SKILLS AND JOB RECOMMENDER APPLICATION

IBM-Project-894-1658329376

NALAIYA THIRAN PROJECT BASED LEARNING ON PROFESSIONAL READLINESS FOR INNOVATION, EMPLOYNMENT AND ENTERPRENEURSHIP

PROJECT REPORT

Navin Sashaanhg J (310819205050)

Praveen Kumar k (310819205058)

Dhanya J (310819205027)

Ramana Devi R(310819205062)

BACHELOR OF TECHNOLOGY IN INFORMATION TECHNOLOGY

JEPPIAAR ENGINEERING COLLEGE
Chennai-600 118

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1. INTRODUCTION

1.1PROJECT OVERVIEW

Category: Cloud App Development

Team ID: PNT2022TMID27168

💻 Skills Required: IBM Cloud, HTML, JavaScript, IBM Cloud Object Storage, Python Flask , Kubernetes, Docker ,IBM DB2,IBM Container Registry

The Skills and job Recommender application is an online application that ensures there is proper representation for every skill and job related to them. It is aimed at making the process of finding job much easier by providing a resolute and clear perspective of the wide variety of job opportunities available in variety of field of skillsets. The main aim being to create an application that will serve the purpose of helping aspiring job applicants and present to them the most appropriate and suitable of job opportunities matching their skillsets.

1.2PURPOSE

This project is aimed to developing an online job recommender application. The entire project has been developed keeping in view of the distributed client server computing technology in mind.

The Skills and job Recommender application is an online application that ensures there is proper representation for every skill and job related to them. It is aimed at making the process of finding job much easier by providing a resolute and clear perspective of the wide variety of job opportunities available in variety of field of skillsets. The main aim being to create an application that will serve the purpose of helping aspiring job applicants and present to them the most appropriate and suitable of job opportunities matching their skillsets

The project has been planned to be having the view of distributed architecture" with centralized storage of the database. The application for the storage of the data has been planned. Using the constructs of IBM database services and all the user interfaces have been designed using the ASP.Net technologies.

The database connectivity is planned using the "SQL Connection" methodology. The standards of security and data protective mechanism have been kept in consideration and proper security measures have been included like securing API key and having a properly issued SSL certificate. The application takes care of different modules and their associated reports" which are produced as per the applicable strategies and standards that are put forwarded by the administrative staff.

The database connectivity was planned using the latest "SQL Connection" technology provided by Microsoft corporation. The authentication and authorization was cross checked at all the relevant stages. The user level accessibility has been restricted into two zones namely.

2. LITERATURE SURVEY

2.1EXISTING PROBLEM

Introduction

Existing job suggestion structures only reflect inconsideration on the user's subject of pastime and omit the user's profile and skills, which should result in extra relevant career guidelines for users. CaPaR, a Career Path Recommendation framework, is proposed in this paper to address such shortcomings. The gadget scans the user's profile and resume, identifies the candidate's key skills, and generates customized job recommendations using textual content mining and collaborative filtering techniques. Furthermore, the device suggests to student's extra competencies needed for related job openings, as nicely as learning assets for each skill. As a result, the gadget not only permits its customers to explore big quantities of information, but additionally to enlarge their portfolio and resume in order to enhance their careers.

