process effectively.
1.	Business Model (Revenue Model)	<ul style="list-style-type: none">• Made publicly available a new dataset formed by a set of job seekers profiles and a set of job vacancies collected from different job search engine sites.• This also helps the industries to find out the users as his employees easily.
1.	Scalability of the Solution	Here a seeker looks up for the job he would find relevant to him and apply for it. As there are many job boards, applicants tend to use the tool that provides better services to them, services such as writing a CV, creating a job profile, and recommending new jobs to a job seeker.

3.4 Problem Solution fit:

Problem – Solution Fit Template: The Problem-Solution Fit simply means that you have found a problem with your customer and that the solution you have realized for it actually solves the customer's problem. It helps entrepreneurs, marketers and corporate innovators identify behavioural patterns and recognize what would work and why

Purpose:

1. Solve complex problems in a way that fits the state of your customers.
2. Succeed faster and increase your solution adoption by tapping into existing mediums and channels of behaviour.
3. Sharpen your communication and marketing strategy with the right triggers and messaging.
4. Increase touch-points with your company by finding the right problem behaviour fit and building trust by solving frequent annoyances, or urgent or costly problems.
5. Understand the existing situation in order to improve it for your target group.

CHAPTER 4

REQUIREMENT ANALYSIS

4.1 Functional requirement:

Following are the functional requirements of the proposed solution.

FR No.	Functional Requirement (Epic)	Sub Requirement (Story / Sub-Task)
FR-1	User Registration	Registration through Form Registration through Gmail Create a password for login
FR-2	User Confirmation	Interaction through Chat Bot
FR-3	User Login	The user login through mail id and password.
FR-4	User Profile	Here the user fills the details like name, age, gender, etc. The user is also asked to upload his/her cv.
FR-5	Chatbot	The chatbot will help the user to fulfil the user queries and issues
FR-6	Current openings	Here the user came to known about the available openings.
FR-7	Skill level monitor	Here the user asked to attend assessment for calculating their skillset and accuracy.
FR-8	logout	

4.2 Non-functional Requirements:

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

FR No.	Non-Functional Requirement	Description
NFR-1	Usability	User friendly and highly trusted website
NFR-2	Security	User data will be stored in cloud and viewed only by authorised person.
NFR-3	Reliability	The user can update their data at any time.e trusted
NFR-4	Performance	The website will be available in all devices. The website will be updated based on the user feedback.
NFR-5	Availability	The site will update new openings /offers.
NFR-6	Scalability	This site will work smoothly even if there is multiple users request/access at a time

CHAPTER 5

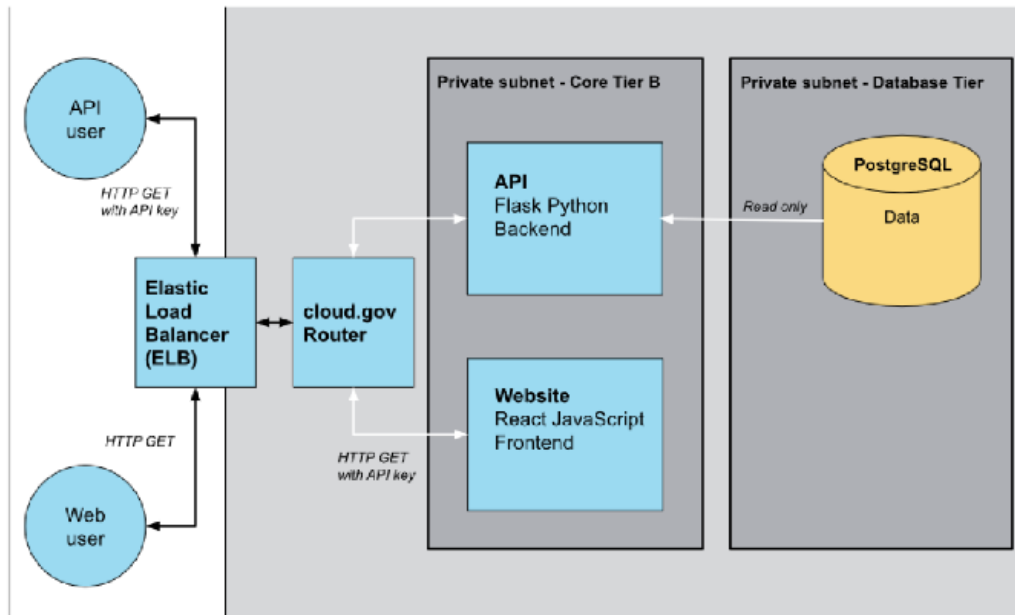
PROJECT DESIGN

5.1 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 graphically depict the right amount of the system requirement. It shows how data enters and leaves the see what changes the information, and where data is stored.

5.2 Technical Architecture



5.2 Solution Architecture

Table-1 : Components & Technologies:

S.No	Component	Description	Technology
1.	User Interface	How user interacts with application e.g. Web UI, Mobile App, Chatbot etc.	HTML, CSS, JavaScript / Angular Js / React Js etc.
2.	Application Logic-1	Logic for a process in the application	Java / Python
3.	Application Logic-2	Logic for a process in the application	IBM Watson STT service
4.	Application Logic-3	Logic for a process in the application	IBM Watson Assistant
5.	Database	Data Type, Configurations etc.	MySQL, NoSQL, etc.
6.	Cloud Database	Database Service on Cloud	IBM DB2, IBM Cloudant etc.
7.	File Storage	File storage requirements	IBM Block Storage or Other Storage Service or Local Filesystem
8.	External API-1	Purpose of External API used in the application	IBM Weather API, etc.
9.	External API-2	Purpose of External API used in the application	Aadhar API, etc.
10.	Machine Learning Model	Purpose of Machine Learning Model	Object Recognition Model, etc.
11.	Infrastructure (Server / Cloud)	Application Deployment on Local System / Cloud Local Server Configuration: Cloud Server Configuration :	Local, Cloud Foundry, Kubernetes, etc.

