SKILL / JOB RECOMMENDER APPLICATION

A PROJECT REPORT

Submitted by,

(Team ID: PNT2022TMID32888)

ALEX S	820419104006
GOWTHAM E	820419104022
GURUHARAN S	820419104023
NANDHINI V	820419104039

In partial fulfillment for the award of the degree

of

BACHELOR OF ENGINEERING

IN

COMPUTER SCIENCE

ANJALAI AMMAL MAHALINGAM ENGINEERING COLLEGE,

KOVILVENNI

1. INTRODUCTION

1.1 Project Overview

Nowadays, the job search is a task commonly done on the Internet using job search engine sites like LinkedIn1, Indeed, and others. Commonly, a job seeker has two ways to search for a job using these sites: 1) doing a query based on keywords related to the job vacancy that he/she is looking for, or 2) creating and/or updating a professional profile containing data related to his/her education, professional experience, professional skills and other, and receive personalized job recommendations based on this data. Sites providing support to the former case are more popular and have a simpler structure; however, their recommendations are less accurate than those of the sites using profile data.

1.2 PROJECT PURPOSE

"Job search made easy" As the world-leading job board search engine we are aware of how important it is to find the best job boards and we trust our guide will help you to choose the right media for your recruiting campaign. We have chosen only the job boards that offer recruiters a quick and easy way to showcase their specific job postings to qualified candidates.

2. LITERATURE SURVEY

Having lots of skills but wondering which job best suits you? Don't need to worry! We have developed a skill recommender solution through which the fresher or the skilled person can log in and find jobs by using the search option or 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 recommendations based on their skills.

2.1.EXISTING PROBLEM

Everybody has a dream job; a career that they aspire to achieve. Job seekers work hard to gain the right skills and knowledge to give them an edge over others in the role they seek. However, at times, despite their best efforts, one may find it challenging to move a step closer to this sought-after job. We recently conducted an online poll with Indeed India to take a deep dive into the challenges faced by job seekers. Here are the key takeaways: 40 percent of the respondents (3500+) shared that silence from the recruiter during or after the recruitment process is one of their biggest challenges Crafting a resume and getting noticed were the next big challenges, both taking 21 percent of the votes 18 percent of the respondents shared that getting insights on the employer was challenging

2.2 REFERENCES

1. Buyya, R., Yeo, C.S., Venugopal, S., Broberg, J. and Brandic, I. (2009) Cloud Computing and Emerging IT Platforms: Vision, Hype, and Reality for Delivering Computing as the 5th Utility. Future Generation Computer Systems, 25, 599-616. http://dx.doi.org/10.1016/j.future.2008.12.001

2. [AlO12] Shaha T Al-Otaibi and Mourad Ykhlef. "A survey of job recommender systems". In: International Journal of the Physical Sciences 7.29 (2012), pp. 5127–5142. issn: 19921950. doi: 10.5897/IJPS12. 482.

3. [Dia13] M Diaby, E Viennet, and T Launay. "Toward the next generation of recruitment tools: An online social network-based job recommender system". In: Proc. of the 2013 IEEE/ACM Int. Conf. on Advances in Social Networks Analysis and Mining, ASONAM 2013 (2013), pp. 821–828. doi: 10. 1145/2492517.2500266.

4. [Kus15] M Kusner et al. "From word embeddings to document distances". In: Proc. of the 32nd Int. Conf. on Machine Learning, ICML'15. 2015, pp. 957–966.

2.3.PROBLEM STATEMENT DEFINITION

Create a problem statement to understand your customer's point of view. The Customer Problem Statement template helps you focus on what matters to create experiences people will love.

A well-articulated customer problem statement allows you and your team to find the ideal solution for the challenges your customers face. Throughout the process, you'll also be able to empathize with your customers, which helps you better understand how they perceive your product or service.

Problem Statement (PS)	I am (Customer)	I'm trying to	But	Because	Which makes me feel
PS-1	Alex aged 20	Get a job for myself	I can't be able to find the perfect job	Of the lack of advertisement about the vacancies	Frustrated
PS-2	Guruharan who is working as an HR manager	Hire freshers with smart skills	It is hard for me to hire them within a short period	Lack of required details about the candidates	Like a huge task.
PS-3	Gowtham who is an application developer	Refer a current job offer	I can't able to get the perfect list of offers	Shortage of quality in the recommendation system	Hopeless

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 behaviors 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.
- An empathy map is a **visual map** where the team member has to identify with different feelings, emotions, needs, goals, etc. of the target audience they are designed for. It helps the team to empathize with their users and understand their problems in order to design better products or services for them.
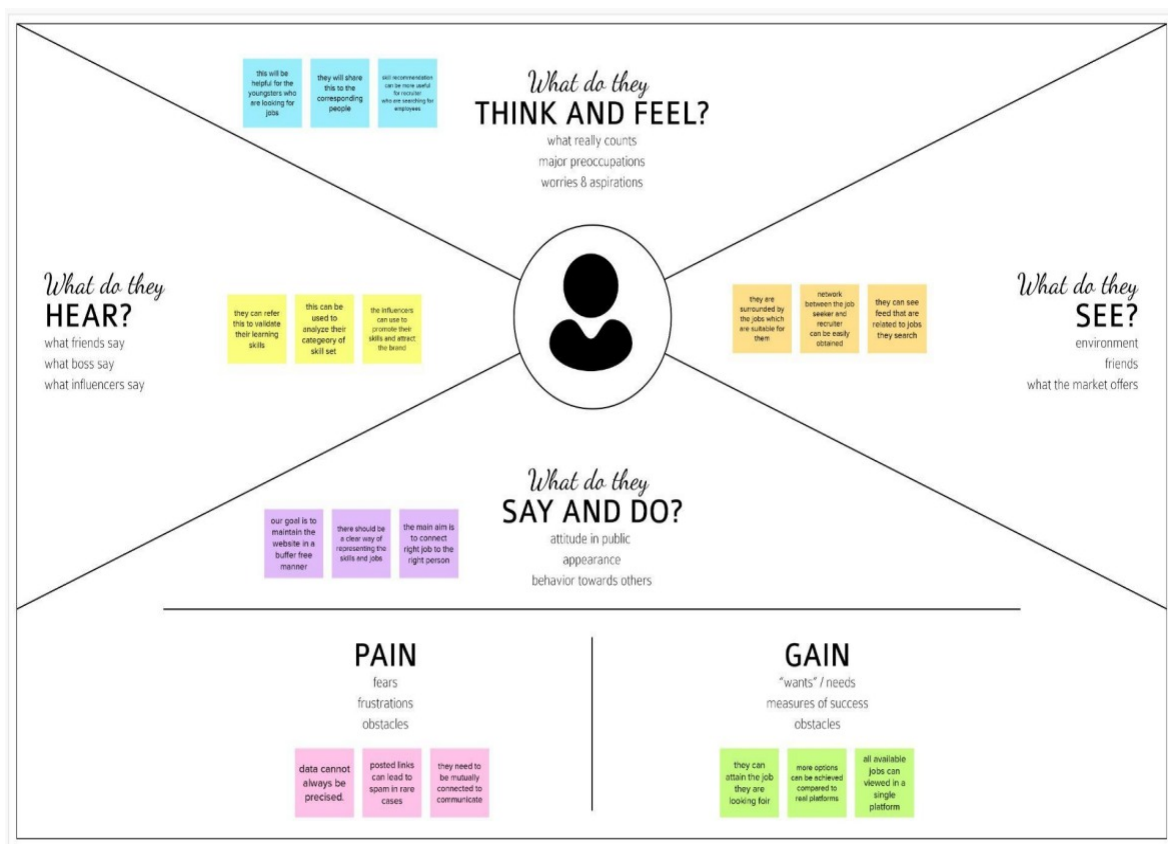
3.2 . IDEATION BRAINSTORMING

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.

Brainstorm & idea prioritization

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.

- **10 minutes** to prepare
- **1 hour** to collaborate
- **2-8 people** recommended

Before you collaborate

A little bit of preparation goes a long way with this session. Here's what you need to do to get going.

10 minutes

A **Team gathering**
Define who should participate in the session and send an invite. Share relevant information or pre-work ahead.

B **Set the goal**
Think about the problem you'll be focusing on solving in the brainstorming session.

C **Learn how to use the facilitation tools**
Use the Facilitation Superpowers to run a happy and productive session.

Open article →

1 Define your problem statement

What problem are you trying to solve? Frame your problem as a How Might We statement. This will be the focus of your brainstorm.

5 minutes

To recommend the perfect job and analyse the skills of the users

PROBLEM
How might we [your problem statement]?

Key rules of brainstorming
To run an smooth and productive session

- Stay in topic.
- Encourage wild ideas.
- Defer judgment.
- Listen to others.
- Go for volume.
- If possible, be visual.

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

Brainstorm & idea prioritization

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.

- **10 minutes** to prepare
- **1 hour** to collaborate
- **2-8 people** recommended

Before you collaborate

A little bit of preparation goes a long way with this session. Here's what you need to do to get going.

⏱ 10 minutes

A **Team gathering**
Define who should participate in the session and send an invite. Share relevant information or pre-work ahead.

B **Set the goal**
Think about the problem you'll be focusing on solving in the brainstorming session.

C **Learn how to use the facilitation tools**
Use the Facilitation Superpowers to run a happy and productive session.