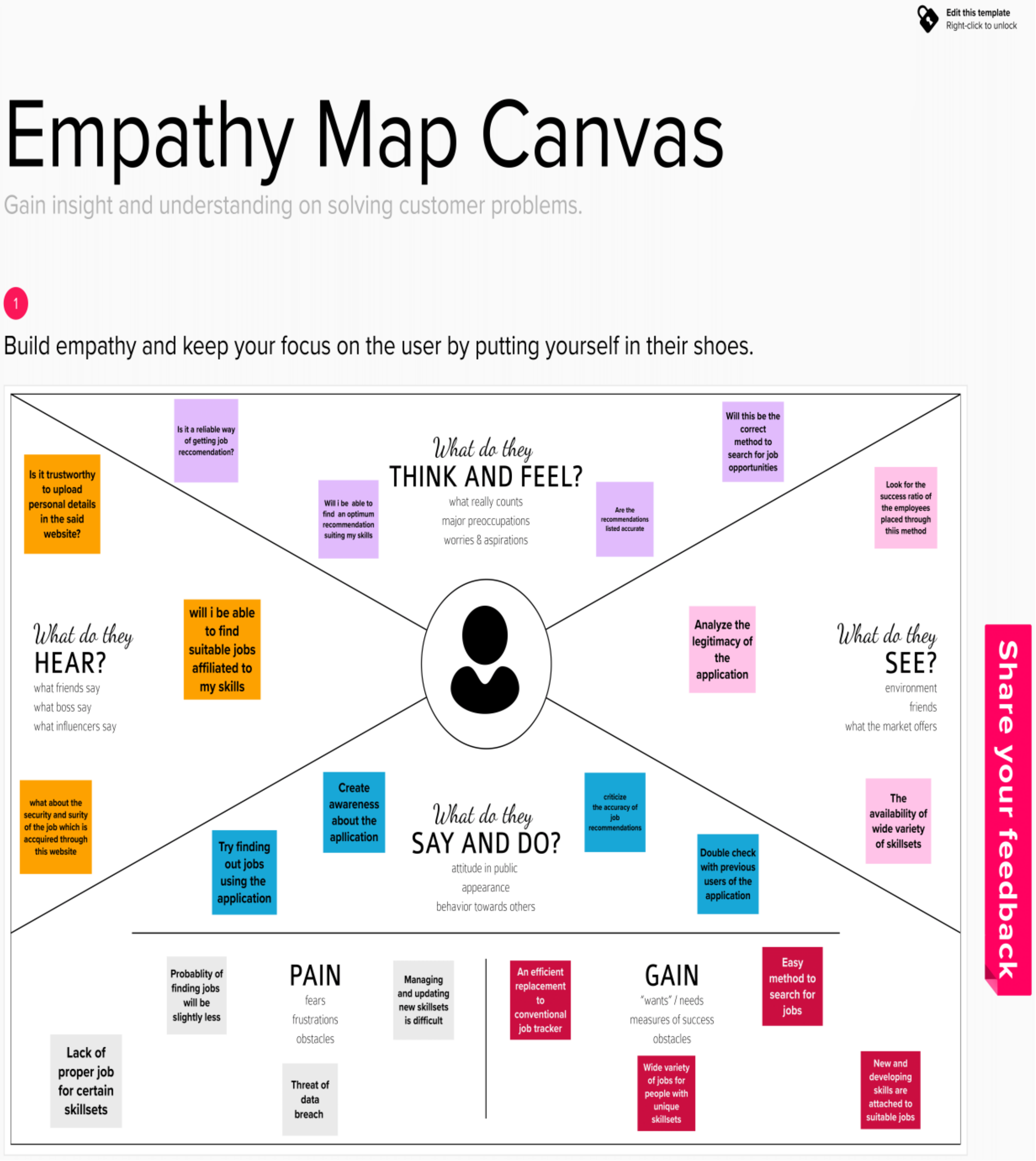
Given the quantity of profession role statistics of individuals handy online, personalised profession route recommendation systems that should mine and advocate the most relevant profession paths for a consumer are on the rise. However, such advice systems usually are solely positive inside a single company the place there are standardized job roles. At an enterprise area level such as Information Technology or across such one of a kind enterprise sectors (such as retail, insurance, health care), mining and recommending the most applicable career paths for a user is still an unsolved lookup challenge. Towards addressing this problem, this paper proposes a machine that leverages the concept of competencies to construct talent graphs that can shape the foundation for profession path recommendations. Skills are perceived to be greater amenable for profession path standardizations across the organizations. The proposed device ingests a user's profile (in a pdf, phrase format or different public and shared data sources) and leverages an Open IE pipeline to extract education and experiences. Subsequently, the extracted entities are mapped as precise capabilities that are expressed in the form of a novel unified skill graph. Such ability graphs which capture both spatial and temporal relationships are believed to aid in producing specific profession path recommendations. An comparison of this modern ability extraction mannequin with an industrial scale dataset yielded a precision and recall of 80.54% and 86.44% respectively.

