

## **SKILLS AND JOB RECOMMENDER**

IBM - NALAIYA THIRAN PROJECT

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## **1. INTRODUCTION**

### **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 a fresher or a skilled person can login and find jobs by using the search option or they can directly interact with the chatbot and get their dream job.

### **1.2 Purpose**

To develop an end to end web application capable of displaying the current job openings based on the skillset of the users. The user's credentials and their information are stored in the Database. Whenever there is a job opening based on the user's skillset, it is recommended to the user. The user will interact with the chatbot and can get recommendations based on their skills. Users can use the job search API of the web application to get the current job openings in the market which will fetch the data directly from the webpage.

## **2. LITERATURE SURVEY**

### **2.1 Existing Problem**

Existing system is not very efficient, it does not benefit the user in maximum way, so the proposed system uses IBM cloud services like db2, Watson virtual assistant, cluster, Kubernetes and docker for containerization of the application. They tend to miss out on these postings because there is an ocean of existing systems that list millions of jobs which are generally not relevant at all to the users. There is an abundance of choices and not much streamlining. On the basis of the actual skills or interests of an individual, job seekers often find themselves unable to find the appropriate employment for themselves. This system, therefore,

approaches the idea from a data point of view, emphasizing more on the quality of the data than the quantity

## 2.2 References

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L. Zahrotun, “ Comparison jaccard similarity, cosine similarity and combined both of the data clustering with shared nearest neighbor method,” Computer Engineering and Applications Journal. vol. 5. Pp. 11-18, 2016, doi:10.18495/comengapp.v5i1.160, 2016.

[8] Peng Yi, Cheng Yang ,Chen Li, Yingya Zhang, “ A Job Recommendation Method Optimized by Position Descriptions and Resume Information” , IEEE Advanced Information Management, Communicates, Electronic and Automation Control Conference (IMCEC), pp. 762 -764, March 2017, doi:10.1109/rteict.2017.8256590.

[9] Minh-Luan Tran, Anh-Tuyen Nguyen, Quoc-Dung Nguyen, Tin Huynh, “ A comparison study for job recommendation” ,Inter Conference on Information and Communications (ICIC), pp. 199-204, 2017, doi:10.1109/infoc.2017.8001667.

## 2.3 Problem Statement Definition

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 log in and find the jobs by using the search option or they can directly interact with the chatbot and get their dream job.

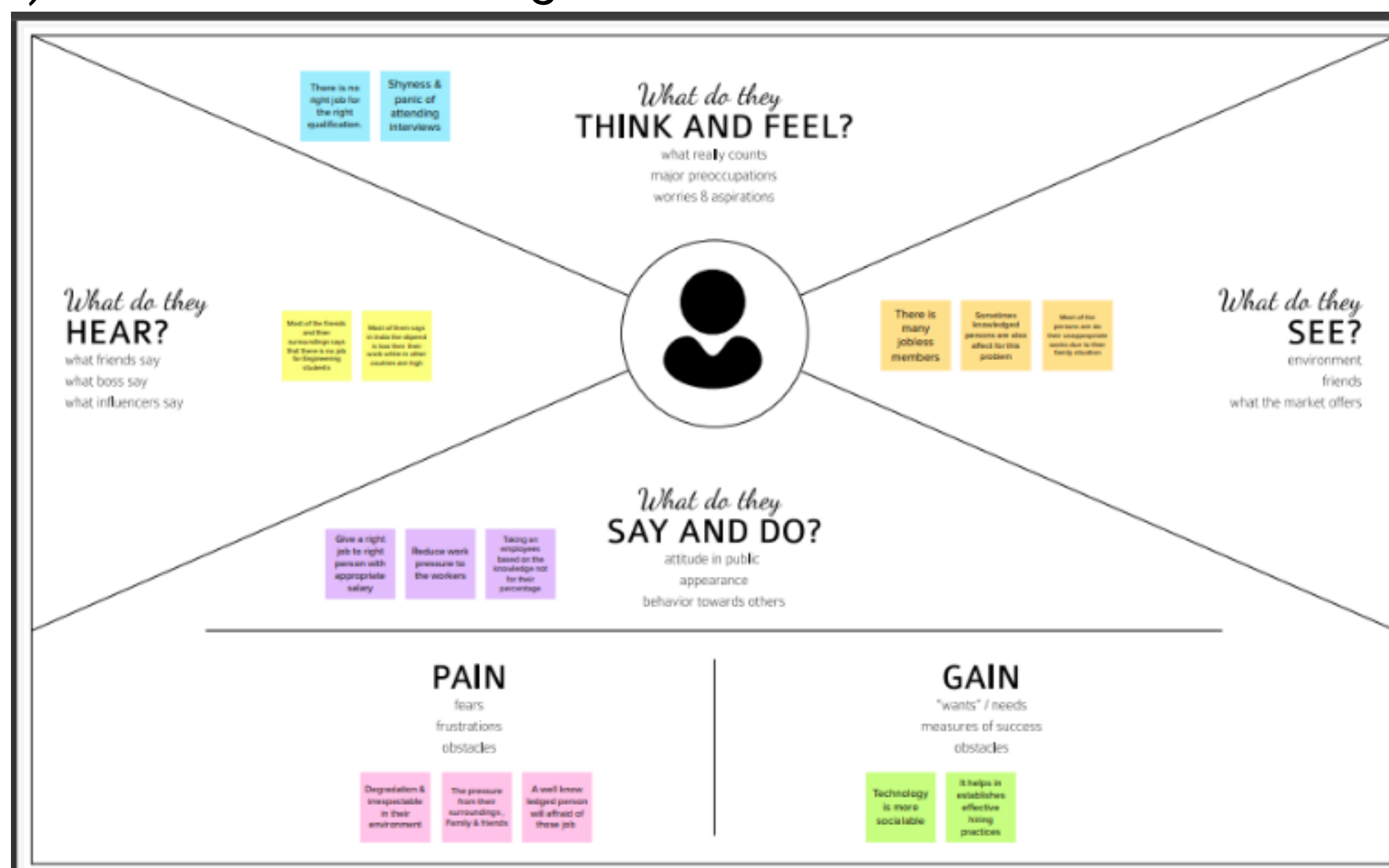
To develop an end-to-end web application capable of displaying the current job openings based on the user skillset. The user and their information are stored in the Database. An alert is sent when there is an opening based on the user skillset. Users will interact with the chatbot and can get the recommendations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