5.3 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	User can register for the application by entering my email, password, and confirming my password	User can access my account / dashboard	High	Sprint-1
		USN-2	User will receive confirmation email once the user have registered for the application	User can receive confirmation email & click confirm	High	Sprint-1
		USN-3	User can register for the application through Face book	User can register & access the dashboard with Face book Login	Low	Sprint-2
		USN-4	User can register for the application through G mail		Medium	Sprint-1
	Login	USN-5	User can log into the application by entering email & password	User can access my data by Login	High	Sprint-1
	Dashboard	USN-6	User can view the dashboard and by products		High	Sprint-2

Customer (Web user)	Registration / Login	USN-7	User can register for the application by entering my email, password, and confirming my password	User can access my account / dashboard		Sprint-1
Customer Care Executive	Contact with Customers	USN-8	Customer care executive solve the Customer Requirements and feedback	Can receive calls from customers	High	Sprint-1
Administrator	Check stock and Price, orders	USN-9	Administrator can check the database and stock details and buying and selling prices	I am the administrator of the company	High	Sprint-2

CHAPTER 6

PROJECT PLANNING & SCHEDULING

6.1 Sprint Planning & Estimation:

Use the below template to create product backlog and sprint schedule

Sprint	Functional Requirement (Epic)	User Story Number	User Story / Task	Acceptance criteria	Priority	Team Members
Sprint-1	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	Bharath.V, Madhubalan.K , Srikanth.
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	Madhan.R, Madhubalan.K, Srikanth.B

Sprint-2		USN-3	As a user, I can register for the application through Face book	I can register & access the dashboard with Face book Login	Low	Srikanth.B, Bharath.V, Madhan.R
Sprint-1		USN-4	As a user, I can register for the application through Gmail	I can receive confirmation email & click confirm	Medium	Madhubalan.k, Bharath.V
Sprint-1	Login	USN-5	As a user, I can log into the application by entering email & password	I can access my account / dashboard	High	Madhan.R, Bharath.v
Sprint-1	Dashboard	USN-6	Create a model set that contains those models, then assign it to a role.	Assign that group to the appropriate roles on the Roles page	High	Bharath.V, Madhan.R, Madhubalan.k
Sprint-2	identity-Aware	USN-7	Open, public access, Userauthenticated access, EmployeeCompany public website. App running High restricted access.	on the company intranet. App with access to customer private information.	High	Madhan.R, Bharath.v Srikanth.B
Sprint-3	Communication	USN-8	A customer care executive is a professional responsible for communicating the how's and why's regarding service expectations within a company.	For how to tackle customer queries.	Medium	Madhubalan.K, Bharath.V

Sprint-4	Device management	USN-9	You can Delete/Disable/Enabled Azure Active Directory but you cannot Add/Remove Users in the directory.	Ease of use.	Medium	Srikanth.B Bharath.V, Madhan.R, Madhu balan.k
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6.2 Sprint Delivery Schedule:

Project Tracker, Velocity:

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	20	6 Days	24 Oct 2022	29 Oct2022	20	29 Oct 2022
Sprint-2	20	6 Days	31 Oct 2022	05 Nov 2022	20	05 Nov 2022

Sprint-3	20	6 Days	07 Nov 2022	12 Nov 2022	20	12 Nov 2022
Sprint-4	20	6 Days	14 Nov 2022	19 Nov 2022	20	19 Nov 2022

Velocity:

Imagine we have a 10-day sprint duration, and the velocity of the team is 20 (points per sprint). Let's calculate the team's average velocity (AV) per iteration unit (story points per day)

6.3 Reports from JIRA

1. Image showing the project created in the JIRA software

2. Image showing the List of Sprints and their time duration in the project

3. Images showing the User Stories involved in each sprint

4. Image showing the working progress of the tasks in the selected Sprint

5. Image showing the RoadMap of the Project

Chapter 7

Coding and solutions

Index.html

```
<html lang="en">  
<head>  
  <meta charset="utf-8">  
  <meta http-equiv="X-UA-Compatible" content="IE=edge">  
  <meta name="viewport" content="width=device-width, initial-
```

```
scale=1.0">
  <link rel=stylesheet href="style.css">
  <!--font-->
  <link
href="https://fonts.googleapis.com/css2?family=Noto+Serif&fa
mily=Nunito&display=swap" rel="stylesheet">
  <!--icons-->
  <link rel="stylesheet"
href="https://cdnjs.cloudflare.com/ajax/libs/font-
awesome/5.15.3/css/all.min.css" >
  <!--swiper-->
  <link rel="stylesheet"
href="https://cdn.jsdelivr.net/npm/swiper@8/swiper-
bundle.min.css"/>

  <title>JOB HUNTER</title>
</head>
<body>
  <!--navbar-->
  <nav class="navbar">
    <h2 >JOB HUNTERS
  </h2>
  <div class="navbar-menu">
    <a href="index.html">Home</a>
```

```

    <a href="Register.html">Register </a>
    <a href="login.html">Sign In </a>
</div>
<div class="menu-toggle">
    <span class="bar"></span>
    <span class="bar"></span>
    <span class="bar"></span>
</div>
<!--header-->
<header>
    <h1 class="header-title">
        <span>DELIGHTFULLY BEGIN <br> YOUR
CARRIER</span>

    </h1>
</header>
<searchh>
<!--search-->
<div class="search-wrapper">
    <div class="search-box">
        <div class="search-card">
            <input class="search-input" type="text"
placeholder="Job title">
            <button class="search-button">Search</button>