2.2PROBLEM STATEMENT DEFINITION

Freshly graduated students and employee’s Looking for job change are finding it difficult to find a job suitable to their skills. Finding the right kind of job vacancies which suits your skill set perfectly is difficult. An undergraduate pass out is well versed in the field of cybersecurity and network connections finds it difficult to scout an opportunity that is suitable to their skillset. A platform that will keep her updated on job vacancies regularly and update the status of her current application

3. IDEATION & PROPOSED SOLUTION

3.1EMPATHY MAP CANVAS



Edit this template
Right-click to unlock

Empathy Map Canvas

Gain insight and understanding on solving customer problems.

1

Build empathy and keep your focus on the user by putting yourself in their shoes.

What do they THINK AND FEEL?
what really counts
major preoccupations
worries & aspirations

Is it a reliable way of getting job reccomendation?

Will i be able to find an optimum recommendation suiting my skills

Are the recommendations listed accurate

Will this be the correct method to search for job opportunities

What do they HEAR?
what friends say
what boss say
what influencers say

Is it trustworthy to upload personal details in the said website?

will i be able to find suitable jobs affiliated to my skills

what about the security and surity of the job which is accquired through this website

What do they SEE?
environment
friends
what the market offers

Look for the success ratio of the employees placed through thiis method

Analyze the legitimacy of the application

The availability of wide variety of skillsets

What do they SAY AND DO?
attitude in public
appearance
behavior towards others

Try finding out jobs using the application

Create awareness about the apllication

criticize the accuracy of job recommendations

Double check with previous users of the application

PAIN
fears
frustrations
obstacles

Lack of proper job for certain skillsets

Probablity of finding jobs will be slightly less

Threat of data breach

Managing and updating new skillsets is difficult

GAIN
"wants" / needs
measures of success
obstacles

An efficient replacement to conventional job tracker

Wide variety of jobs for people with unique skillsets

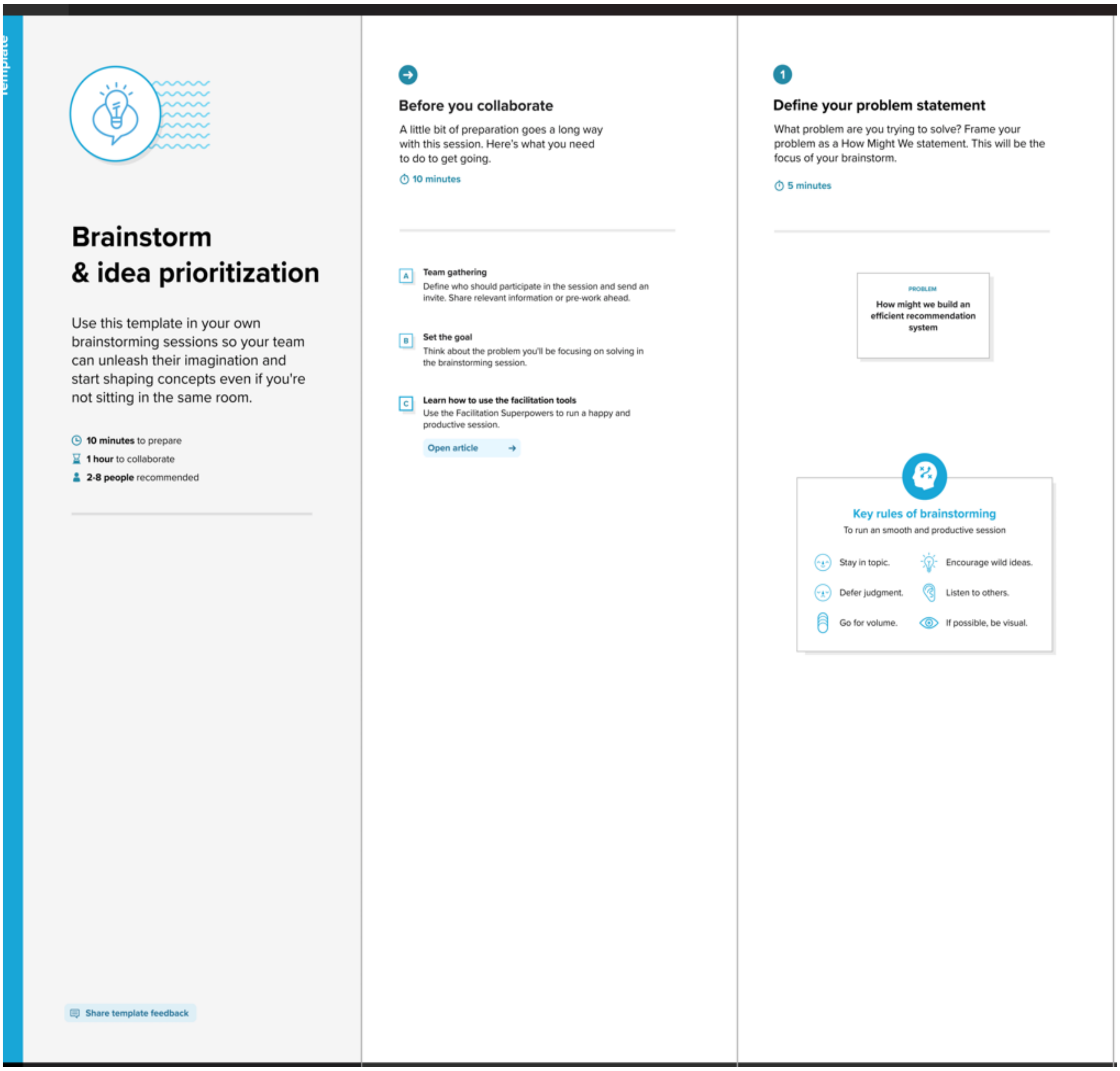
Easy method to search for jobs

New and developing skills are attached to suitable jobs

Share your feedback

3.2 IDEATION & BRAINSTORMING

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

Share template feedback

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.