### 3. IDEATION & PROPOSED SOLUTION

#### 3.1 Empathy Map Canvas

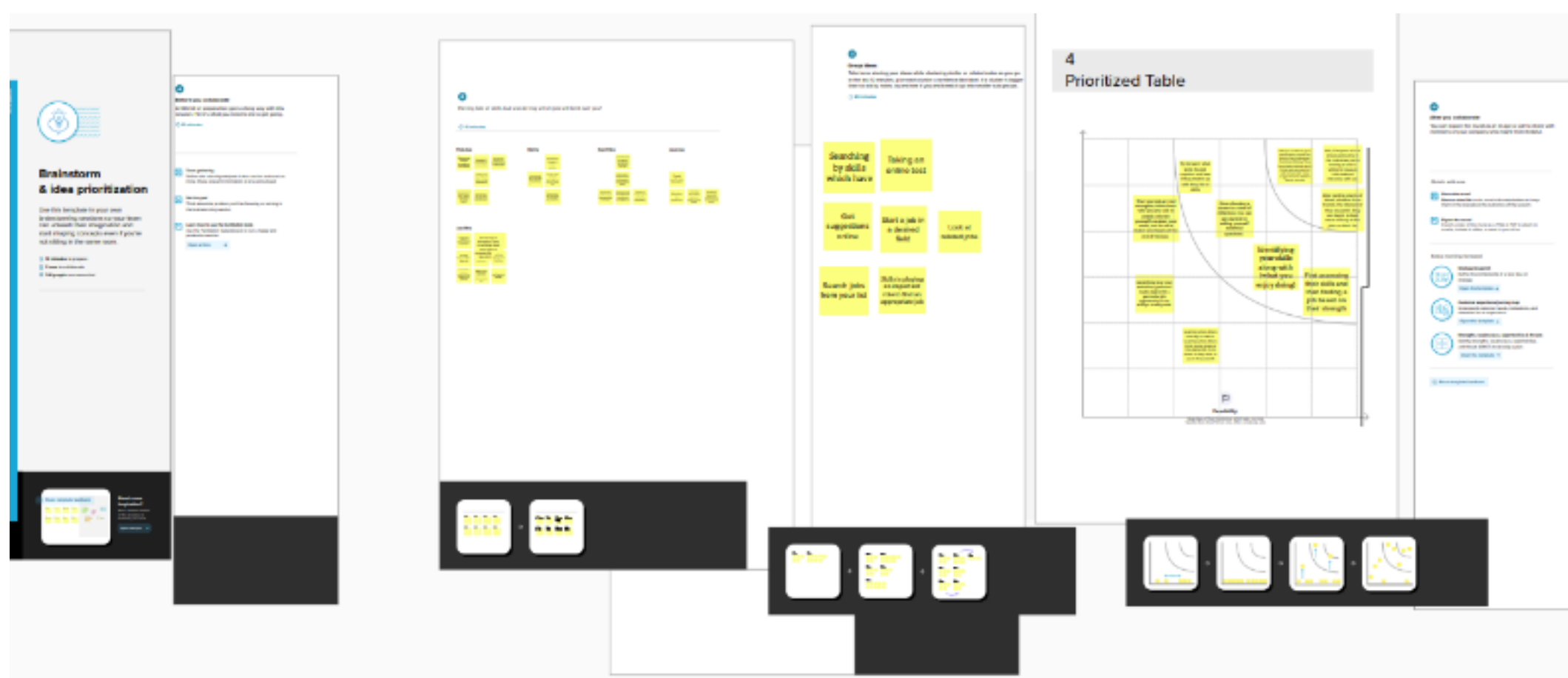
An empathy map is a collaborative visualization used to articulate what we know about a particular type of user. It externalizes knowledge about users in order to

- 1) create a shared understanding of user needs, and
- 2) aid in decision making



### 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



### 3.3 Proposed Solution

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

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 issues.

Here we provide a website which provides the user recommendations of jobs and skills that they need to built for their career. It recommends the employee, graduate, unemployed and freshers the companies that are hiring. The



final year students can be recommend with the skills and companies that are hiring the final years. The web application recommends the users the job that best suits them based on the information they provide like, field of interest, previous experience current position. The users have their individual profiles .

The users can chat with chatbot for any queries. The chat both helps the users for their queries

We have come up with a skill and job recommender solution through which the fresher or the skilled person can log in and find the jobs by using the search option or they can directly interact with the chatbot and get their dream job. The system provides the initial recommendation to the job seeker and records his behaviour. Thus, we will be able to arrive at a set of jobs in which the job seeker is interested and a set of jobs in which he is not interested. The extended new basic features help in updating the job seeker's profile. The job applicant is provided with new recommendations. Similarly, the same recommendation system helps provide job applicant recommendations to the job recruiters to find the most eligible candidates for their firm. Training programmes and certification courses are also recommended to job seekers based on their job interests to grow their skill.

### 3.4 Problem Solution Fit

Define CS, fit into CL	<b>1. CUSTOMER SEGMENT(S)</b> <span>CS</span> Job Seekers.	<b>6. CUSTOMER LIMITATIONS</b> <span>CL</span> <small>EG. BUDGET, DEVICES</small> Need to provide right skillsets and bios.	<b>5. AVAILABLE SOLUTIONS</b> <span>AS</span> <small>PROS &amp; CONS</small> On the job recommendation system it can also available for providing an solution location based services.	Explore AS, differentiate
	<b>2. PROBLEMS / PAINS</b> <span>PR</span> <small>+ ITS FREQUENCY</small> There could be more than one, explore different sides. Having lots of skills but wondering which job will best suit you?	<b>9. PROBLEM ROOT / CAUSE</b> <span>RC</span> Decision fatigue on choosing the right job based upon their skillsets.	<b>7. BEHAVIOR</b> <span>BE</span> <small>+ ITS INTENSITY</small> Directly: They attend face-face interviews and more. Indirectly: They can choosing by online services.	
Identify strong TR & EM	<b>3. TRIGGERS TO ACT</b> <span>TR</span> Having an trouble in decision making. That which job will suitable for a right qualification.	<b>10. YOUR SOLUTION</b> <span>SL</span> Creating an Attractive end-to-end web application capable of displaying the current job openings based on the user skillset.	<b>8. CHANNELS of BEHAVIOR</b> <span>CH</span> <b>ONLINE</b> Using auto recommender web application to get the job.	Extract online & offline CH of BE
	<b>4. EMOTIONS</b> <span>EM</span> <small>BEFORE / AFTER</small> Before: Anxiety about future, struggling in decision making for the right job. After: Picking right job by the Recommender.		<b>OFFLINE</b> Using web application offline services to get right job.	

## 4. REQUIREMENT ANALYSIS

### 4.1 Functional Requirement

FR No.	Functional Requirement (Epic)	Sub Requirement (Story / Sub-Task)
FR-1	User Registration	Registration through Form Registration through Gmail Registration through LinkedIn Registration through Facebook
FR-2	User Confirmation	Confirmation via Email Confirmation via OTP Confirmation via Gmail Confirmation via Verification
FR-3	Employee Searches	Employee can update their profile/Edit their profile/update at anytime. Employee can upload their resume on the site for getting an job which suits to their skills.
FR-4	Recommender	Recommender can analyse the skills of the user and provide an appropriate job to them. Recommender can find the suitable job by means of their skills they provide.
FR-5	Administrators	Administrators can manage all of those databases of the users and can update the company about their user skills and user profile.
FR-6	User Accessibility	User can access the job location company details and their profile by the accessibility sources.