```



```
        </div>
    </div>
</div>
<br>
<!--filter box-->
<div class="filter-box">
    <div class="filter-dropdown">
        <select class="filter-select" id="job-level" name="job-
level">
            <option>Job level</option>
            <option>Entry</option>
            <option>Mid-Senior</option>
            <option>Director</option>
        </select>
        <select class="filter-select" id="job-function" name="job-
function">
            <option> Job function</option>
            <option>IT</option>
            <option>Manager</option>
            <option>Education</option>
        </select>
        <select class="filter-select" id="qualification"
name="qualification">
            <option>Qualification</option>
```

```
        <option>Bachelor's degree</option>
        <option>Master's degree</option>
    </select>
    <select class="filter-select" id="location"
name="location">
        <option>Locations</option>
        <option>Chennai</option>
        <option>Banglore</option>

    </select>
    <select class="filter-select" id="employment"
name="employment">
        <option>Employement Type</option>
        <option>Internship</option>
        <option>Part time</option>
        <option>Full time</option>
    </select>

</div>

</div>
<!--Job listing-->
<section class="job-list" id="jobs">
```

```
<div class="job-card">
  <div class="job-name">
    
    <div class="job-detail">
      <h4>Tesla</h4>
      <h3>Mechanical Engineer</h3>
      <p>A Mechanical Design Engineer is responsible
for<br>bringing parts from concept</p>
    </div>
  </div>
  <div class="job-label">
    <a class="label-a" href="#">HTML</a>
    <a class="label-b" href="#">CSS</a>
    <a class="label-c" href="#">Javascript</a>
  </div>
  <div class="job-posted">
    Posted 2 mins ago
  </div>
</div>
<div class="job-card">
  <div class="job-name">
    
    <div class="job-detail">
      <h4>E-commerce</h4>
```

<h3>Business Development</h3>

<p>Business development is a good career choice

even if it comes with a diverse set of challenges</p>

</div>

</div>

<div class="job-label">

HTML

CSS

Javascript

</div>

<div class="job-posted">

Posted 7 mins ago

</div>

</div>

<div class="job-card">

<div class="job-name">

<div class="job-detail">

<h4>Youtube</h4>

<h3>UI UX Designer</h3>

<p>For designing the responsive pages we want

UI/UX designer to evaluates the user requirements</p>

</div>

</div>

<div class="job-label">

HTML

CSS

Javascript

</div>

<div class="job-posted">

Posted an hour ago

</div>

</div>

<button class="job-more">More List is Loading..</button>

</section>

</searchh>

<!--join-->

<section class="join">

<div class="join-detail">

<h1 class="section-title"> LETS START YOUR

JOB WITH US</h1>

</div>

<button class="join-button">Join to start</button>

</section>

<!--featured company-->

<section class="featured" id="companies">

```
<h1 class="section-title">Featured Companies</h1>
<div class="featured-wrapper">
  <div class="featured-card">
    
    <p>Ebay</p>
    <button class="featured-button">View Jobs
posted</button>
  </div>
  <div class="featured-card">
    
    <p>Youtube</p>
    <button class="featured-button">View Jobs
posted</button>
  </div>
  <div class="featured-card">
    
    <p>Tesla</p>
    <button class="featured-button">View Jobs
posted</button>
  </div>
</div>
</section>
<!--skills-->
```

```
<section class="blog" id="blog" style="background-color:#99ccff">
```

```
<h1 class="section-title">How It Works?</h1>
```

```
<p>Lets see how the website works?</p>
```

```
<div class="blog-wrapper">
```

```
<div class="blog-card" style="background-color:white">
```

```

```

```
<div class="blog-detail">
```

```
<h4>Create an account!</h4>
```

```
<p>Sign up by creating an account with required details  
in order to avail our services. The optimal feeding of correct  
information will help us fine tune your job search</p>
```

```
<hr class="divider">
```

```
<a href="#" class="blog-more"></a>
```

```
</hr>
```

```
</div>
```

```
</div>
```

```
<div class="blog-card" style="background-color:white">
```

```

```

```
<div class="blog-detail">
```

```
<h4>Search for the Job</h4>
```

```
<p>Providing you with our wide database of job  
opportunities notified by numerous companies. You can add  
filters to search your desired jobs and still have a list of options
```

to choose from.</p>

<hr class="divider">

</hr>

</div>

</div>

<div class="blog-card" style="background-color:white">

<div class="blog-detail">

<h4>Apply for desired Job</h4>

<p>Search for jobs in your field.Research companies
with openings.Prepare your resume.Decide if you need a cover
letter.Submit your resume and online application</p>

<hr class="divider">

</hr>

</div>

</div>

</div>

</section>

<!--blog-->

<section class="blog" id="blog" >

<h1 class="section-title">Career Advices</h1>

<p>Learn more Career due tips from company's

recruiter</p>

<div class="blog-wrapper">

<div class="blog-card">

<div class="blog-detail">

<h4>How to enjoy Your Work!</h4>

<p>Take breaks. During a busy workday, it is important
you take time away from your desk to get your mind off your
job</p>

<hr class="divider">

</hr>

</div>

</div>

<div class="blog-card">

<div class="blog-detail">

<h4>Tips for Technical interview!</h4>

<p>Consider the tools and skills necessary for the role.