Open article →

Define your problem statement

What problem are you trying to solve? Frame your problem as a How Might We statement. This will be the focus of your brainstorm.

⏱ 5 minutes

PROBLEM
How might we [your problem statement]?

Key rules of brainstorming
To run an smooth and productive session

- Stay in topic.
- Encourage wild ideas.
- Defer judgment.
- Listen to others.
- Go for volume.
- If possible, be visual.

Step-2: Brainstorm, Idea Listing and Grouping

Step-3:idea prioritization

3.3. **Proposed Solution**

Proposed Solution Template:

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

S.No	Parameter	Description
1.	Problem Statement (Problem to be solved)	Currently, if anyone wants to sell their car, they have to take their car to a respective company workshop or have to make an appointment for the company to get an estimate of the price. This process involves of a lot of time and resources.

2.	Idea / Solution description	Especially for the first timers, a used purchase is more practical and affordable at the same time. Unless you really want the latest car in the market or that new car smell is all you are looking for, a used car can very well cater to almost all types of buyers quite conveniently
3.	Novelty / Uniqueness	Looks Matter for A Better Car Resale Value. A Service Ensures Good Car Resale Value. Keep All Papers in Place. Novelty is car resale Get Phone Numbers, Address, Photos, Maps of Novelty Tata.
4.	Social Impact / Customer Satisfaction	Became obsessed with customer feedback, Create a sense of convenience, Deliver fast responses, satisfaction is a company –wide focus. Customer Satisfaction Look and Style Fuel consumption Pulling Power Seating Capacity Riding Comfort Safety Features Speed Shock Absorbs & transmission Tyre mileage Braking EfficiencyTyre mileage Braking Efficiency
5.	Business Model (Revenue Model)	How to start a car merchant business. Generally, it is considered that if you want to start a car merchant business, you need a huge capital to invest. Dealer license. Location of the business. Keep a watch on the market. Make your catalog. Use a perfect marketing strategy.

6.	Scalability of the Solution	The size of the used car market in India was over 4.4 million units in 2020, according to Statista. The startup has managed to strive ahead by leveraging a robust managed marketplace business model, while proving that it is economically viable and independent of scale due to the use of technology, economy of scale, economy of scope, asset light, and network effects.

3.4 PROBLEM-SOLUTION FIT

Define CS, fit into CC	**1. CUSTOMER SEGMENT(S)** CS	**6. CUSTOMER CONSTRAINTS** CC	**5. AVAILABLE SOLUTIONS** AS	Explore AS, differentiate
	• Business people • Common people • Working parents • Racers	• **Anxiety**-customer began to get anxious when they still no idea aboutwhat they have found. • **Mysteries**-they might Called it mysteries which they can't able to	• By searching in online websites. • By gathering the information fromthe peoples and come to	
Focus on J&P, tap into BE, understand RC	**2. JOBS-TO-BE-DONE / PROBLEMS** J&P	**9. PROBLEM ROOT CAUSE** RC	**7. BEHAVIOUR** BE	Focus on J&P, tap in BE, understand RC
	• Giving the necessary information for particular thing which needs for customer • Solving customer doubts	• Lack of study in the sequence of things • Unaware of the object • New to environment	When the user Don't have the knowledge about particular thing this kind of situation occurs.	

4. REQUIREMENT ANALYSIS

4.1 FUNCTIONAL REQUIREMENTS

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
FR-2	User Confirmation	Confirmation via site
FR-3	User Login	Login via Email Login via password

4.2 NON FUNCTIONAL REQUIREMENTS

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

FR No.	Non-Functional Requirement	Description
NFR-1	**Usability**	Predicting the resale value
NFR-2	**Security**	Providing security to the website
NFR-3	**Reliability**	Providing high reliability by predicting values for different types of cars
NFR-4	**Performance**	Providing high performance by using some machine learning techniques

NFR-5	**Availability**	It is used for all types of jobs
NFR-6	**Scalability**	Predicting values for different types of jobs

5. PROJECT DESIGN

5.1 DATA FLOW DIAGRAM

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.
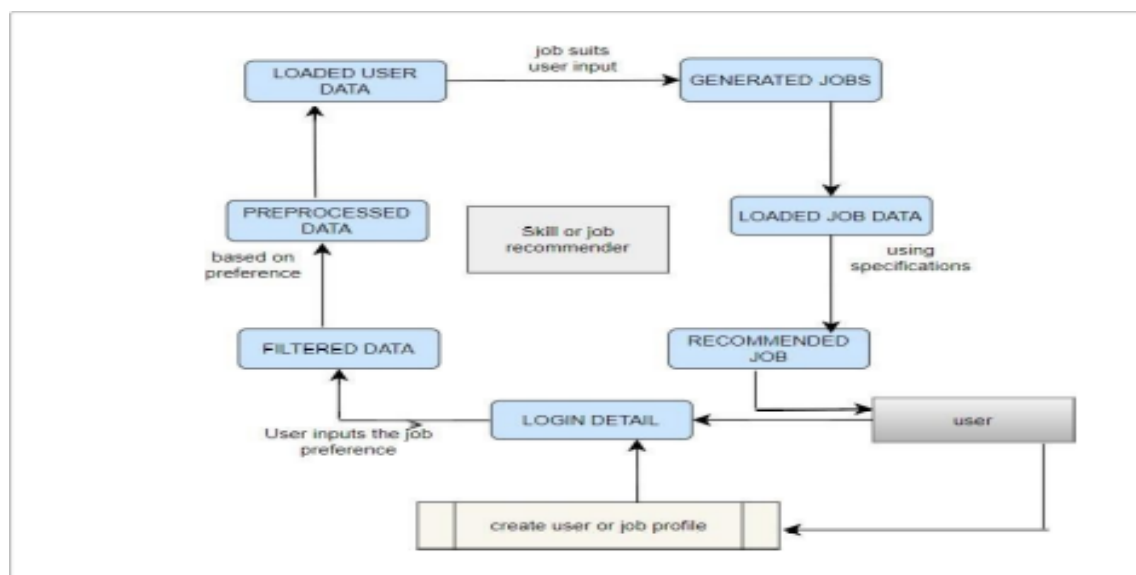
FLOW OF THE PROCESS

User Type	Functional Requirement (Epic)	User Story Number	User Story / Task	Acceptance criteria	Priority	Release

Job Seeker(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	I can register & access the application through G-mail	Medium	Sprint-1

	Login	USN-5	As a user, I can log into the application by entering email & password	I can log into the application by entering email & password	High	Sprint-1
	Dashboard	USN-6	As a user, I can register & access the dashboard with Facebook Login	I can access the dashboard thorugh facebook login and get access to various tools	Medium	Sprint-1
Customer (Web user)	Registration	USN-6	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
Customer Care Executive	Access	USN-7	As a user, I can connect to the custmer care executive through contact number or email.	I can connect to the custmer care executive and clarify my doubts through contact number or email.	High	Sprint-1

Administrator	Document verification	USN-8	As a user, I can get my details and documents verified virtually from the comfort of my home.	, I can get my details and documents verified virtually from the comfort of my home.	High	Sprint-1
	Login verification	USN-9	As a user, I can get my login details verified virtually from the comfort of my home through OTP.	I can get my login details verified virtually from the comfort of my home through OTP.	High	Sprint-1