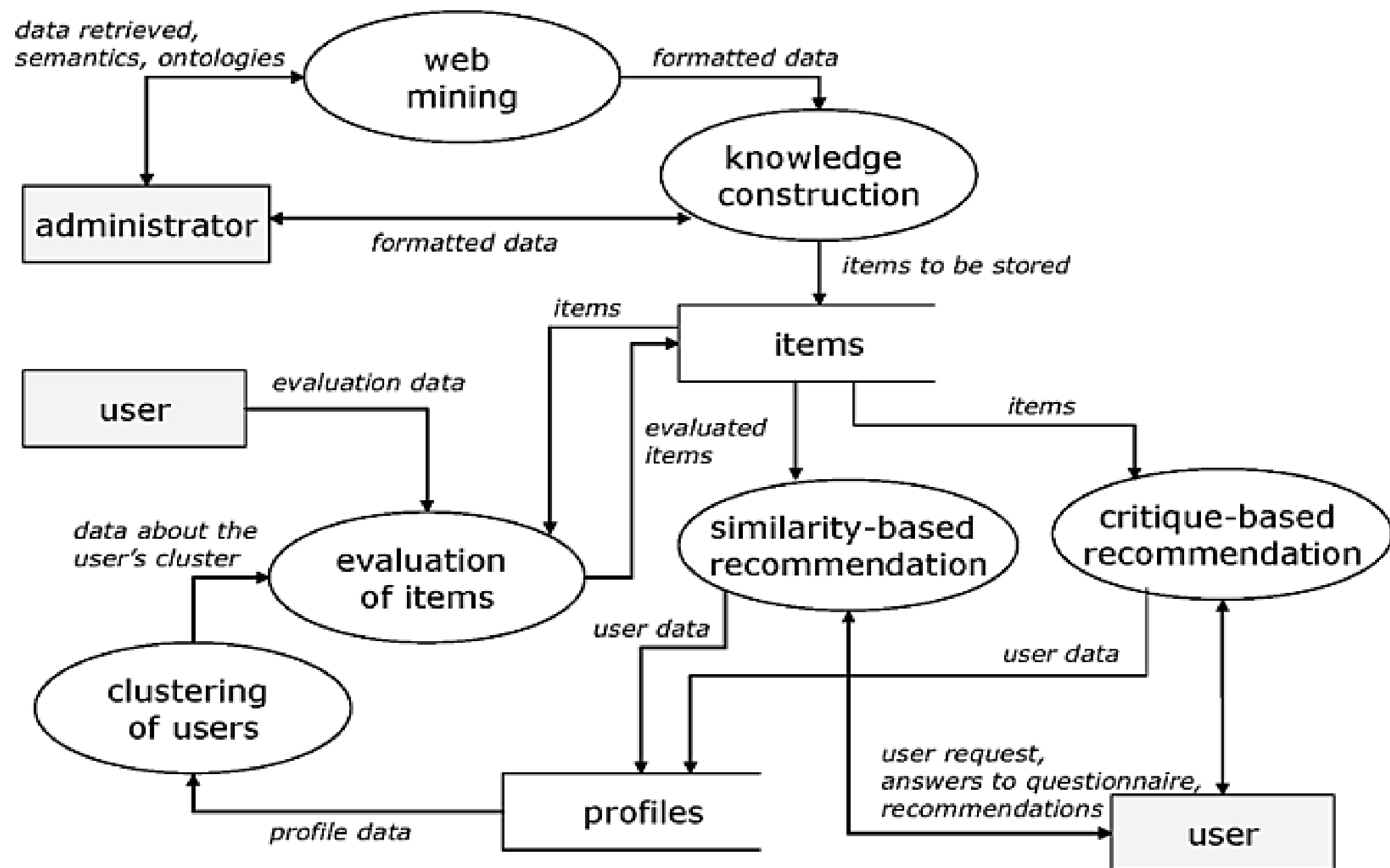
## 4.2 Non Functional Requirements

FR No.	Non-Functional Requirement	Description
NFR-1	Usability	Usability is a measure of how well a specific user in a specific context can use a product/design to achieve a defined goal effectively, efficiently.
NFR-2	Security	Security is provided to safeguarding high-value mobile applications and your digital identity from fraudulent attack in all its forms.
NFR-3	Reliability	Application reliability is the probability of a piece of software operating without failure while in a specified environment over a set duration of time is given in the application.
NFR-4	Performance	It aims to build predictable performance into systems by specifying and analysing quantitative behaviour from the very beginning of a system, through to its deployment and evolution.
NFR-5	Availability	It is always available for both Administrators and users to provide an efficient application.
NFR-6	Scalability	It is scalable while user can only access those scalable criteria's and not to access the company personal categories.