Think about the basic requirements of the job.

Study helpful books and digital publications</p>

<hr class="divider">

</hr>

```
</div>
</div>
<div class="blog-card">
  
  <div class="blog-detail">
    <h4>Managing Time effectively!</h4>
    <p>Group similar tasks together
    Assign time limits to tasks
    Create a daily schedule—and stick with it
    Avoid the urge to multitask</p>
    <hr class="divider">
    <a href="#" class="blog-more"></a>
  </div>
</div>
</div>
</section>
<!--footer-->
<footer>
  <div class="footer-wrapper">
    <h3>Team Details</h3>

    <p>Skill/Job Recommender Application</p>
    <div class="social-media">
```

```
<a href="#"><i class="fab fa-facebook-f"></i></a>  
<a href="#"><i class="fab fa-linkedin-in"></i></a>  
<a href="#"><i class="fab fa-youtube"></i></a>  
</div>
```

```
</div>
```

```
<div class="footer-wrapper">  
  <h4>Authorship</h4>  
  <a href="#">Madhu balan K</a>  
  <a href="#">Bharath V </a>  
  <a href="#">Srikanth B</a>  
  <a href="#">Madhan R </a>  
</div>
```

```
<div class="footer-wrapper">  
  <h4>Contacts</h4>  
  <a href="#">madhubalan5star@gmail.com</a>  
  <a href="#">tonybharathsandy@gmail.com</a>  
  <a href="#">srikanthsri02072002@gmail.com</a>  
  <a href="#">madhuan2002r@gmail.com</a>  
</div>
```

```
<div class="footer-wrapper">
  <h4>Account</h4>
  <a href="Register.html">Signup/Register</a>
  <a href="login.html">Signin/Login</a>
</div>
```

```
<div class="footer-wrapper">
  <h4>Community</h4>
  <a href="#">Community</a>
  <a href="#">Invite a friend</a>
</div>
```

```
</footer>
```

```
<script
src="https://ajax.googleapis.com/ajax/libs/jquery/3.6.0/jquery.mi
n.js"></script>
```

```
<script src="https://cdn.jsdelivr.net/npm/swiper@8/swiper-
bundle.min.js"></script>
```

```
<script src="app.js"></script>
```

```
</body>
```

```
</html>
```

Login.html

```
<!DOCTYPE html>
<html lang="en" >
<head>
  <meta charset="UTF-8">
  <title>Jobportal||Login Page</title>
  <link
href="https://fonts.googleapis.com/css?family=Rubik&display=
swap" rel="stylesheet">
<link rel="stylesheet" href="logincss.css">
</head>
<body>

<div class="container">
  <div class="left-section">
    <div class="header">
      <h2>SEEK-JOB</h2><br><br><br>
      <h1 class="animation a1">Welcome Back!</h1>
      <h4 class="animation a2">Login for entering
dashboard.</h4>
    </div>
    <form action="\login" method="post">
```

```
<div class="form">

    <input type="email" class="form-field animation a3"
placeholder="Username">
    <input type="password" class="form-field animation a4"
placeholder="Password"><br>

    <button class="animation a5">LOGIN</button><br>
    <p class="animation a6">Already have an
account?&nbsp;&nbsp; <a href="templates/Register.html"
style="color:blue">SignUp</a></p>

</div>
</form>
</div>
<div class="right-section"></div>
</div>

</body>
</html>
```

Register.html

```
<!DOCTYPE html>
<html lang="en" dir="ltr">
  <head>
    <meta charset="UTF-8">
    <title>Register page</title>
    <link rel="stylesheet" href="login1css.css">

    <link rel="stylesheet"
href="https://cdnjs.cloudflare.com/ajax/libs/font-
awesome/5.15.3/css/all.min.css">
    <meta name="viewport" content="width=device-width,
initial-scale=1.0">
  </head>

  <body>

    <div class="container">
      <input type="checkbox" id="flip">
      <div class="cover">
        <div class="front">
          
          <div class="text">
            <span class="text-1">Complete miles of journey<br>
```

with one step

Let's get started

</div>

</div>

</div>

<div class="forms">

<div class="form-content">

<div class="login-form">

<div class="title">Register</div>

<form action="#">

<div class="input-boxes">

<div class="input-box">

<i class="fas fa-user"></i>

<input type="text" placeholder="Enter Username"

required>

</div>

<div class="input-box">

<i class="fas fa-envelope"></i>

<input type="text" placeholder="Enter the password"

required>

</div>

<div class="input-box">

<i class="fas fa-lock"></i>

<input type="password" placeholder="Enter your


```
email" required>
    </div>
    <div class="button input-box">
        <input type="submit" value="Create Account">
    </div>
    <div class="text sign-up-text">Already have an
account? <a href="login.html">Login now</a></div>
    </div>
</form>
</div>

</div>
</div>
</body>
</html>
```