5.2 Solution & Technical Architecture

```
                    ┌─────────────────────┐
                    │  onboarding screen  │
                    └─────────────────────┘
                              │
                  ┌───────────┴───────────┐
                  ▼                       ▼
         ┌─────────────────┐     ┌─────────────────┐
         │  register page  │     │   login page    │
         └─────────────────┘     └─────────────────┘
                  │                       │
                  └──────► ┌──────────────┐ ◄──────┘
                           │  home screen │
                           └──────────────┘
                                  │
    ┌─────────────┬───────────────┼───────────────┬──────────────┐
    ▼             ▼               ▼               ▼
┌──────────┐ ┌──────────┐  ┌──────────┐  ┌──────────┐
│ explore  │ │ daily    │  │ chatbot  │  │ messager │
│ the jobs │ │ feed     │  │          │  │          │
└──────────┘ └──────────┘  └──────────┘  └──────────┘
    │             │               │               │
    ▼             │               ▼               ▼
┌──────────┐      │        ┌──────────────┐ ┌──────────────┐
│ search   │      │        │ get          │ │ get connect  │
│ for      │      │        │ recommendation│ │ with your    │
│ required │      │        │ based on your │ │ friends      │
│ job      │      │        │ skills        │ └──────────────┘
└──────────┘      │        └──────────────┘        │
    │             │               │                │
    ▼             │               │                │
┌──────────┐      │               │                │
│proceeding│      │               │                │
│to apply  │      │               │                │
└──────────┘      │               │                │
    └─────────────┼───────────────┼────────────────┘
                  ▼
          ┌──────────────────┐
          │ gettting feedback│
          └──────────────────┘
                  │
                  ▼
          ┌──────────────┐
          │   log out     │
          └──────────────┘
```
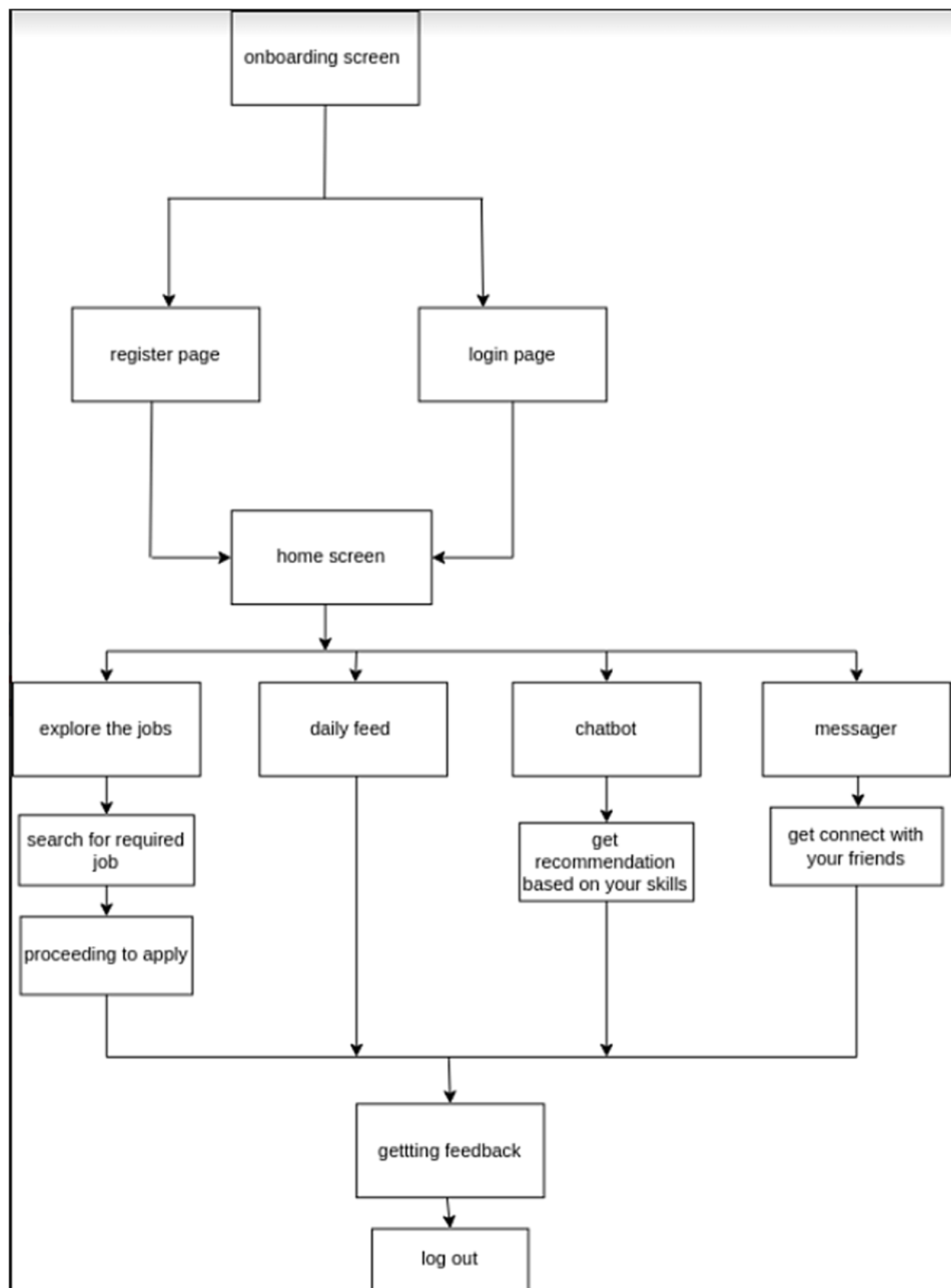
5.3 User Stories

User Type	Functional Requirement (Epic)	User Story Number	User Story / Task	Acceptance Criteria	Priority	Release
Job Seeker (Mobile user)	Registration	USN-1	As a user, I can register for the application bye 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 confirmati on 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		High	Sprint-1

			& password			
	Dashboard	USN-6	As a user, I can access the dashboard for jobs to search	I can access the dashboard	High	Sprint-1
Job Seeker (Web user)	Login	USN-7	As a user, I can log into the application by entering email & password	I can log into the account I have created	High	Sprint-1
Administrator	Registration	USN-8	As a administrator, I can see the registration details	I can access the registration details	High	Sprint-1
	Login	USN-9	As a administrator, I can see the login details	I can access the login details	High	Sprint-1
	Dashboard	USN-10	As a administrator, I can update the dashboard	I can update the dashboard	High	Sprint-1

6. PROJECT PLANNING & SCHEDULING

6.1 Sprint Planning & Estimation

Product Backlog, Sprint Schedule, and Estimation

Use the below template to create product backlog and sprint schedule

Sprint	Functional Requirement (Epic)	User Story Number	User Story / Task	Story Points	Acceptance criteria	Priority
sprint-1	User registration	<u>USN-1</u>	As a user, i can register for the application by entering my email, password, and confirming my password	2	I can access my accoun t/ dahbooard	High
Sprint-1	User Confirmation	USN-2	As a user, I will receive confirmation email once i have registered for the application	1	I can receive a confirmation email and click confirm	High
Sprint-2		USN-3	As a user, I can register for the application through Faceook	2	I can register & access the dashboard with Facebook login	Low
Sprint-1		USN-4	As a user, I can register for the application through Gmail	2	I can receive confirmation email & click confirm	Medium
Sprint-1	Login	USN-5	As a user, I can log into the application by entering email & password	1	I can access my account/dashboard	High

| Sprint-1	Dashboard	USN-6	Create a model set that contains those models, then assign it to a role.	2	Assign that group to the appropriate roles on the Roles page	High
Sprint-1	Identity-Aware	USN-7	Open, public access, User authenticated access, Employee restricted access.	1	Company public website. App running on the company intranet. App with access to customer private information.	Low
Sprint-1	Communication	USN-8	A customer care executive is a professional responsible for communicating the hows and why's regarding service expectations within a company.	1	For how to tackle customer queries.	Medi um
Sprint-1	Device management	USN-9	You can Delete/Disable/Ena bl e devices in Azure Active Directory but you cannot Add/Remove Users in the directory.	2	Ease of use	High

6.2 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	20	6 Days	24 Oct 2022	29 Oct 2022	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

6.3 Reports from JIRA

Burndown Chart:

A burn down chart is a graphical representation of work left to do versus time. It is often used in agile software development methodologies such as Scrum. However, burn down charts can be applied to any project containing measurable progress over time
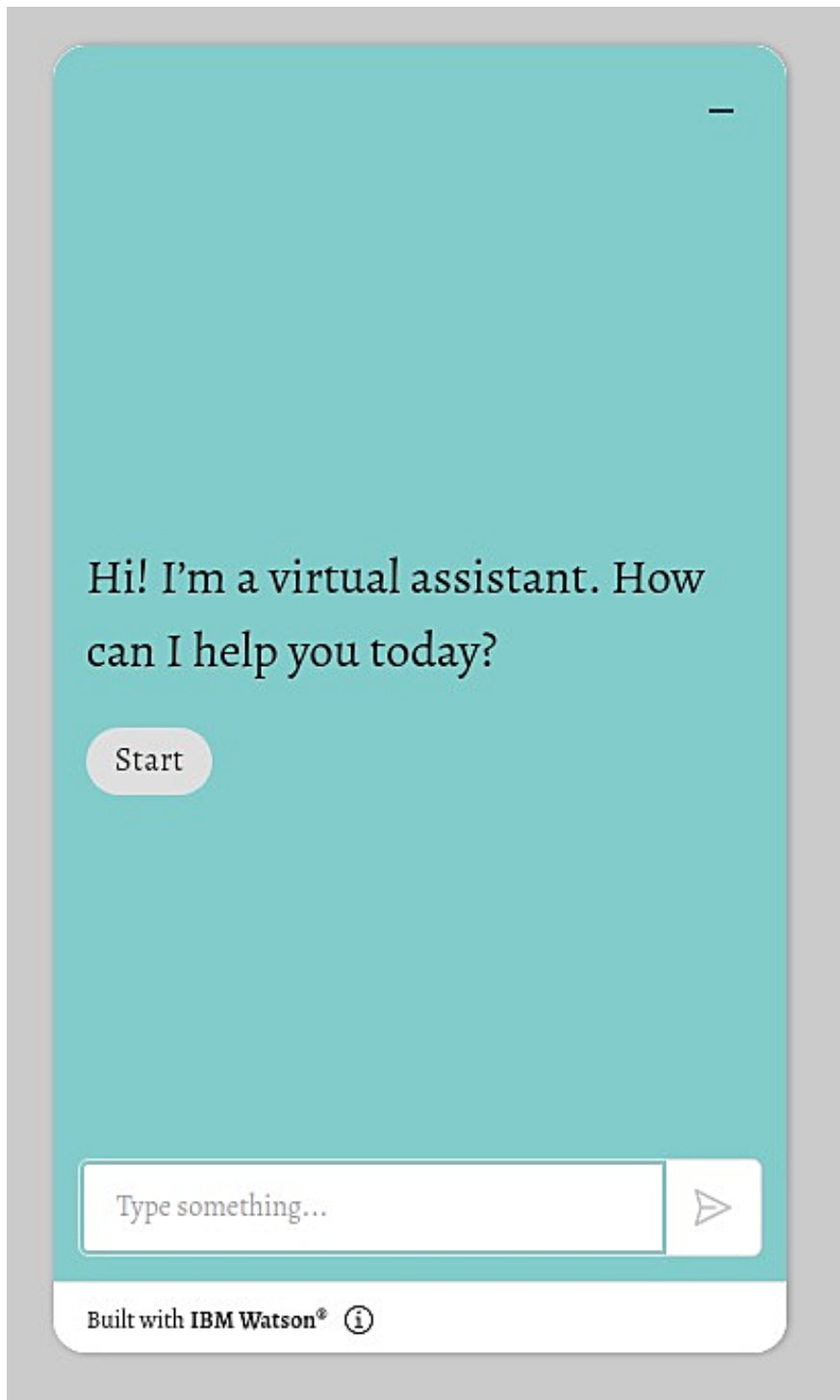
Burndown Chart
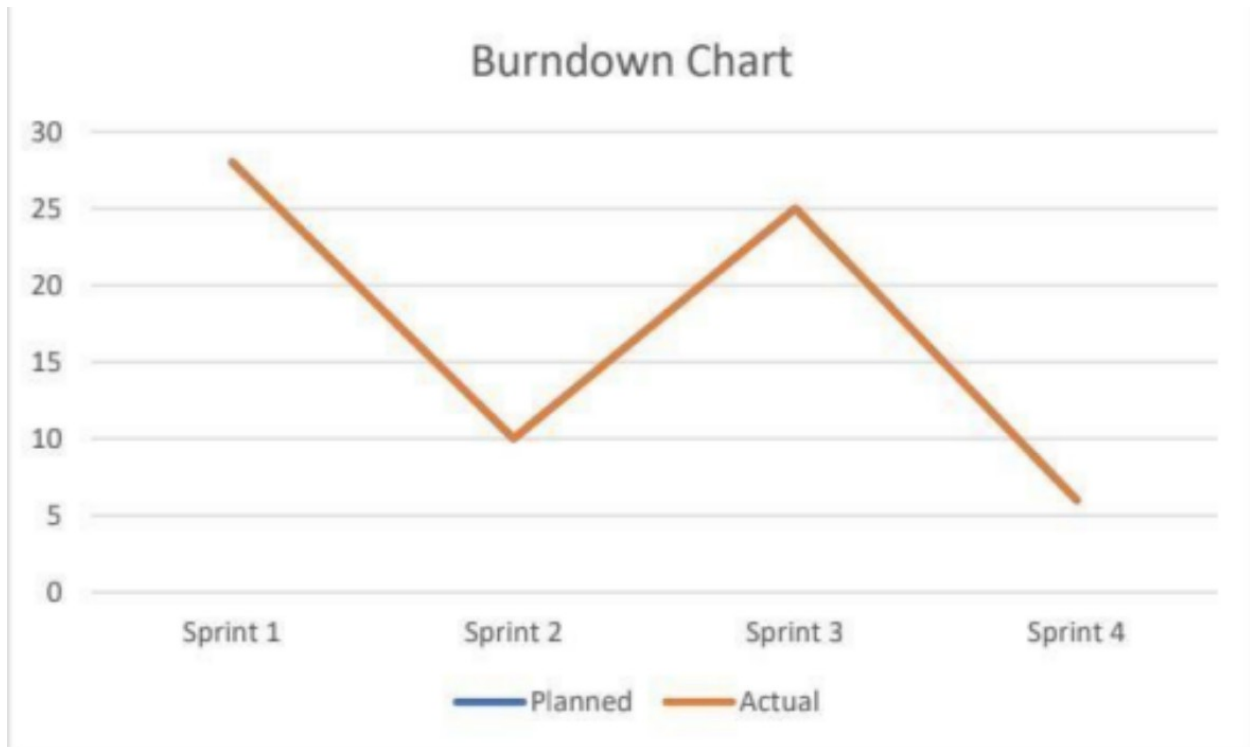
7. CODING & SOLUTIONING
7.1 Feature 1

```
<script>
    window.watsonAssistantChatOptions = {
      integrationID: "e22dcd16-3b9c-407a-90dc-0d175d6708eb", // The ID of this
integration.
      region: "au-syd", // The region your integration is hosted in.
      serviceInstanceID: "9f2196de-4c2c-4b82-874b-9768ad3501e4", // 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);
    });
```


Hi! I'm a virtual assistant. How can I help you today?

Start

Type something…

Built with **IBM Watson®** ⓘ

7.2 Feature 2

HTML HOME PAGE:

```
<!DOCTYPE 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">
    <title>JOBPORTAL | HOME</title>
    <meta charset="UTF-8">
    <!-- Compiled and minified CSS -->
    <link rel="stylesheet" href="../static/css/card.css">
    <link rel="stylesheet"
href="https://cdnjs.cloudflare.com/ajax/libs/materialize/1.0.0/css/materialize.min.css">

    <!-- Compiled and minified JavaScript -->
    <script
src="https://cdnjs.cloudflare.com/ajax/libs/materialize/1.0.0/js/materialize.min.js">
</script>

        <!-- favicon -->
        <!-- <link rel="shortcut icon" href="/assets/img/favicon.ico" type="image/x-icon"> -->
        <!-- <link rel="icon" href="/assets/img/favicon.ico" type="image/x-icon"> -->
        <link rel="icon" type="image/png" sizes="16x16" href="/assets/img/favicon-32x32.png">
        <!-- bootstrap css cdn -->
        <link rel="stylesheet"
href="https://stackpath.bootstrapcdn.com/bootstrap/4.5.2/css/bootstrap.min.css"
```

```
integrity="sha384-
JcKb8q3iqJ61gNV9KGb8thSsNjpSL0n8PARn9HuZOnIxN0hoP+VmmDGMN5t9
UJ0Z" crossorigin="anonymous">
    <link rel="stylesheet" href="https://cdnjs.cloudflare.com/ajax/libs/font-
awesome/4.7.0/css/font-awesome.css">
    <!-- css stylesheet -->
    <link rel="stylesheet" href="../static/css/reg.css">
    <link rel="stylesheet" href="../static/css/style.css">
    <!-- font styles cdn -->
    <link rel="stylesheet" href="https://cdnjs.cloudflare.com/ajax/libs/font-
awesome/6.2.1/css/all.css" integrity="sha512-
FA9cIbtlP61W0PRtX36P6CGRy0vZs0C2Uw26Q1cMmj3xwhftftymr0sj8/YeezDn
RwL9wtWw8ZwtCiTDXlXGjQ==" crossorigin="anonymous" referrerpolicy="no-
referrer" />
    <link rel="stylesheet" href="https://cdnjs.cloudflare.com/ajax/libs/font-
awesome/6.2.1/css/all.min.css" integrity="sha512-
MV7K8+y+gLIBoVD59lQIYicR65iaqukzvf/nwasF0nqhPay5w/9lJmVM2hMDcn
K1OnMGCdVK+iQrJ7lzPJQd1w==" crossorigin="anonymous"
referrerpolicy="no-referrer" />
    <link rel="preconnect" href="https://fonts.gstatic.com">
    <link
href="https://fonts.googleapis.com/css2?family=Alegreya&display=swap"
rel="stylesheet">
    <link
href="https://fonts.googleapis.com/css2?family=Alegreya:wght@600&display=sw
ap" rel="stylesheet">
</head>
<body>
    <!-- bootstrap navbar -->
    <nav class="navbar sticky-top navbar-expand-lg navbar-dark">
        <div class="container-fluid menu">
            <a class="main-logo-img mt-3" href="home"><img
```

```html
src="/static/img/goseek.png" alt="sheep-logo" height="180px" width="180px">
            <!-- <a class="navbar-brand" href="index.html">JobPortal</a> -->
          </a>
          <div class="row donate-sponsor linker" style="text-align:center;">
            <a type="button" class="col-3 links" id="donate"
href="login">LOGIN</a>
            <a type="button" class="col-3 links" id="sponsor"
href="register">REGISTER</a>
          </div>
        </div>
      </nav>
      <!-- navbar ends -->
<div class="card-container">
      <div class="card">
        <div class="card-box">
        <div class="card-image waves-effect waves-block waves-light">
          <img class="activator" src="../static/img/startup.svg" height="85px"
width="85px">
        </div>
        <div class="card-content">
          <span class="card-title activator grey-text text-darken-4 title-
col">Mission </span>

        </div></div>
        <div class="card-reveal">
          <span class="card-title grey-text text-darken-4 title-col">Mission  <i
class="fa-solid fa-caret-down"></i></span>
          <p class="title-sub">GoSeek is an edTech organization with a vision to
bridge the gap between academia & industry. Whether you are new to the
workforce, are a seasoned professional, or somewhere in between, GoSeek's
contributors will help you move the needle on your career and get the job you want
faster than you think.Our outcome-based experiential learning programs on
```

emerging technologies (Internet of Things, Machine Learning, Data Science, Artificial Intelligence, Robotics) are building skilled entry - level engineers, for the corporate world.</p>
                     </div>
                  </div>
                  <div class="card"> <div class="card-box">
                  <div class="card-image waves-effect waves-block waves-light">
                  <img class="activator" src="../static/img/vision.svg" height="85px" width="85px">
                  </div>
                  <div class="card-content">
                  Vision