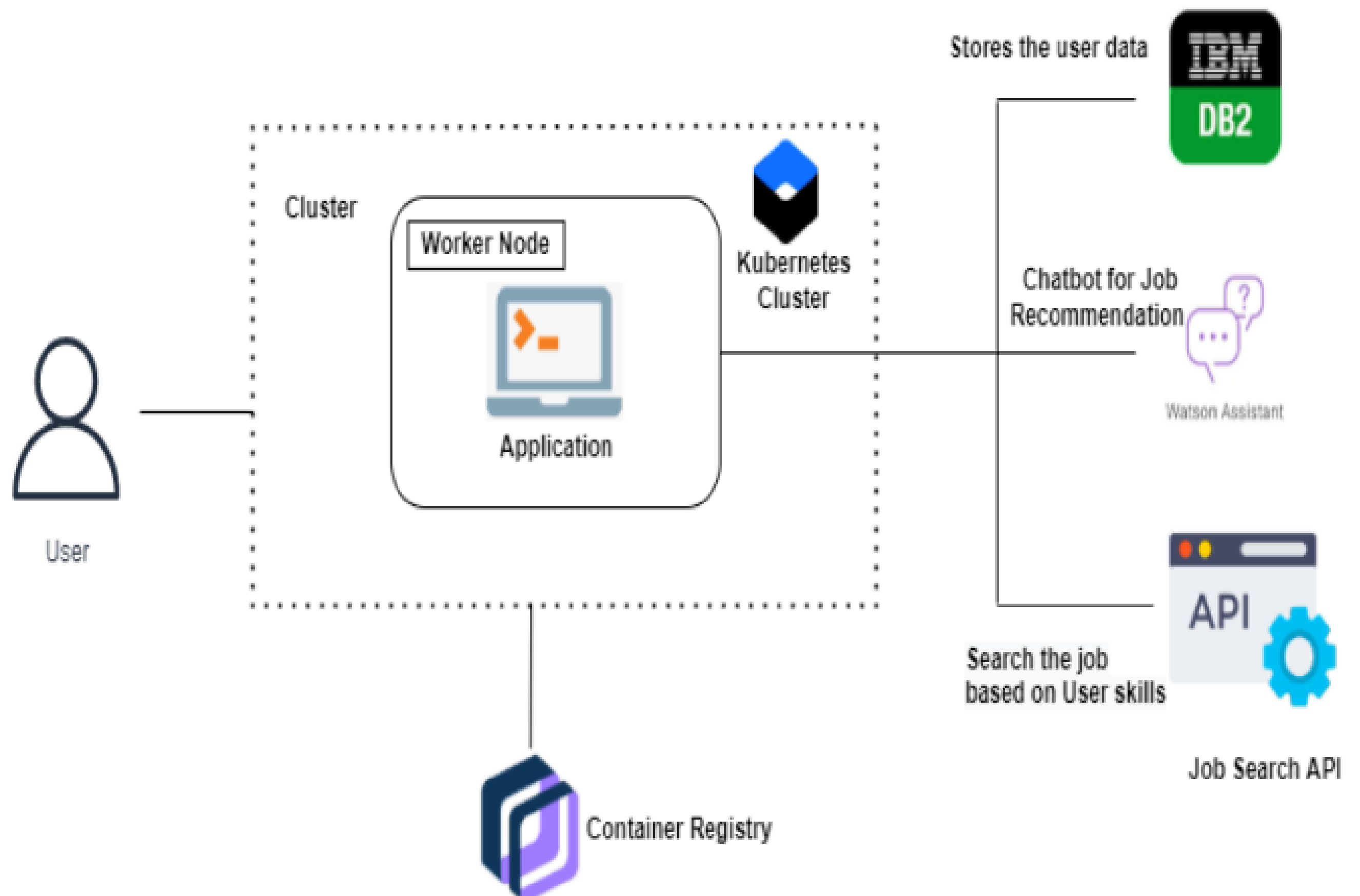
## 5. PROJECT DESIGN

### 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.



## 5.2 Solution & Technical Architecture



## 5.3 User Stories

User Type	Functional Requirement (Epic)	User Story Number	User Story / Task	Acceptance criteria	Priority	Release
Customer (Mobile user)	Registration	USN-1	As a user, I can register for the application by entering my email, password, and confirming my password.	I can access my account / dashboard	High	Sprint-1
Employee	Conform	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
Un employee	Register	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
Business officer	Apply	USN-4	As a user, I can register for the application through Gmail	I can register for the application	Medium	Sprint-1
Part time job employee	Login	USN-5	As a user, I can log into the application by entering email & password	I can login int the application	High	Sprint-1
College Students	Dashboard	USN-6	As a user, I can go to Dashboard and update my profile for job employment	I can go to Dashboard and update	Low	Sprint-1
Customer (Web user)	Analyzer/Recommender	USN-7	As a Customer Web User the analyser/Recommender can searches suitable job and recommends for user.	Analysing the correct job for my skills	High	Sprint-2
Customer Care Executive	Recommendation	USN-8	As a Customer Care Executive it is easy to suggest the appropriate job for the user.	Suggestion taking process for the skill	Medium	Sprint-1
Administrator	Manage	USN-9	As a Administrator I can manage all the recommendation system and data of the user.	Managing the database and users	High	Sprint-2
Recruiters	Search	USN-10	As a Recruiters, I can search the suitable job for my skills.	Searching the skill oriented job	Low	Sprint-1

6.PROJECT PLANNING & SCHEDULING

6.1 Sprint Planning & Estimation

Sprint	Functional Requirement (Epic)	User Story Number	User Story / Task	Story Points	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.	2	High	5
Sprint-1	Confirms	USN-2	As a user, I will receive confirmation email once I have registered for the application	1	High	3
Sprint-2	Register	USN-3	As a user, I can register for the application through Facebook	2	Low	2
Sprint-1	Apply	USN-4	As a user, I can register for the application through Gmail	2	Medium	4
Sprint-1	Login	USN-5	As a user, I can log into the application by entering email & password	1	High	5
Sprint-2	Dashboard	USN-6	As a user, I can go to Dashboard and update my profile for job employment	1	Low	4
Sprint-1	Analyse/Recommender	USN-7	As a Customer Web User the analyser/Recommender can searches suitable job and recommends for user.	2	High	3
Sprint-2	Recommendation	USN-8	As a Customer Care Executive it is easy to suggest the appropriate job for the user	2	High	2