Login.css

```
* {
    box-sizing: border-box;
}
```

```
body {  
  font-family: 'Rubik', sans-serif;  
  margin: 0;  
  padding: 0;  
}  
.container {  
  display: flex;  
  height: 100vh;  
}  
.left-section {  
  overflow: hidden;  
  display: flex;  
  flex-wrap: wrap;  
  flex-direction: column;  
  
  justify-content: top;  
  -webkit-animation-name: left-section;  
    animation-name: left-section;  
  -webkit-animation-duration: 1s;  
    animation-duration: 1s;  
  -webkit-animation-fill-mode: both;  
    animation-fill-mode: both;  
  -webkit-animation-delay: 1s;
```

```
        animation-delay: 1s;
    }
    .right-section {
        flex: 1;
        background: linear-gradient(to right, #f50629 0%, #fd9d08
100%);
        transition: 1s;
        background-image: url(images/login.jpg);
        background-size: cover;
        background-repeat: no-repeat;
        background-position: center;
    }
    .header > h1 {
        margin:0;
        color: #f50629;

    }
    .header > h4 {
        margin-top: 7px;
        font-weight: normal;
        font-size: 15px;
        color: rgba(0, 0, 0, 0.9);
    }
    .form {
```

```
max-width: 100%;
display: flex;
flex-direction: column;

}

.form > p {
  text-align: center;
}

.form > p > a {
  color: #000;
  font-size: 14px;
}

.form-field {
  height: 46px;
  padding: 0 16px;
  border: 2px solid #ddd;
  border-radius: 4px;
  font-family: 'Rubik', sans-serif;
  outline: 0;
  transition: .2s;
  margin-top: 20px;
}

.form-field:focus {
  border-color: #0f7ef1;
```

```
}  
.form > button {  
  padding: 12px 10px;  
  border: 0;  
  background: linear-gradient(to right, #f50629 0%, #fd9d08  
100%);  
  border-radius: 3px;  
  margin-top: 10px;  
  color: #fff;  
  letter-spacing: 1px;  
  font-family: 'Rubik', sans-serif;  
}  
.animation {  
  -webkit-animation-name: move;  
    animation-name: move;  
  -webkit-animation-duration: .4s;  
    animation-duration: .4s;  
  -webkit-animation-fill-mode: both;  
    animation-fill-mode: both;  
  -webkit-animation-delay: 2s;  
    animation-delay: 2s;  
}  
  
.a1 {
```

```
-webkit-animation-delay: 2s;
    animation-delay: 2s;
}
.a2 {
    -webkit-animation-delay: 2.1s;
    animation-delay: 2.1s;
}
.a3 {
    -webkit-animation-delay: 2.2s;
    animation-delay: 2.2s;
}
.a4 {
    -webkit-animation-delay: 2.3s;
    animation-delay: 2.3s;
}
.a5 {
    -webkit-animation-delay: 2.4s;
    animation-delay: 2.4s;
}
.a6 {
    -webkit-animation-delay: 2.5s;
    animation-delay: 2.5s;
}
.a7{
```

```
-webkit-animation-delay: 2.6s;
    animation-delay: 2.6s;
}
@keyframes move {
    0% {
        opacity: 0;
        visibility: hidden;
        -webkit-transform: translateY(-40px);
        transform: translateY(-40px);
    }
    100% {
        opacity: 1;
        visibility: visible;
        -webkit-transform: translateY(0);
        transform: translateY(0);
    }
}
@keyframes left-section {
    0% {
        opacity: 0;
        width: 0;
    }
    100% {
        opacity: 1;
```

```
padding: 20px 40px;
width: 350px;
}
}
```