APP.PY FLASK:

```python
from flask import Flask, render_template, request, redirect, url_for, session
import re
import ibm_db
import os
import json

app = Flask(_name_)
job="
app.secret_key='a'
conn = ibm_db.connect("DATABASE=bludb;HOSTNAME=2f3279a5-73d1-4859-88f0-
a6c3e6b4b907.c3n41cmd0nqnrk39u98g.databases.appdomain.cloud;PORT=30756;
Security=SSL;SSLServerCertificate=DigiCertGlobalRootCA.crt;UID=nmc63120;
PWD=BC9ub7wWLk2Yb8fM;","","")
```

```python
@app.route('/')
def index():
    return redirect(url_for('register'))

@app.route('/register', methods =['GET', 'POST'])
def register():
    msg = ''
    if request.method == 'POST':
        username = request.form['username']
        email = request.form['email']
        password = request.form['password']
        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 = 'Account already exists !'
            return render_template('register.html', msg = msg)
        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(prep_stmt, 1, username)
            ibm_db.bind_param(prep_stmt, 2, email)
            ibm_db.bind_param(prep_stmt, 3, password)
            ibm_db.execute(prep_stmt)
            msg = 'You have successfully registered !'
```

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


@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)
```

```python
@app.route('/dashboard')
def dash():
    return render_template('dashboard.html')

@app.route('/display')
def display():
    try:
        username = session['username']
    except:
        return render_template('home.html',msg='Please login first')
    print(username)
    sql = "SELECT * FROM jobs WHERE username =?"
    stmt = ibm_db.prepare(conn, sql)
    print(stmt)
    ibm_db.bind_param(stmt,1,username)
    ibm_db.execute(stmt)
    print(stmt)
    account = ibm_db.fetch_assoc(stmt)
    print ("display",account)


    # print(session["username"],session['id'])
    # sql = "SELECT username FROM jobs WHERE username =?"
    # stmt=ibm_db.prepare(conn,sql)
    # ibm_db.bind_param(stmt,1,session['username'])
    # ibm_db.execute(stmt)
    # account = ibm_db.fetch_assoc(stmt)
    # print("accountdislay",account)
    return render_template('display.html',account = account)

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

```python
        session['loggedin'] = False
        session.pop('id', None)
        session.pop('username', None)
        return render_template('home.html')

@app.context_processor
def override_url_for():
    return dict(url_for=dated_url_for)

def dated_url_for(endpoint, **values):
    if endpoint == 'static':
        filename = values.get('reg', None)
        if filename:
            file_path = os.path.join(app.root_path, endpoint, filename)
            values['q'] = int(os.stat('./static/css/reg.css').st_mtime)
    return url_for(endpoint, **values)

@app.route('/home')
def home():
    msg=session['loggedin']
    return render_template('home.html',msg=msg)

@app.route('/apply/<job>')
def getJob(job):
    job=job

    return redirect(url_for('apply',job=job))
@app.route('/apply',methods =['GET', 'POST'])
def apply():
    msg=''
    try:
        print(session['id'])
    except:
```

```python
        return render_template('apply.html',msg='Something went wrong')
    msg = ''
    if request.method == 'POST' :
        username = session['username']
        email = request.form['email']
        qualification= request.form['qualification']
        skills = request.form['skills']
        categ = request.form['s']
        sql = "SELECT job FROM jobs 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)
        if account:
            print(account)
            msg = 'There is only 1 job position! for you'
            return render_template('apply.html', msg = msg)
        insert_sql = "INSERT INTO jobs VALUES (?, ?, ?, ?, ?, ?)"
        prep_stmt = ibm_db.prepare(conn, insert_sql)
        ibm_db.bind_param(prep_stmt, 1, username)
        ibm_db.bind_param(prep_stmt, 2, email)
        ibm_db.bind_param(prep_stmt, 3, qualification)
        ibm_db.bind_param(prep_stmt, 4, skills)
        ibm_db.bind_param(prep_stmt, 5, categ)
        ibm_db.bind_param(prep_stmt, 6, job)
        ibm_db.execute(prep_stmt)
        msg = 'You have successfully applied for '+job+' !'
        session['loggedin'] = True
        TEXT = "Hello, a new application for job position" ,job," is requested"
        return render_template('dashboard.html', msg = msg)
    elif request.method == 'POST':
        msg = 'Please fill out the form !'
```

```
    if request.json != None:
        session['job'] = request.json
        session['job'] = session.get['job',None]
    return render_template('apply.html', msg = msg)

if _name_ == '_main_':
    job=""
    app.run(debug=True)
```

APPLY.HTML:

```
<!DOCTYPE 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">
    <title>JOBPORTAL | APPLY</title>
        <!-- favicon -->
        <!-- <link rel="shortcut icon" href="/assets/img/favicon.ico" type="image/x-icon"> -->
        <!-- <link rel="icon" href="/assets/img/favicon.ico" type="image/x-icon"> -->
        <link rel="icon" type="image/png" sizes="16x16" href="/assets/img/favicon-32x32.png">
        <!-- bootstrap css cdn -->
        <link rel="stylesheet" href="https://stackpath.bootstrapcdn.com/bootstrap/4.5.2/css/bootstrap.min.css" integrity="sha384-JcKb8q3iqJ61gNV9KGb8thSsNjpSL0n8PARn9HuZOnIxN0hoP+VmmDGMN5t9UJ0Z" crossorigin="anonymous">
        <link rel="stylesheet" href="https://cdnjs.cloudflare.com/ajax/libs/font-
```

awesome/4.7.0/css/font-awesome.css">

    <!-- css stylesheet -->

    <link rel="stylesheet" href="../static/css/reg.css">

    <link rel="stylesheet" href="../static/css/style.css">

    <!-- font styles cdn -->

    <link rel="preconnect" href="https://fonts.gstatic.com">

    <link
href="https://fonts.googleapis.com/css2?family=Alegreya&display=swap"
rel="stylesheet">

    <link
href="https://fonts.googleapis.com/css2?family=Alegreya:wght@600&display=sw
ap" rel="stylesheet">

</head>

<body>

  <!-- bootstrap navbar -->

  <nav class="navbar sticky-top navbar-expand-lg navbar-light">

   <div class="container-fluid menu">

    <img
src="static/img/goseek.png" alt="sheep-logo" height="180px" width="180px">

     <!-- JobPortal -->

    <button class="navbar-toggler" type="button" data-bs-toggle="collapse" data-
bs-target="#navbarSupportedContent" aria-controls="navbarSupportedContent"
aria-expanded="false" aria-label="Toggle navigation">

    </button>

    <div class="row donate-sponsor dash">

     <a type="button" class="col-6 links" id="donate"
href="/logout">LOGOUT

     MY
JOBS

    </div>

```html
    </div>
  </nav>
    <!-- navbar ends -->
  <!-- Login form -->
  <div class="login text-center mt-5">
    <h2>Apply Now</h2>
    <div class="msg">{{msg}}</div>
    <form action="/apply" method="post" class="mt-3">
      <input type="email" name="email" placeholder="Enter Your Email" id="email" required></br></br>
      <input type="text" name="qualification" placeholder="Enter Your Qualification"  id="qualification" required></br></br>
      <input type="text" name="skills" placeholder="Enter Your Skills" id="skills" required></br></br>
      <select name ="s">
      <option value ="PYTHON"> Python</option>
      <option value ="ML"> ML</option>
      <option value ="AI"> AI</option>
      </select>
      </br></br>
    <button style="width: 15%;
    margin-left: auto;
    margin-right: auto;" type="submit" id="button" class="btn btn-primary">Submit</button>
    </form>
  </div>

 <div class="note mt-3 text-center">
   <p> Click here to go to dashboard <a href="dashboard">Dashboard! </a> </p>
```

```
    </div>
    <div class="alert">{{msg}}</div>
    <script>
      window.watsonAssistantChatOptions = {
        integrationID: "e22dcd16-3b9c-407a-90dc-0d175d6708eb", // The ID of this
integration.
        region: "au-syd", // The region your integration is hosted in.
        serviceInstanceID: "9f2196de-4c2c-4b82-874b-9768ad3501e4", // 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>
```