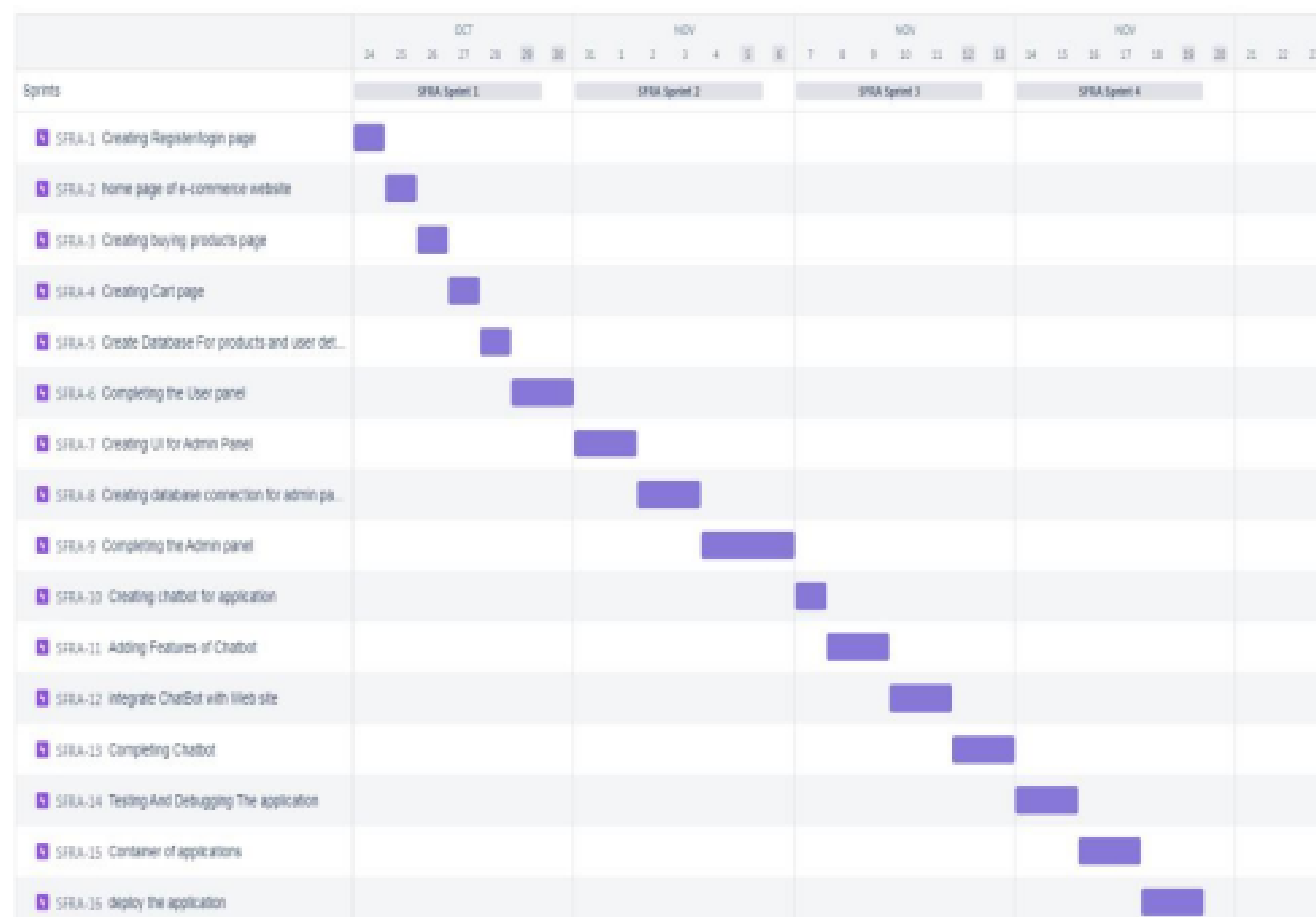
6.2 Sprint Delivery Schedule

Sprint planning is an event in scrum that kicks off the sprint. The purpose of sprint planning is to define what can be delivered in the sprint and how that work will be achieved. Sprint planning is done in collaboration with the whole scrum team.



SPRINT	TASK	MEMBERS
SPRINT 1	Create registration page, login page, job search portal, job apply portal in flask.	Prakalya Nalina Keerthika Lavanya Jeevitha
SPRINT 2	Connect application to ibm db2	Nalina Lavanya Keerthika Prakaya
SPRINT 3	Integrate ibm Watson Assistant	Nalina Lavanya Jeevitha
SPRINT 4	Containerize the app and Deploy the application in ibm cloud	Keethika Prakalya Nalina

## 6.3 Reports From JIRA



## 7. CODING & SOLUTIONG

### 7.1 Feature 1

Home page.HTML

```
<html>
<head>
<title> SKILLS AND JOB RECOMMENDER </title>
</head>
<style>
*{
margin: 0;
padding: 0;
font-family: "Times New Roman", Times, serif;
}
.main{
width: 100%;
background: linear-gradient(to top,rgba(0,0,0,0.5),rgba(0,0,0,0.5)50%);
background-position: center ;
background-size: cover;
height: 100%;
font-family: "Times New Roman", Times, serif;
```

```
}  
.navbar{  
width: 100%;  
height: 75px;  
margin: auto;  
}  
  
.icon{  
width: 200px;  
float: left;  
height: 70px;  
}  
.logo{  
color:#FFFFFF;  
font  
-size: 35px;  
padding  
-left: 20px;  
float: left;  
padding  
-top: 10px;  
}  
.menu{  
width: 400px;  
float: left;  
height: 70px;  
}  
ul{  
float: left;  
display: flex;  
justify  
-content: center;  
align  
-items: center;  
}  
ul li{
```

```
list
-style: none;
margin
-left: 62px;
margin
-top: 27px;
font
-size: 15px;

}
ul li a{
text-decoration: none;
color: #FFFFFFF;
font-weight: bold;
transition: 0.4s ease-in-out;
}
ul li a:hover{
color: rgb(98, 246, 152);
}
.search{
width: 330px;
float: left;
margin-left: 270px;
```

```
}  
.srch{  
width: 200px;  
height: 40px;  
  
background: transparent;  
border: 1px solid rgb(98, 246, 152);  
margin-top: 13px;  
color: #FFFFFF;  
border-right: none;  
font-size: 16px;  
float: left;  
padding: 10px;  
border-bottom-left-radius: 5px;  
border-top-left-radius: 5px;  
}  
.btn{  
width: 100px;  
height: 40px;  
background:rgb(98, 246, 152) ;  
border: 2px solid rgb(98, 246, 152);  
margin-top: 13px;  
color: #FFFFFF;  
font-size: 15px;  
border-bottom-right-radius: 5px;  
border-bottom-right-radius: 5px;  
}  
.btn:focus{  
outline: none;  
}  
.srch:focus{  
outline: none;  
}  
.content{  
width: 1200px;  
height: auto;
```

```
margin: auto;
color: #800080;
position: relative;
}
```

```
.content.par{
```

```
padding
-left: 20px;
padding
-bottom: 25px;
letter
-spacing: 1.2px;
line
-height: 30px;
}
```

```
.content h1{
font
-size: 50px;
padding
-left: 20px;
margin
-top: 9%;
letter
```

```
-spacing: 2px;
}
.content .cn{
width: 160px;
height: 40px;
background: rgb(98, 246, 152);
border: none;
margin
-bottom: 10px;
margin
-left: 20px;
font
-size: 18px;
border
-radius: 10px;
cursor: pointer;
transition: .4s ease;
}
.content .cn a{
text
-decoration: none;
color: #FBE7A1;
transition: .3s ease;
}
.cn:hover{
background-color: #FBE7A1;
}
.content span{
color:rgb(98, 246, 152);
font-size: 60px;
}
.form{
width: 250px;
height: 380px;
background: linear-gradient(to top,hsla(89, 43%, 51%, 0.3));
position: absolute;
```



```
top: -20px;
left: 870px;
border-radius: 10px;
padding: 25px;
}
.form h2{
width: 220px;
text-align: center;
color:rgb(98, 246, 152);
font-size: 22px;
border-radius: 10px;
margin: 2px;
padding: 8px;
}
.form input{
width: 240px;
height: 35px;
background: rgba(0, 255, 0, 0.5);
}
.form input{
width: 240px;
height: 35px;
background: rgba(0, 255, 0, 0.5);
```

```
border-bottom: 1px solid rgb(98, 246, 152);
border-top: none;
border-right: none;
border-left: none;
color: #fff;
font-size: 15px;
letter-spacing: 1px;
margin-top: 30px;
}
.form input:focus{
outline: none;
}
::placeholder{
color: #fff;
}
.btnn{
width: 240px;
height: 40px;
```

```
background: rgb(98, 246, 152);
border: none;
margin
-top: 30px;
font
-size: 18px;
border
-radius: 10px;
cursor: pointer;
color: #fff;
transition: 0.4s ease;
}
.btnn:hover{
background: #fff;
color: rgb(98, 246, 152);
}
.btnn a{
```

```
text
-decoration: none;
color: #000;
font
-weight: bold;
}
.form .link{
font
-size: 17px;
padding
-top: 20px;
text
-align: center;
}
.form .link a{
text
-decoration: none;
color: rgb(98, 246, 152);
}
```

```
.liw{
padding-top: 15px;
padding-bottom: 10px;
```

```

text-align: center;
}
</style>
<body>
<div class="main">
<div class="navbar">
<div class="icon">
<h2 class="logo">JOB RECOMMENDER</h2>
</div>
<div class="menu">
<ul>
<li><a href="#">HOME</a></li>
<li><a href="#">ABOUT</a></li>
</ul>
</div>
<div class="search">
<input class="srch" type="search" name="" placeholder="TYPE TO SEARCH">
<a href="#"><button class="btn">SEARCH</button></a>
</div>

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