Style.css

```
@import
url('https://fonts.googleapis.com/css2?family=Poppins:wght@20
0;300;400;500;600;700&display=swap');
*{
margin: 0;
padding: 0;
box-sizing: border-box;
font-family: "Poppins" , sans-serif;
}
body{
min-height: 100vh;
display: flex;
align-items: center;
justify-content: center;

background-image: url(images/login.jpg);
```



```
background-size: cover;  
background-repeat: no-repeat;  
background-position: center;  
padding: 30px;  
}
```

```
.container{  
  position: relative;  
  max-width: 850px;  
  width: 100%;  
  background: #fff;  
  padding: 40px 30px;  
  box-shadow: 0 5px 10px rgba(0,0,0,0.2);  
  perspective: 2700px;  
}
```

```
.container .cover{  
  position: absolute;  
  top: 0;  
  left: 50%;  
  height: 100%;  
  width: 50%;  
  z-index: 98;  
  transition: all 1s ease;  
  transform-origin: left;
```

```
    transform-style: preserve-3d;
}
.container #flip:checked ~ .cover{
    transform: rotateY(-180deg);
}
.container .cover .front,
.container .cover .back{
    position: absolute;
    top: 0;
    left: 0;
    height: 100%;
    width: 100%;
}
.cover .back{
    transform: rotateY(180deg);
    backface-visibility: hidden;
}
.container .cover::before,
.container .cover::after{
    content: "";
    position: absolute;
    height: 100%;
    width: 100%;
    background: #331900;
```

```
    opacity: 0.5;
    z-index: 12;
}
.container .cover::after{
    opacity: 0.3;
    transform: rotateY(180deg);
    backface-visibility: hidden;
}
.container .cover img{
    position: absolute;
    height: 100%;
    width: 100%;
    object-fit: cover;
    z-index: 10;
}
.container .cover .text{
    position: absolute;
    z-index: 130;
    height: 100%;
    width: 100%;
    display: flex;
    flex-direction: column;
    align-items: center;
    justify-content: center;
```

```
}  
.cover .text .text-1,  
.cover .text .text-2{  
  font-size: 26px;  
  font-weight: 600;  
  color: #fff;  
  text-align: center;  
}  
.cover .text .text-2{  
  font-size: 15px;  
  font-weight: 500;  
}  
.container .forms{  
  height: 100%;  
  width: 100%;  
  background: #fff;  
}  
.container .form-content{  
  display: flex;  
  align-items: center;  
  justify-content: space-between;  
}  
.form-content .login-form,  
.form-content .signup-form{
```

```
    width: calc(100% / 2 - 25px);
}
.forms .form-content .title{
    position: relative;
    font-size: 24px;
    font-weight: 500;
    color: #333;
}
.forms .form-content .title:before{
    content: "";
    position: absolute;
    left: 0;
    bottom: 0;
    height: 3px;
    width: 25px;
    background: #331900;
}
.forms .signup-form .title:before{
    width: 20px;
}
.forms .form-content .input-boxes{
    margin-top: 30px;
}
.forms .form-content .input-box{
```

```
display: flex;
align-items: center;
height: 50px;
width: 100%;
margin: 10px 0;
position: relative;
}
.form-content .input-box input{
height: 100%;
width: 100%;
outline: none;
border: none;
padding: 0 30px;
font-size: 16px;
font-weight: 500;
border-bottom: 2px solid rgba(0,0,0,0.2);
transition: all 0.3s ease;
}
.form-content .input-box input:focus,
.form-content .input-box input:valid{
border-color: #331900;
}
.form-content .input-box i{
position: absolute;
```

```
color: #331900;
font-size: 17px;
}
.forms .form-content .text{
font-size: 14px;
font-weight: 500;
color: #333;
}
.forms .form-content .text a{
text-decoration: none;
}
.forms .form-content .text a:hover{
text-decoration: underline;
}
.forms .form-content .button{
color: #fff;
margin-top: 40px;
}
.forms .form-content .button input{
color: #fff;
background: #0000ff;
border-radius: 6px;
padding: 0;
cursor: pointer;
```

```
    transition: all 0.4s ease;
}
.forms .form-content .button input:hover{
    background: #0000ff;
}
.forms .form-content label{
    color: #331900;
    cursor: pointer;
}
.forms .form-content label:hover{
    text-decoration: underline;
}
.forms .form-content .login-text,
.forms .form-content .sign-up-text{
    text-align: center;
    margin-top: 25px;
}
.container #flip{
    display: none;
}
@media (max-width: 730px) {
    .container .cover{
        display: none;
    }
}
```



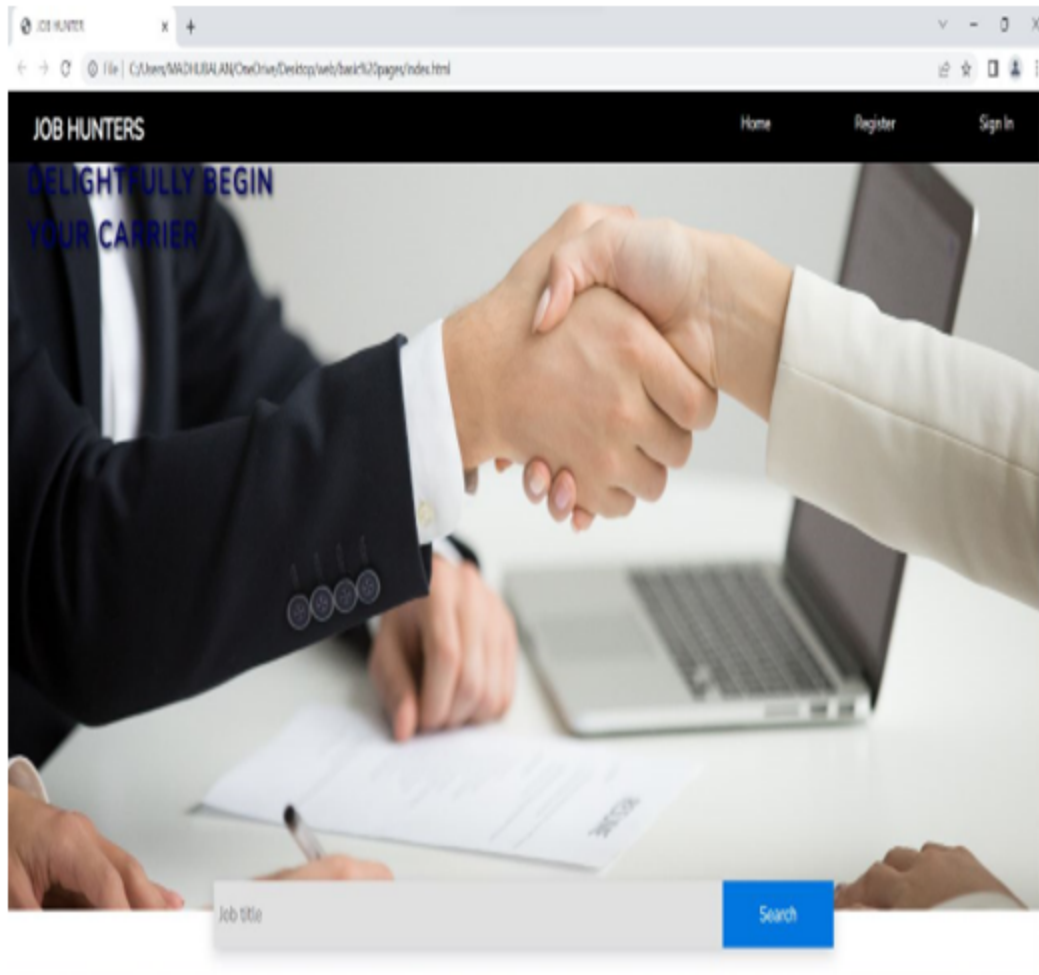
```
.form-content .login-form,  
.form-content .signup-form{  
  width: 100%;  
}  
.form-content .signup-form{  
  display: none;  
}  
.container #flip:checked ~ .forms .signup-form{  
  display: block;  
}  
.container #flip:checked ~ .forms .login-form{  
  display: none;  
}  
}
```