LOGIN.HTML:

```
<!DOCTYPE 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">
    <title>JOBPORTAL | LOGIN</title>
```

```html
<!-- favicon -->
<!-- <link rel="shortcut icon" href="/assets/img/favicon.ico" type="image/x-icon"> -->
<!-- <link rel="icon" href="/assets/img/favicon.ico" type="image/x-icon"> -->

<link rel="stylesheet" href="../static/css/reg.css">
<link rel="preconnect" href="https://fonts.googleapis.com">
<link rel="preconnect" href="https://fonts.gstatic.com" crossorigin>
<link href="https://fonts.googleapis.com/css2?family=Secular+One&display=swap" rel="stylesheet">
    <!-- favicon -->
    <!-- <link rel="shortcut icon" href="/assets/img/favicon.ico" type="image/x-icon"> -->
    <!-- <link rel="icon" href="/assets/img/favicon.ico" type="image/x-icon"> -->
    <link rel="icon" type="image/png" sizes="16x16" href="/assets/img/favicon-32x32.png">
    <!-- bootstrap css cdn -->
    <link rel="stylesheet" href="https://stackpath.bootstrapcdn.com/bootstrap/4.5.2/css/bootstrap.min.css" integrity="sha384-JcKb8q3iqJ61gNV9KGb8thSsNjpSL0n8PARn9HuZOnIxN0hoP+VmmDGMN5t9UJ0Z" crossorigin="anonymous">
    <link rel="stylesheet" href="https://cdnjs.cloudflare.com/ajax/libs/font-awesome/4.7.0/css/font-awesome.css">
    <!-- css stylesheet -->
  <link rel="stylesheet" href="../static/css/reg.css">
    <link rel="stylesheet" href="../static/css/style.css">
    <!-- font styles cdn -->
    <link rel="preconnect" href="https://fonts.gstatic.com">
    <link
```

```html
href="https://fonts.googleapis.com/css2?family=Alegreya&display=swap"
rel="stylesheet">
        <link
href="https://fonts.googleapis.com/css2?family=Alegreya:wght@600&display=swap" rel="stylesheet">
</head>
<body>
    <div class="main">
      <div class="user">
        <div class="logo"><img src="../static/img/goseek.png" alt="tie"
height="180px" width="180px"></div>
      <header class="user_header"><h1 class="user_title">Login</h1></header>
      <form action="login" class="form" method="post">
        <div class="form_group"><input type="text" name="username"
placeholder="Enter Your Username"  id="username" class="form_input" required
/></div>
        <div class="form_group"><input type="password" name="password"
placeholder="Enter Your Password" id="password" class="form_input" required
/></div><br>
        <button class="btn" type="submit">Login</button>
      </form>
      </div>
      <div class="note text-center">
        <p>Don't have an account?<a href="register">Register</a></p>
      </div>
      <div class="alert"><p><b>{{msg}}</b>
      </p>
      </div>
    </div>
    <script>
      window.watsonAssistantChatOptions = {
        integrationID: "e22dcd16-3b9c-407a-90dc-0d175d6708eb", // The ID of this
```

integration.

```
        region: "au-syd", // The region your integration is hosted in.
        serviceInstanceID: "9f2196de-4c2c-4b82-874b-9768ad3501e4", // 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>
```

REGISTER.HTML:

```
<!DOCTYPE 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">
    <title>JOBPORTAL | LOGIN</title>
    <link rel="stylesheet" href="../static/css/reg.css">
    <link rel="preconnect" href="https://fonts.googleapis.com">
    <link rel="preconnect" href="https://fonts.gstatic.com" crossorigin>
    <link
href="https://fonts.googleapis.com/css2?family=Secular+One&display=swap"
rel="stylesheet">
```

```html
<!-- favicon -->
<!-- <link rel="shortcut icon" href="/assets/img/favicon.ico" type="image/x-icon"> -->
<!-- <link rel="icon" href="/assets/img/favicon.ico" type="image/x-icon"> -->
<link rel="icon" type="image/png" sizes="16x16" href="/assets/img/favicon-32x32.png">
<!-- bootstrap css cdn -->
<link rel="stylesheet" href="https://stackpath.bootstrapcdn.com/bootstrap/4.5.2/css/bootstrap.min.css" integrity="sha384-JcKb8q3iqJ61gNV9KGb8thSsNjpSL0n8PARn9HuZOnIxN0hoP+VmmDGMN5t9UJ0Z" crossorigin="anonymous">
<link rel="stylesheet" href="https://cdnjs.cloudflare.com/ajax/libs/font-awesome/4.7.0/css/font-awesome.css">
<!-- css stylesheet -->
<link rel="stylesheet" href="../static/css/reg.css">
<link rel="stylesheet" href="../static/css/style.css">
<!-- font styles cdn -->
<link rel="preconnect" href="https://fonts.gstatic.com">
<link href="https://fonts.googleapis.com/css2?family=Alegreya&display=swap" rel="stylesheet">
<link href="https://fonts.googleapis.com/css2?family=Alegreya:wght@600&display=swap" rel="stylesheet">
</head>
<body>

    <div class="main">
      <div class="user">
        <div class="logo"><img src="../static/img/goseek.png" alt="tie"
```

```html
height="180px" width="180px"></div>
    <header class="user_header"><h1 class="user_title">Register</h1></header>
    <form action="register" class="form" method="post">
      <div class="form_group"><input type="text" name="username"
placeholder="Enter Your Username"  id="username" class="form_input" required
/></div>
        <div class="form_group"><input type="email" name="email"
placeholder="Enter Your Email ID"  id="email" class="form_input"
required/></div>
        <div class="form_group"><input type="password" name="password"
placeholder="Enter Your Password" id="password" class="form_input" required
/></div><br>
        <button class="btn" type="submit">Register</button>
    </form>
    </div>
  <div class="note text-center">
    <p>Already have an account? <a href="login">Login</a></p>
  </div>
  <div class="alert">
    <p><b>{{msg}}</b></p>
  </div>
  </div>
  <script>
    window.watsonAssistantChatOptions = {
      integrationID: "e22dcd16-3b9c-407a-90dc-0d175d6708eb", // The ID of this
integration.
      region: "au-syd", // The region your integration is hosted in.
      serviceInstanceID: "9f2196de-4c2c-4b82-874b-9768ad3501e4", // 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>
```

HOME.HTML:

```
<!DOCTYPE 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">
   <title>JOBPORTAL | HOME</title>
   <meta charset="UTF-8">
    <!-- Compiled and minified CSS -->
    <link rel="stylesheet" href="../static/css/card.css">
    <link rel="stylesheet"
href="https://cdnjs.cloudflare.com/ajax/libs/materialize/1.0.0/css/materialize.min.c
ss">

    <!-- Compiled and minified JavaScript -->
    <script
src="https://cdnjs.cloudflare.com/ajax/libs/materialize/1.0.0/js/materialize.min.js">
</script>

      <!-- favicon -->
```

```html
<!-- <link rel="shortcut icon" href="/assets/img/favicon.ico" type="image/x-icon"> -->
<!-- <link rel="icon" href="/assets/img/favicon.ico" type="image/x-icon"> -->
<link rel="icon" type="image/png" sizes="16x16" href="/assets/img/favicon-32x32.png">
<!-- bootstrap css cdn -->
<link rel="stylesheet" href="https://stackpath.bootstrapcdn.com/bootstrap/4.5.2/css/bootstrap.min.css" integrity="sha384-JcKb8q3iqJ61gNV9KGb8thSsNjpSL0n8PARn9HuZOnIxN0hoP+VmmDGMN5t9UJ0Z" crossorigin="anonymous">
<link rel="stylesheet" href="https://cdnjs.cloudflare.com/ajax/libs/font-awesome/4.7.0/css/font-awesome.css">
<!-- css stylesheet -->
<link rel="stylesheet" href="../static/css/reg.css">
<link rel="stylesheet" href="../static/css/style.css">
<!-- font styles cdn -->
<link rel="stylesheet" href="https://cdnjs.cloudflare.com/ajax/libs/font-awesome/6.2.1/css/all.css" integrity="sha512-FA9cIbtlP61W0PRtX36P6CGRy0vZs0C2Uw26Q1cMmj3xwhftftymr0sj8/YeezDnRwL9wtWw8ZwtCiTDXlXGjQ==" crossorigin="anonymous" referrerpolicy="no-referrer" />
<link rel="stylesheet" href="https://cdnjs.cloudflare.com/ajax/libs/font-awesome/6.2.1/css/all.min.css" integrity="sha512-MV7K8+y+gLIBoVD59lQIYicR65iaqukzvf/nwasF0nqhPay5w/9lJmVM2hMDcnK1OnMGCdVK+iQrJ7lzPJQd1w==" crossorigin="anonymous" referrerpolicy="no-referrer" />
<link rel="preconnect" href="https://fonts.gstatic.com">
<link href="https://fonts.googleapis.com/css2?family=Alegreya&display=swap" rel="stylesheet">
```

```html
        <link
href="https://fonts.googleapis.com/css2?family=Alegreya:wght@600&display=sw
ap" rel="stylesheet">
</head>
<body>
    <!-- bootstrap navbar -->
    <nav class="navbar sticky-top navbar-expand-lg navbar-dark">
        <div class="container-fluid menu">
        <a class="main-logo-img mt-3" href="home"><img
src="/static/img/goseek.png" alt="sheep-logo" height="180px" width="180px">
          <!-- <a class="navbar-brand" href="index.html">JobPortal</a> -->
        </a>
        <div class="row donate-sponsor linker" style="text-align:center;">
          <a type="button" class="col-3 links" id="donate"
href="login">LOGIN</a>
          <a type="button" class="col-3 links" id="sponsor"
href="register">REGISTER</a>
        </div>
        </div>
    </nav>
    <!-- navbar ends -->
<div class="card-container">
    <div class="card">
      <div class="card-box">
      <div class="card-image waves-effect waves-block waves-light">
        <img class="activator" src="../static/img/startup.svg" height="85px"
width="85px">
      </div>
      <div class="card-content">
        <span class="card-title activator grey-text text-darken-4 title-
col">Mission </span>
```

```html
</div></div>
<div class="card-reveal">
  <span class="card-title grey-text text-darken-4 title-col">Mission <i class="fa-solid fa-caret-down"></i></span>
  <p class="title-sub">GoSeek is an edTech organization with a vision to bridge the gap between academia & industry. Whether you are new to the workforce, are a seasoned professional, or somewhere in between, GoSeek's contributors will help you move the needle on your career and get the job you want faster than you think.Our outcome-based experiential learning programs on emerging technologies (Internet of Things, Machine Learning, Data Science, Artificial Intelligence, Robotics) are building skilled entry - level engineers, for the corporate world.</p>
  </div>
</div>
<div class="card"> <div class="card-box">
  <div class="card-image waves-effect waves-block waves-light">
    <img class="activator" src="../static/img/vision.svg" height="85px" width="85px">
  </div>
  <div class="card-content">
    <span class="card-title activator grey-text text-darken-4 title-col">Vision </span>
```