```

## 7.2 Feature 2

INTEGRATING CHATBOT WITH HTML PAGE (SOURCE CODE) :

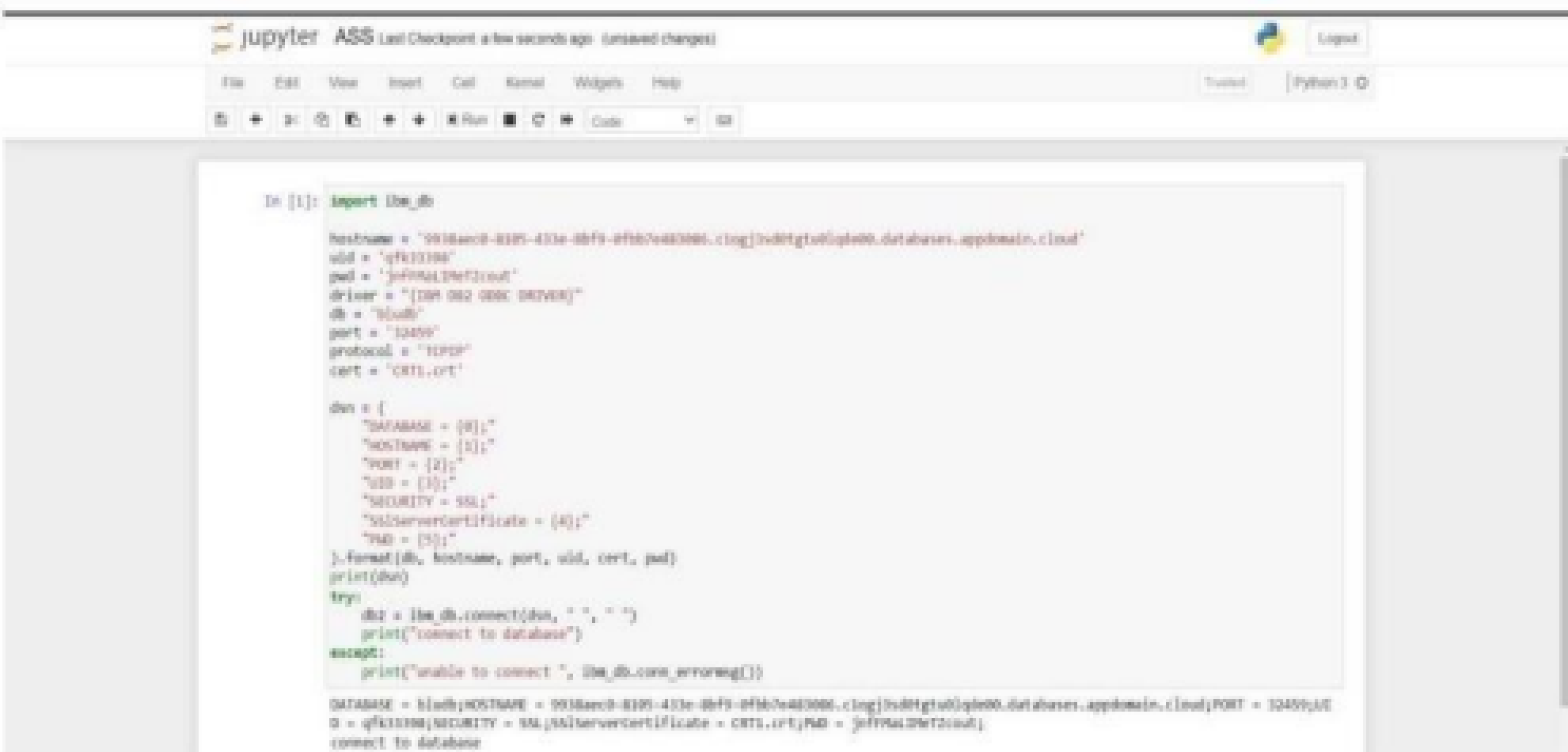
```

<script> window.watsonAssistantChatOptions = { integrationID:
"400013cb-9586-4129-a4b6-

```

```
c11caad2df7e", // The ID of this integration. region: "jp-tok", // The region your
integration is
hosted in. serviceInstanceID: "c3736947-abe7-48d9-ad2a-1064128a8039", // 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>
```