Data base schema

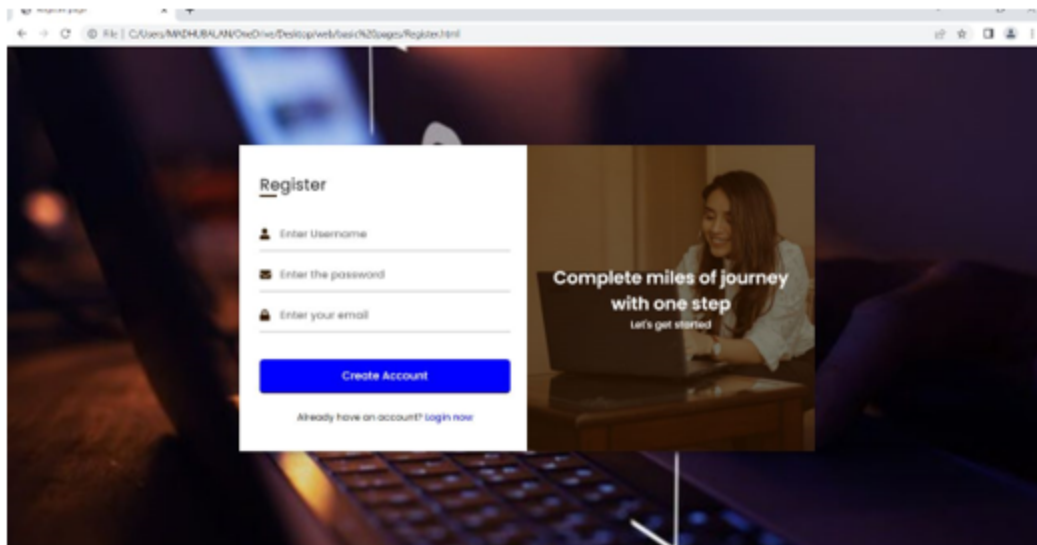
8. Testing

User acceptance testing

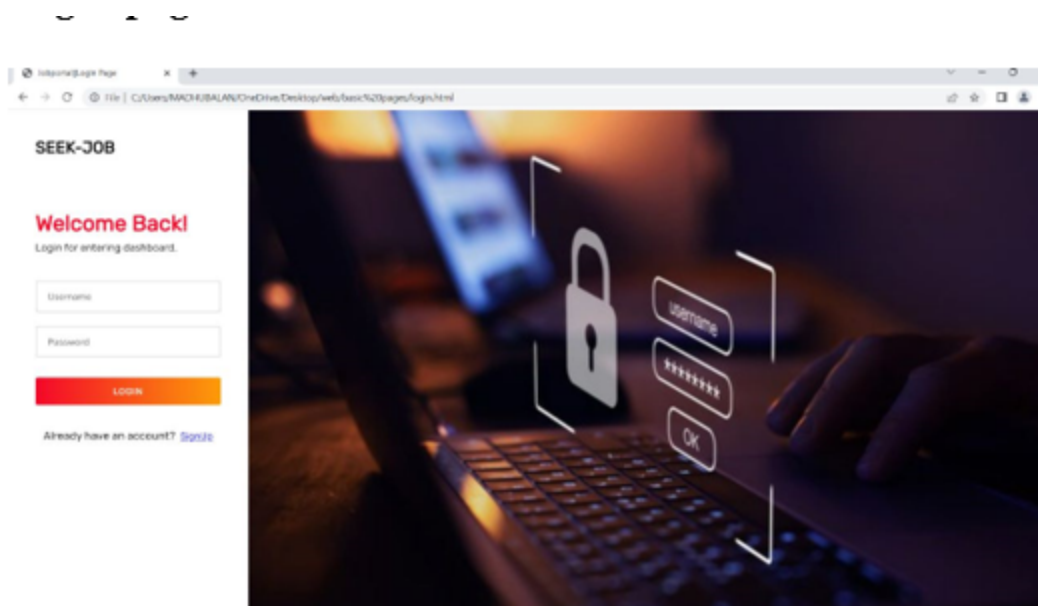
Index page



Registration page



Login page



9. RESULTS

9.1 Performance Matrix

Collection of news from various department:

When analysing your website, you want the full story of how visitors arranging with your site. You want to know not only how many visitors you get, but where they're coming from, how long they're spending on your site, how soon they're leaving, and much more. To find the answers to these questions, you need to track website engagement metrics. In this guide, we'll introduce this key concept, discuss the top metrics to watch for while running a successful website in 2022, and hear from actual website owners about what metrics they're prioritizing for the upcoming year.

10. ADVANTAGES & DISADVANTAGES

Advantages :

- Providing proper update.
- User friendly interface.
- Safe and security.

- Providing chat Bot for user.
- 24x7 updates.
- Less data consumption.

Disadvantage:

- Require data/wifi to get online.
- Costly to maintain.
- Requires higher bandwidth.
- This is totally free so cant make money.
- Some times bugs may appear.

11.CONCLUSION

I can improve my app by providing

- Help users find jobs with their skills.