8. TESTING:

8.1 Test Cases:

   Random Forest is an adaptable, simple-to-utilize AI calculation that produces, even without hyperboundary tuning, an incredible outcome more often than not. It is likewise the most utilized calculation, in view of its effortlessness and variety (it very well may be utilized for both order and relapse errands). In this post, we'll figure out how the arbitrary woodland calculation functions, how it contrasts withfromfromfromdifferent calculations, and how to utilize it and graphically represented in fig.
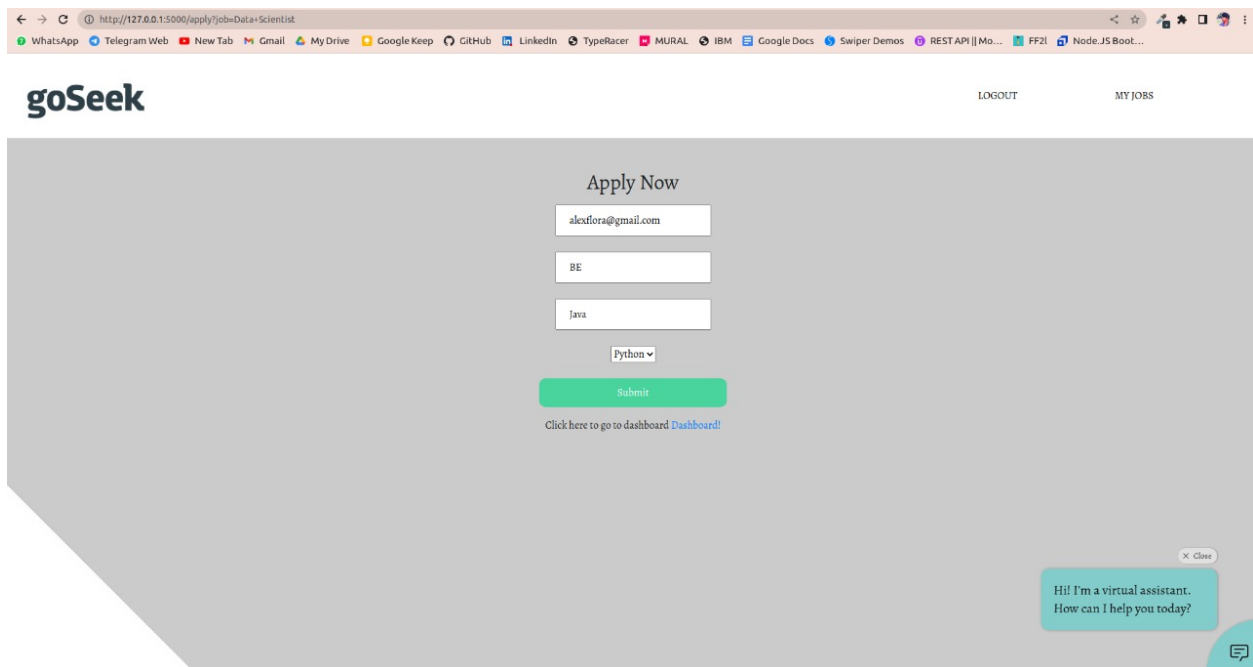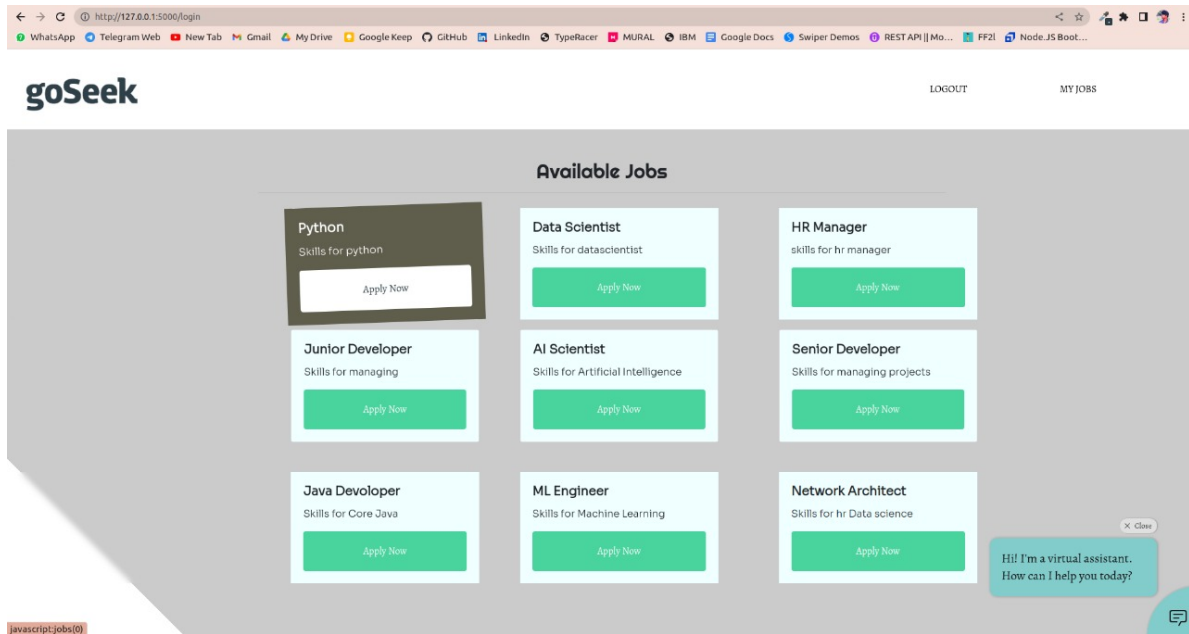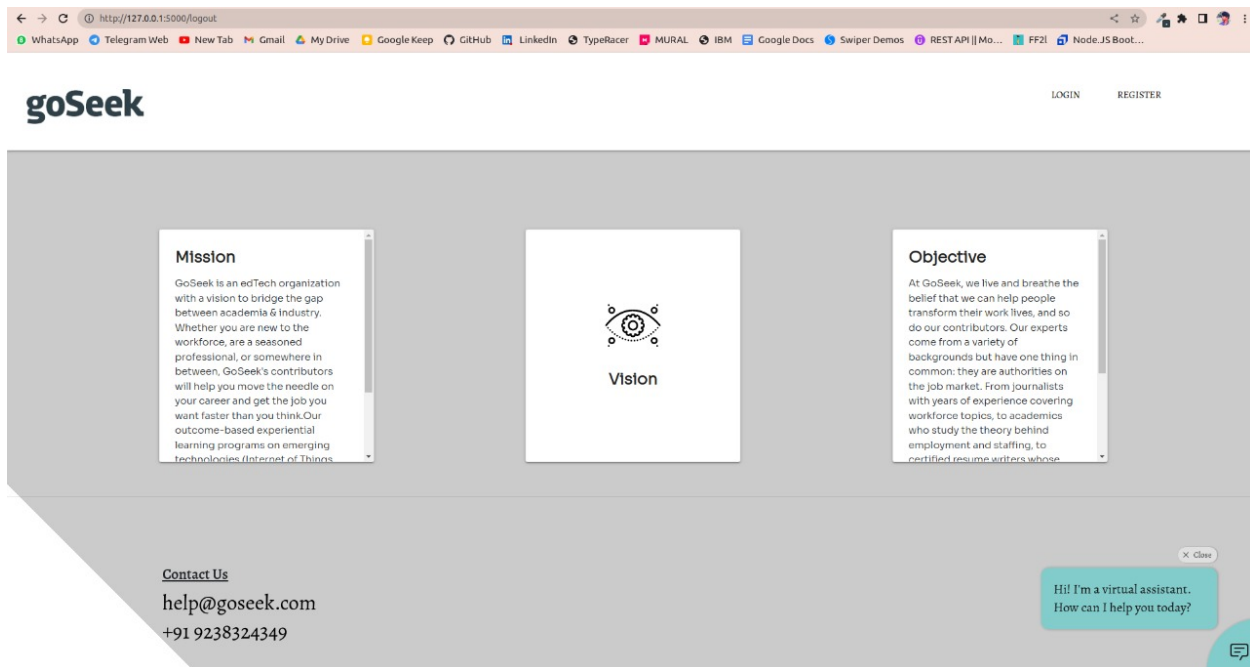
8.2 User Acceptance Testing:

9. RESULTS

9.1 Performance Metrics

Metrics considered to test the strength of the algorithm are Mean Absolute Error, Mean Squared Error, and Root Mean Squared Error. These three metrics are used to evaluate both regression algorithms. The three metrics have lower values for Xgboost, hence it has higher accuracy over the random forest algorithm. Table 1 shows the result analysis of both algorithms.

goSeek

LOGOUT   DASHBOARD

Your details

USERNAME	alex
EMAIL	alex@gmail.com
QUALIFICATION	BE
SKILLS	JAVA
CATEGORY	ML
JOB APPLIED	ML Developer

× Close

Hi! I'm a virtual assistant.
How can I help you today?