## 7.3 Database Schema



The image shows a Jupyter Notebook interface with a code cell containing Python code for database connection. The code defines variables for hostname, uid, pwd, driver, db, port, protocol, and cert. It then constructs a DSN string and attempts to connect to the database using cx\_Oracle. The output of the code cell is displayed below the code.

```
In [1]: import cx_Oracle

hostname = "9938ac0-8195-433e-b6f9-af6b7e403066.clog[3vdtgtut0]qlt00.databases.appebmain.cloud"
uid = 'qfxc13198'
pwd = 'jffmAL2Wt2:out'
driver = "(DSN=MS2 ORSC ORSV08)"
db = "bluadb"
port = "12459"
protocol = "tcpip"
cert = 'CRT1.crt'

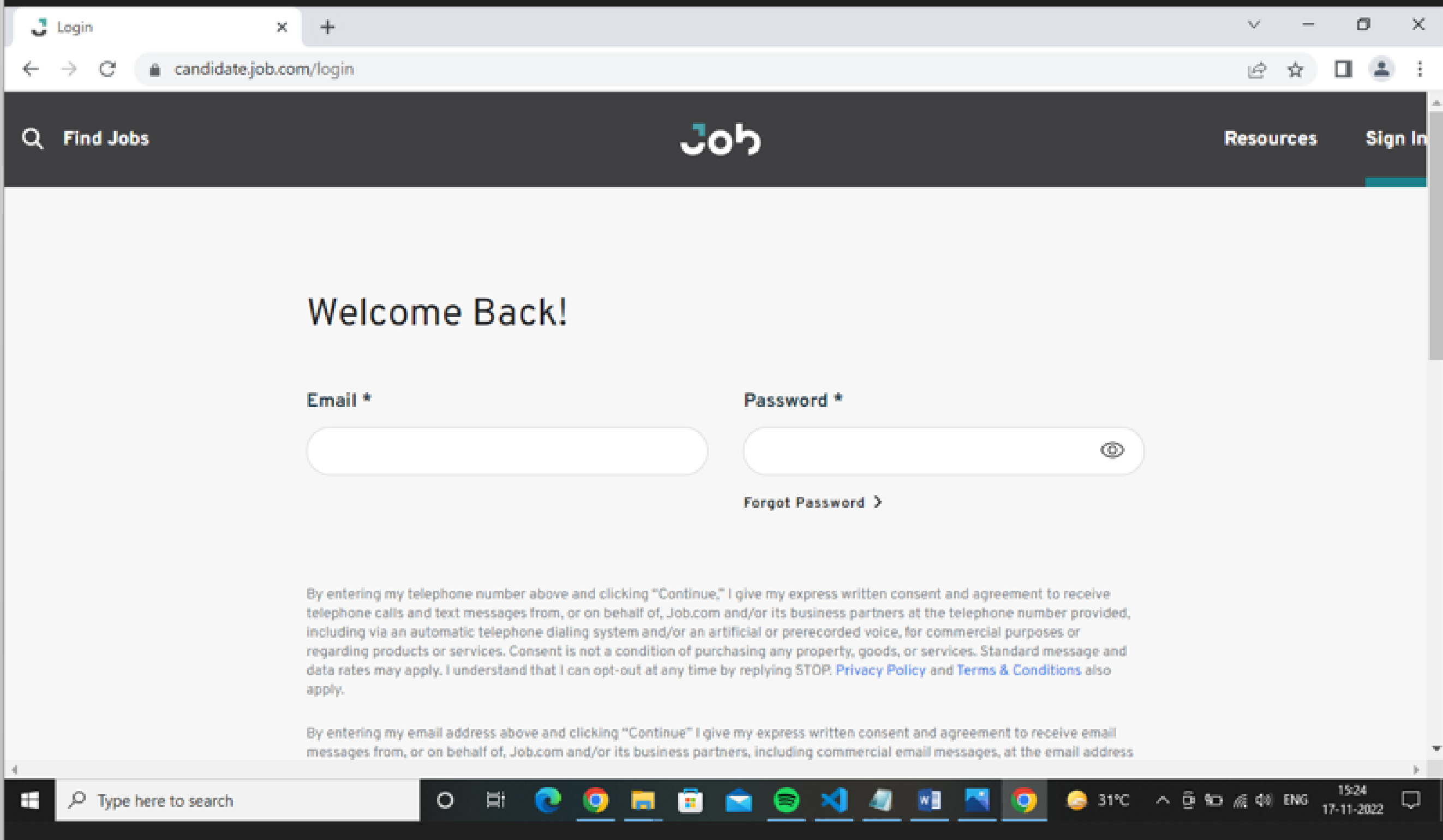
dsn = {
    "DATABASE = {0}:"
    "HOSTNAME = {1}:"
    "PORT = {2}:"
    "UID = {3}:"
    "SECURITY = SQL:"
    "SERVERCertificate = {4}:"
    "PWD = {5}:"
}.format(db, hostname, port, uid, cert, pwd)
print(dsn)

try:
    dbi = cx_Oracle.connect(dsn, " ", " ")
    print("connect to database")
except:
    print("unable to connect ", cx_Oracle.errormsg())
```

DATABASE = bladb;HOSTNAME = 9938ac0-8195-433e-b6f9-af6b7e403066.clog[3vdtgtut0]qlt00.databases.appebmain.cloud;PORT = 12459;UID = qfxc13198;SECURITY = SQL;SERVERCertificate = CRT1.crt;PWD = jffmAL2Wt2:out;  
connect to database

## 8. Testing

### 8.1 Test Cases



The screenshot shows a web browser window with the URL `candidate.job.com/login`. The page has a dark header with a search icon, the text "Find Jobs", the Job.com logo, and links for "Resources" and "Sign In". The main content area is light gray and features the heading "Welcome Back!". Below this are two input fields: "Email \*" and "Password \*". The password field includes a toggle icon for visibility. A "Forgot Password" link is positioned below the password field. At the bottom, there are two paragraphs of consent text. The first paragraph states that by entering a telephone number and clicking "Continue", the user consents to receive telephone calls and text messages from Job.com and its business partners. The second paragraph states that by entering an email address and clicking "Continue", the user consents to receive email messages from Job.com and its business partners. The Windows taskbar at the bottom shows the search bar, several application icons, the system clock (15:24 on 17-11-2022), and the temperature (31°C).

Login

candidate.job.com/login

Find Jobs

Job

Resources Sign In

## Welcome Back!

Email \*

Password \*

[Forgot Password](#)

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8.2 User Accceptance Testing

Resolution	Severity 1	Severity 2	Severity 3	Severity 4	Subtotal
By Design	14	8	4	2	28
Duplicate	2	1	4	0	7
External	3	2	1	1	7
Fixed	6	6	2	12	26
Not Reproduced	0	0	2	0	2
Skipped	0	0	5	2	7
Won't Fix	0	5	3	1	9
Totals	32	33	29	43	86

9. RESULTS

9.1 Performance Metrics

			NFT - Risk Assessment					
S.No	Project Name	Scope/feature	Functional Changes	Hardware Changes	Software Changes	Impact of Downtime	Load/Voluem Changes	
1	Skills and job Recomm	Existing	No Changes	No Changes	No Changes	No Downtime imapct seen..!	No Changes	GREEN
			NFT - Detailed Test Plan					
			S.No	Project Overview	NFT Test approach	umptions/Dependencies/R	Approvals/SignOff	
			End Of Test Report					
S.No	Project Overview	NFT Test approach	NFR - Met	Test Outcome	GO/NO-GO decision	Recommendations	Identified Defects (Detected/Closed/Open)	

## 10. ADVANTAGE & DISADVANTAGE

### Advantage:

- It help recruiters of the company to choose the right candidates for their organisations with appropriate skills.
- Since it is cloud application , it does require any installation of softwares and is portable.
- It helps candidates to search the job which perfectly suites them and make them aware of all the job openings.
- Weed out a high number of unqualified candidates
- Easy to post jobs
- Data analytics to test interest in your job openings

Disadvantage :

- Privacy concerns.
- Too many choices.
- Cold-start problem.
- It is costly.
- Uninterrupted internet connection is required for smooth functioning of application

## **11. CONCLUSION**

Job Recommendation System has a major role to play among recommending systems.

We have used ibm cloud services like db2, cloud registry , kubernetes , Watson assistant to create this application , which will be very usefull for candidates who are searching for job and as well as for the company to select the right candidate for their organization.

## 12. Future Scope

In this proposed work, there is only job recommendations and skill suggestion for jobs. It can be improved by suggesting jobs and skills for the Non - jobs. In the future, some can find a better choice to find similarity than acosine similarity. It makes the recommendation more accurate.

Future directions of our work will focus on performing a more exhaustive evaluation considering a greater amount of methods and data as wells as comprehensive evaluation of the impact of each professional skill of a job seeker on the received job recommendation. We can use machine learning technicques to recommend data in a efficient way.