- Get more users by encouraging social sharing.
- Keep your users engaged for longer job opportunities.
- Increase user engagement by 10x with social-logins
- Make ads user-friendly.
- Build a user community by encouraging comments.
- Giving updates to make user get good optimization .

By tracking your changes in the app, you can easily observe improvements in your crucial app metrics. This way, you can quickly ascertain if these changes work for your app, or do no.

Source code

```
# -*- coding: utf-8 -*-
```

```
from flask import Flask, render_template, request, redirect, url_for,
```

```
session
import ibm_db
import re

app = Flask(__name__)

app.secret_key = 'a'

conn = ibm_db.connect("DATABASE=bludb;HOSTNAME= 54a2f15b-
5c0f-46df-8954-
7e38e612c2bd.c1ogj3sd0tgtu0lqde00.databases.appdomain.cloud;POR
T= 32733;SECURITY=SSL;SSLServerCertificate=certificate.crt;UID=
tct88303;PWD= C5yDGA2a2q6Lng6U","")

@app.route('/')

def homer():
    return render_template('index.html')

@app.route('/login',methods =['GET', 'POST'])
def login():
    global userid
    msg = "

    if request.method == 'POST' :
```



```

username = request.form['username']
password = request.form['password']
sql = "SELECT * FROM users WHERE username =? AND
password=?"
stmt = ibm_db.prepare(conn, sql)
ibm_db.bind_param(stmt,1,username)
ibm_db.bind_param(stmt,2,password)
ibm_db.execute(stmt)
account = ibm_db.fetch_assoc(stmt)
print (account)
if account:
    session['loggedin'] = True
    session['id'] = account['USERNAME']
    userid= account['USERNAME']
    session['username'] = account['USERNAME']
    msg = 'Logged in successfully !'

    msg = 'Logged in successfully !'
    return render_template('dashboard.html', msg = msg)
else:
    msg = 'Incorrect username / password !'
return render_template('login.html', msg = msg)

```

```

@app.route('/register', methods =['GET', 'POST'])

```

```

def register():
    msg = "
    if request.method == 'POST' :
        username = request.form['username']

        password = request.form['password']
        email = request.form['email']
        sql = "SELECT * FROM job WHERE username =?"
        stmt = ibm_db.prepare(conn, sql)
        ibm_db.bind_param(stmt,1,username)
        ibm_db.execute(stmt)
        account = ibm_db.fetch_assoc(stmt)
        print(account)
        if account:
            msg = 'Account already exists !'
        elif not re.match(r'^@]+@^[^@]+\.[^@]+', email):
            msg = 'Invalid email address !'
        elif not re.match(r'[A-Za-z0-9]+', username):
            msg = 'name must contain only characters and numbers !'
        else:
            insert_sql = "INSERT INTO  users VALUES (?, ?, ?)"
            prep_stmt = ibm_db.prepare(conn, insert_sql)
            ibm_db.bind_param(prepare_stmt, 1, username)
            ibm_db.bind_param(prepare_stmt, 2, password)
            ibm_db.bind_param(prepare_stmt, 3, email)
            ibm_db.execute(prepare_stmt)
            msg = 'You have successfully registered !'

```

```
elif request.method == 'POST':  
    msg = 'Please fill out the form !'  
    return render_template('register.html', msg = msg)
```

```
@app.route('/dashboard')  
def dash():
```

```
    return render_template('dashboard.html')
```

```
@app.route('/apply', methods = ['GET', 'POST'])
```

```
def apply():
```

```
    msg = "
```

```
    if request.method == 'POST' :
```

```
        username = request.form['username']
```

```
        email = request.form['email']
```

```
        qualification= request.form['qualification']
```

```
        skills = request.form['skills']
```

```
        jobs = request.form['s']
```

```
        sql = "SELECT * FROM users WHERE username =?"
```

```
        stmt = ibm_db.prepare(conn, sql)
```

```
        ibm_db.bind_param(stmt,1,username)
```

```
        ibm_db.execute(stmt)
```

```
        account = ibm_db.fetch_assoc(stmt)
```

```
        print(account)
```

```
        if account:
```

```
            msg = 'there is only 1 job position! for you'
```

```
return render_template('apply.html', msg = msg)
```

```
insert_sql = "INSERT INTO job VALUES (?, ?, ?, ?, ?)"  
prep_stmt = ibm_db.prepare(conn, insert_sql)  
ibm_db.bind_param(prepare_stmt, 1, username)  
ibm_db.bind_param(prepare_stmt, 2, email)  
ibm_db.bind_param(prepare_stmt, 3, qualification)  
ibm_db.bind_param(prepare_stmt, 4, skills)  
ibm_db.bind_param(prepare_stmt, 5, jobs)  
ibm_db.execute(prepare_stmt)
```

```
elif request.method == 'POST':  
    msg = 'Please fill out the form !'  
    return render_template('apply.html', msg = msg)
```

```
@app.route('/display')  
def display():
```

```
    return render_template('display.html')
```

```
@app.route('/logout')
```

```
def logout():  
    session.pop('loggedin', None)  
    session.pop('id', None)
```

```
session.pop('username', None)
return render_template('index.html')
```

```
if __name__ == '__main__':
    app.run(host='0.0.0.1')
```

GITHUB LINK: <https://github.com/IBM-EPBL/IBM-Project-21809-1659791929>

vedio link:" <https://drive.google.com/file/d/1pA-8yBfoEpku47dnEn5S8dqY6OxrDaPR/view?usp=drivesdk> "