Click to go back, hold to see history

goSeek

Login

alex

••••

Login

Don't have an account? Register

× Close

Hi! I'm a virtual assistant.
How can I help you today?
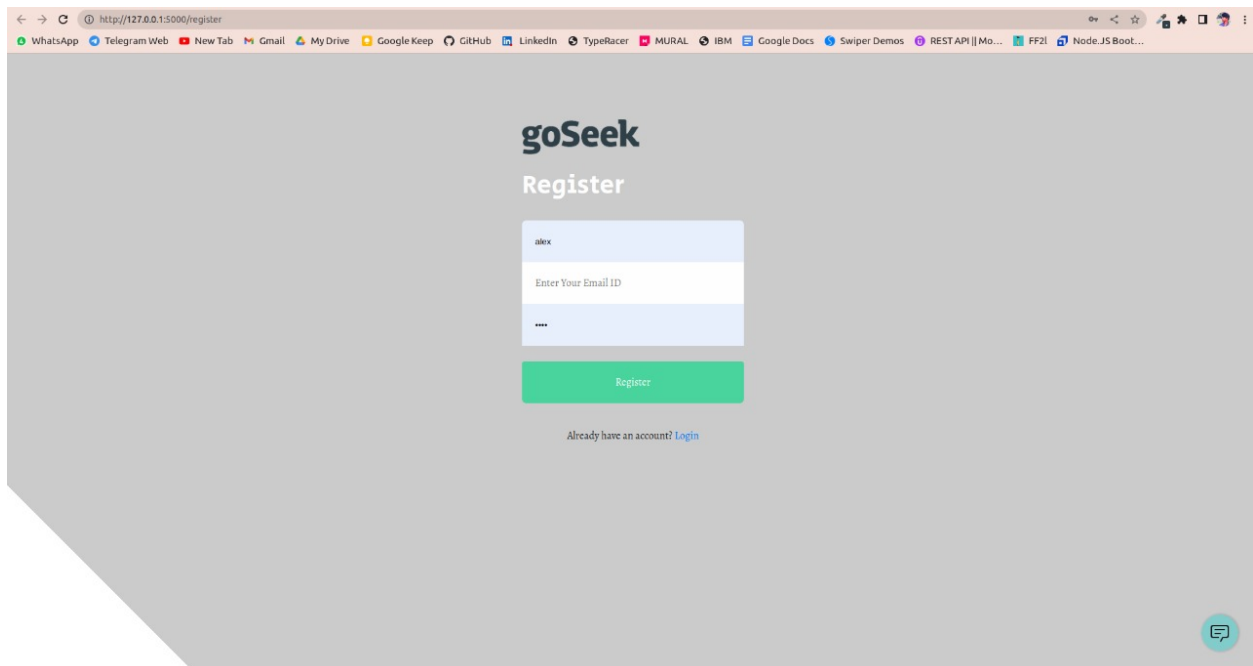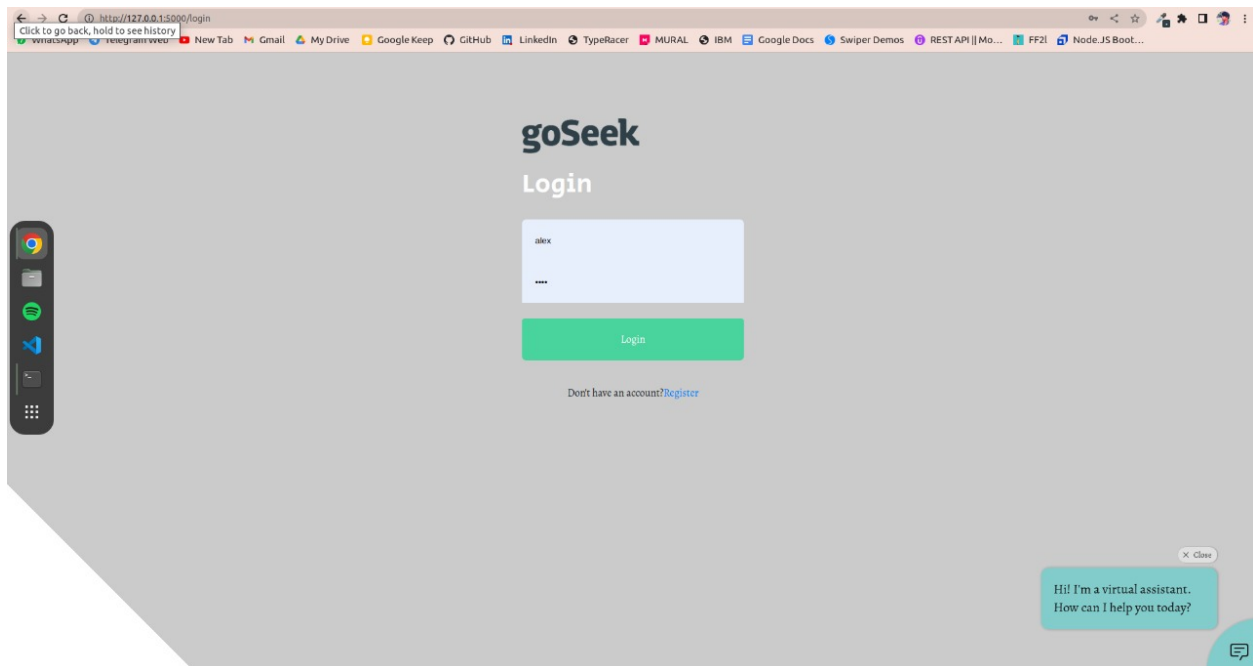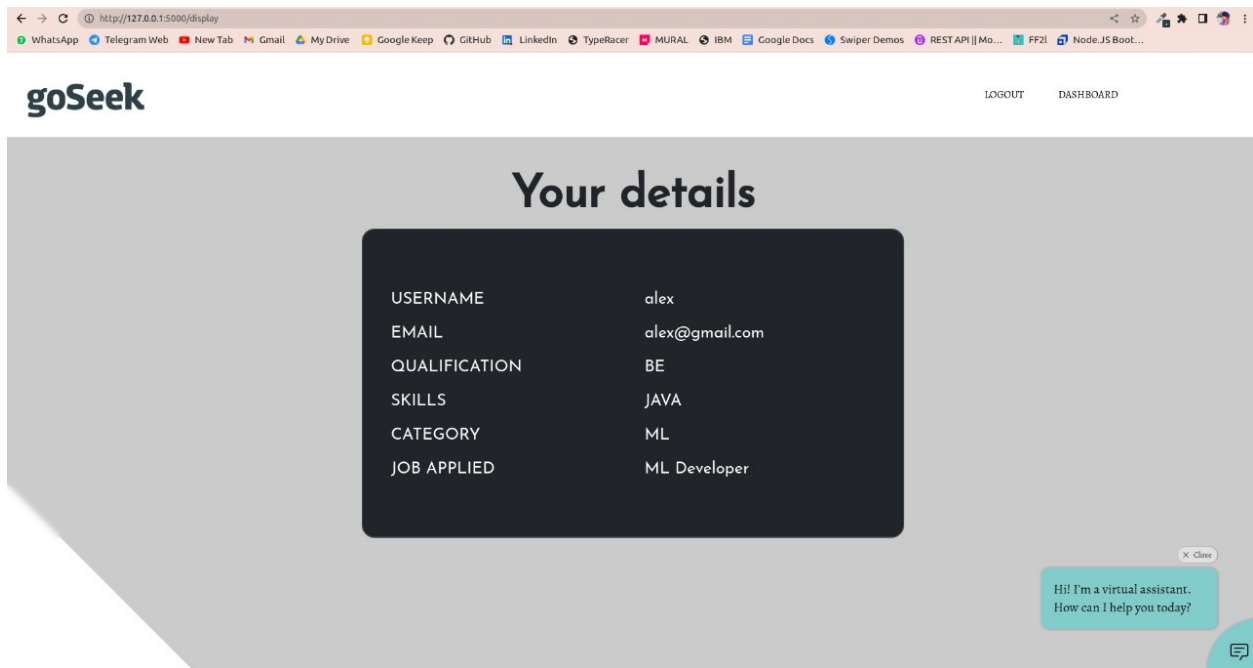
10. ADVANTAGES & DISADVANTAGES

Advantages and Disadvantages of the Job Recommender System

i   It assists with limiting the ideal opportunity for picking and choosing the items from online condition so without any problem.

ii Decision-production processes are redesigned as a result of the recommender framework.

iii It gives a way to users to get their customized proposal without burning through a great deal of time.

iv It is utilized in such huge numbers of different areas, (for example, books, media, places of work, travel, games, eatery, and so forth.) to suggest to the clients.

v   Job recommender framework gives a way for job seekers to get their relevant jobs and recruiters to get their skilled employees.

11. CONCLUSION

Recommender framework encourages us to get what we need from the huge measure of data. It recommends the specific item instead of an overburden of information. As a domain of the recommender system, the Job recommender system provides opportunities for job seekers by suggesting relevant jobs to them. This framework is utilized by numerous organizations to recommend suitable jobs to job seekers. It additionally manages the issues of data over-burden. The recommender system gained popularity in recent years due to its success with a huge amount of data.

12. FUTURE SCOPE

We would like to expand the work by accomplishing more research on geo-area-based recommender framework by giving the applicants the close by areas. This can likewise assist them with tracking the organization areas as indicated by the recommendations.

13. APPENDIX

Source: https://github.com/IBM-EPBL/IBM-Project-6822-1658839004