## 13. APPENDIX

### SOURCE CODE

```
<!DOCTYPE html>
<html lang="en">

<head>

<meta name="generator" content="Hugo 0.88.1" />
<meta charset="utf-8">
<meta name="viewport" content="width=device-width, initial-scale=1">
<script async
src="https://www.googletagmanager.com/gtag/js?id=UA-113313579-7"></script
>

<script>

    (function(w, d, s, l, i) {
        w[l] = w[l] || [];
        w[l].push({
```

```
        'gtm.start': new Date().getTime(),
        event: 'gtm.js'
    });
    var f = d.getElementsByTagName(s)[0],
        j = d.createElement(s),
        dl = l != 'dataLayer' ? '&l=' + l : '';
    j.async = true;
    j.src =
        'https://www.googletagmanager.com/gtm.js?id=' + i + dl;
    f.parentNode.insertBefore(j, f);
})(window, document, 'script', 'dataLayer', 'GTM-KJG467N');
</script>
```

```
<script>
    window.dataLayer = window.dataLayer || [];
```

```
function gtag() {
    dataLayer.push(arguments);
}

gtag('js', new Date());

gtag('config', 'UA-113313579-7');
</script>
<title>Job.com: Your Job Search Starts Here.</title>

<link rel="canonical" href="https://job.com/">

<meta name="description" content="A Better Path to More Opportunity. We're a people-first technology solution for active job discovery and career opportunity matching that improves your connection with real recruiters looking for the next great candidate.">
<meta name="apiUrl" content="https://aor-api.job.com/">
<meta data-name="palette" content="blue-gray">
<style>

    .open-menu-btn {
        cursor: pointer;
        height: 100%;
    }

    .fWhEBi {
```



```
    height: 100%;  
}
```

```
.fWhEBi div {  
    display: flex;  
    -webkit-box-pack: center;  
    justify-content: center;  
    -webkit-box-align: center;  
    align-items: center;  
    height: inherit;  
}
```

```
.fWhEBi svg {  
    width: 19px;  
    height: 19px;  
    color: #fff;  
}
```

```
.fWhEBi svg:hover {  
    color: #8eacbb;  
}
```

```
.articles-list::after,  
.articles-list::before,  
.section-main-article .main-article::after,  
.section-main-article h1::after {  
    background-repeat: no-repeat;  
    background-size: cover;  
}
```

```
.section-main-article h1::after {  
    content: "";  
    background-image: url(../images/heading-after.png);  
    position: absolute;  
    top: -26px;  
    left: -26px;  
    max-width: 20px;  
    width: 100%;  
    height: 20px;  
    min-height: 20px;  
    max-height: 20px;  
    width: 100%;  
    margin-top: 17px;
```

}

</style>

<ul class="css-1fegdn2-S\_ul\_nav\_social\_icons euf15ki2">

<style data-emotion="css 13dueeo-S\_li\_nav\_link">

.css-13dueeo-S\_li\_nav\_link {

font-size: 0.85rem;

position: relative;

display: -webkit-box;

display: -webkit-flex;

display: -ms-flexbox;

display: flex;

-webkit-align-items: center;

-webkit-box-align: center;

-ms-flex-align: center;

align-items: center;

-webkit-box-pack: center;

-ms-flex-pack: center;

```
-webkit-justify-content: center;
justify-content: center;
min-width: 48px;
min-height: 48px;
}
```

```
.css-13dueeo-S_li_nav_link:hover svg {
  fill: rgb(37, 113, 234);
}
```

```
.css-13dueeo-S_li_nav_link:last-of-type a {
  padding-right: 0;
}
```

</style>

<li class="css-13dueeo-S\_li\_nav\_link eufl5ki1">

<style data-emotion="css 1hupo3l-S\_a\_link">

```
.css-1hupo3l-S_a_link {
  min-width: 48px;
  min-height: 48px;
  display: -webkit-box;
  display: -webkit-flex;
  display: -ms-flexbox;
  display: flex;
  -webkit-align-items: center;
  -webkit-box-align: center;
  -ms-flex-align: center;
```

```
align-items: center;
-webkit-box-pack: center;
-ms-flex-pack: center;
-webkit-justify-content: center;
justify-content: center;
}
```

```
@media (min-width: 896px) {
  .css-1hupo3l-S_a_link {
    padding-right: 22px;
  }
}
```

</style>

<a aria-label="Instagram" href="https://www.instagram.com/jobdotcom/" target="\_blank" rel="noopener noreferrer nofollow" data-hook="social-link" class="css-1hupo3l-S\_a\_link eufl5ki0">

<style data-emotion="css 181xxus-S\_svg\_icon">

```
.css-181xxus-S_svg_icon {  
  height: 1rem;  
  width: 1rem;  
  -webkit-transition: fill 0.3s;  
  transition: fill 0.3s;  
  fill: #202124;  
}
```

```
@media (min-width: 768px) {  
  .css-181xxus-S_svg_icon {  
    height: 19px;  
    width: 33.7px;  
  }  
}
```

```
@media (min-width: 1092px) {  
  .css-181xxus-S_svg_icon {  
    -webkit-transition: fill 0.3s;  
    transition: fill 0.3s;  
    fill: #202124;  
  }  
}
```

</style>

<svg class="css-181xxus-S\_svg\_icon e15l4raf0" data-hook="icon" viewBox="0 0 15 15" aria-hidden="true" aria-label="Instagram Icon">

m" target="\_blank" rel="noopener noreferrer nofollow" data-hook="social-link" class="css-1hupo3l-S\_a\_link eufl5ki0"><svg class="css-181xxus-S\_svg\_icon e15l4raf0" data-hook="icon" viewBox="0 0 15 15" aria-hidden="true" aria-label="Twitter Icon">

<</svg></a></li>

<path d="M5.7,5H3.8v2.5h1.8v7.4h3V7.5h2.2L11.2,5H8.7V4c0-0.6,0.1-0.8,0.6-0.8h1.8v-3H8.9c-2.2,0-3.2,1-3.2,2.9V5z">

</path>

</path>

</svg></a></li>

</ul>

</div>

</div>

</div>

</footer>

</footer>

<span id="btnScrollToTop" class="btn-scroll-to-top"></span>

<script type="text/javascript" id="">

    (function() {

        var b = window.XMLHttpRequest.prototype.send;

        window.XMLHttpRequest.prototype.send = function() {

            var a = this,

            c = window.setInterval(function() {

                4 == a.readyState && (dataLayer.push({

                    event: "ajaxSuccess",

                    ajax: "AJAX",

                    ajaxurl: a.responseURL,

                    ajaxtext: a.responseText

                }), clearInterval(c))

            }, 1);

        return b.apply(this, [].slice.call(arguments))

    }

})();

</script>

<div style="display: none; visibility: hidden;">

<script>

    document.addEventListener("click", function() {

        dataLayer.push({



```
event: "gtm.click",  
"click class new": event.target.className,  
"click id new": event.target.id,  
"click text new": event.target.textContent,  
"click url new": event.target.href,  
"click data new": event.target.dataset.hook,  
"click ": event.target.nodeName
```

```
)
```

```
});
```

```
</script>
```

```
</div>
```

```
</body>
```

```
</html>
```

## **Git Hub & Project Demo link :**

GitHub Link : <https://github.com/IBM-EPBL/IBM-Project-41785-1660644912>

Demo Link : <https://youtu.be/at3vjnvfq3s>