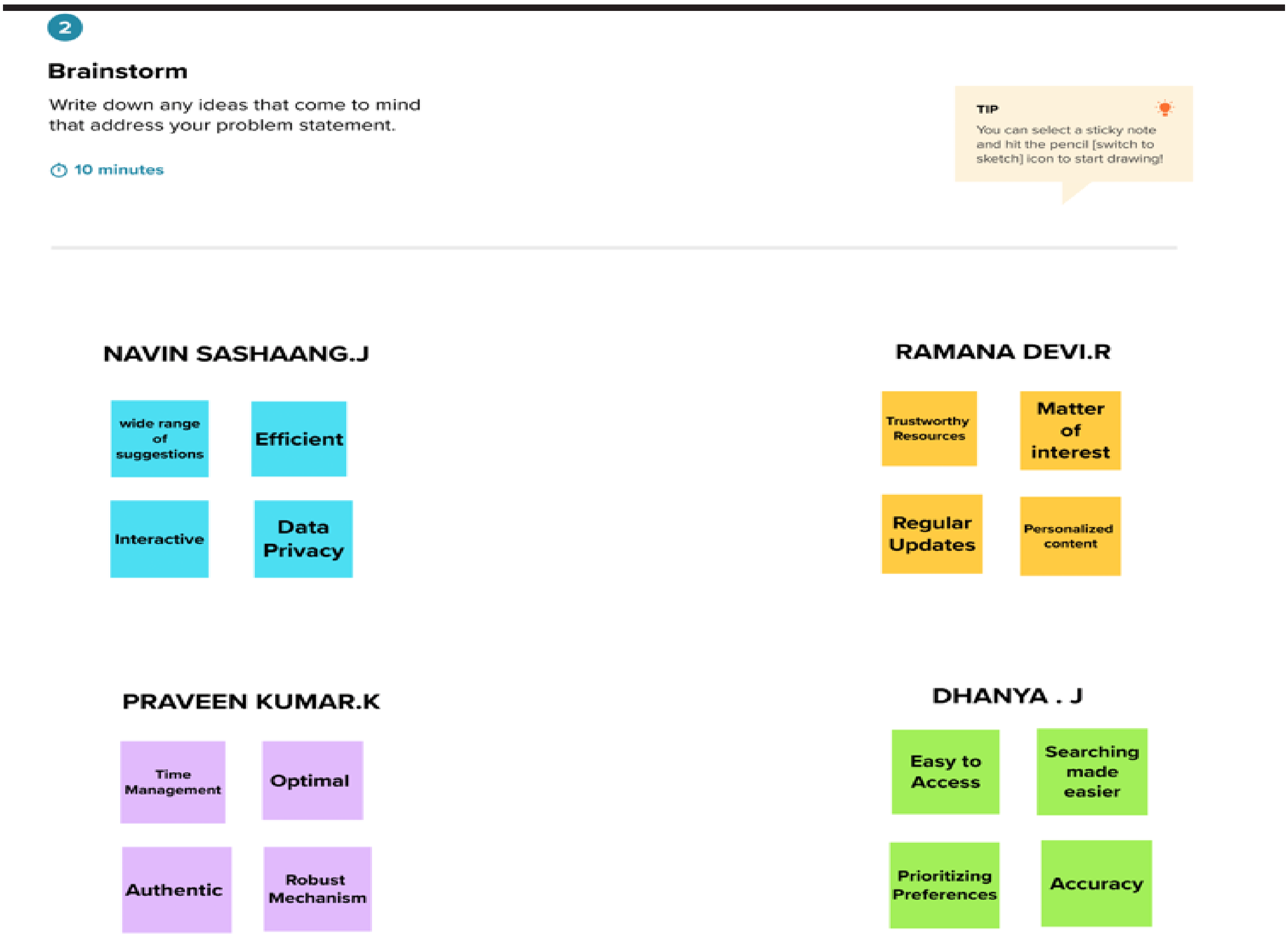
5 minutes

PROBLEM
How might we build an efficient recommendation system

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 and Idea Listing



2

Brainstorm

Write down any ideas that come to mind
that address your problem statement.

10 minutes

TIP

You can select a sticky note and hit the pencil [switch to sketch] icon to start drawing!

NAVIN SASHAANG.J

- wide range of suggestions
- Efficient
- Interactive
- Data Privacy

RAMANA DEVI.R

- Trustworthy Resources
- Matter of interest
- Regular Updates
- Personalized content

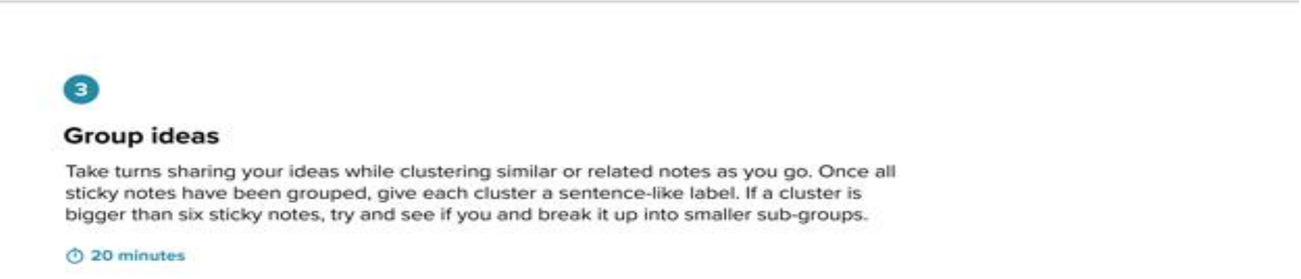
PRAVEEN KUMAR.K

- Time Management
- Optimal
- Authentic
- Robust Mechanism

DHANYA . J

- Easy to Access
- Searching made easier
- Prioritizing Preferences
- Accuracy

Step 3: Grouping

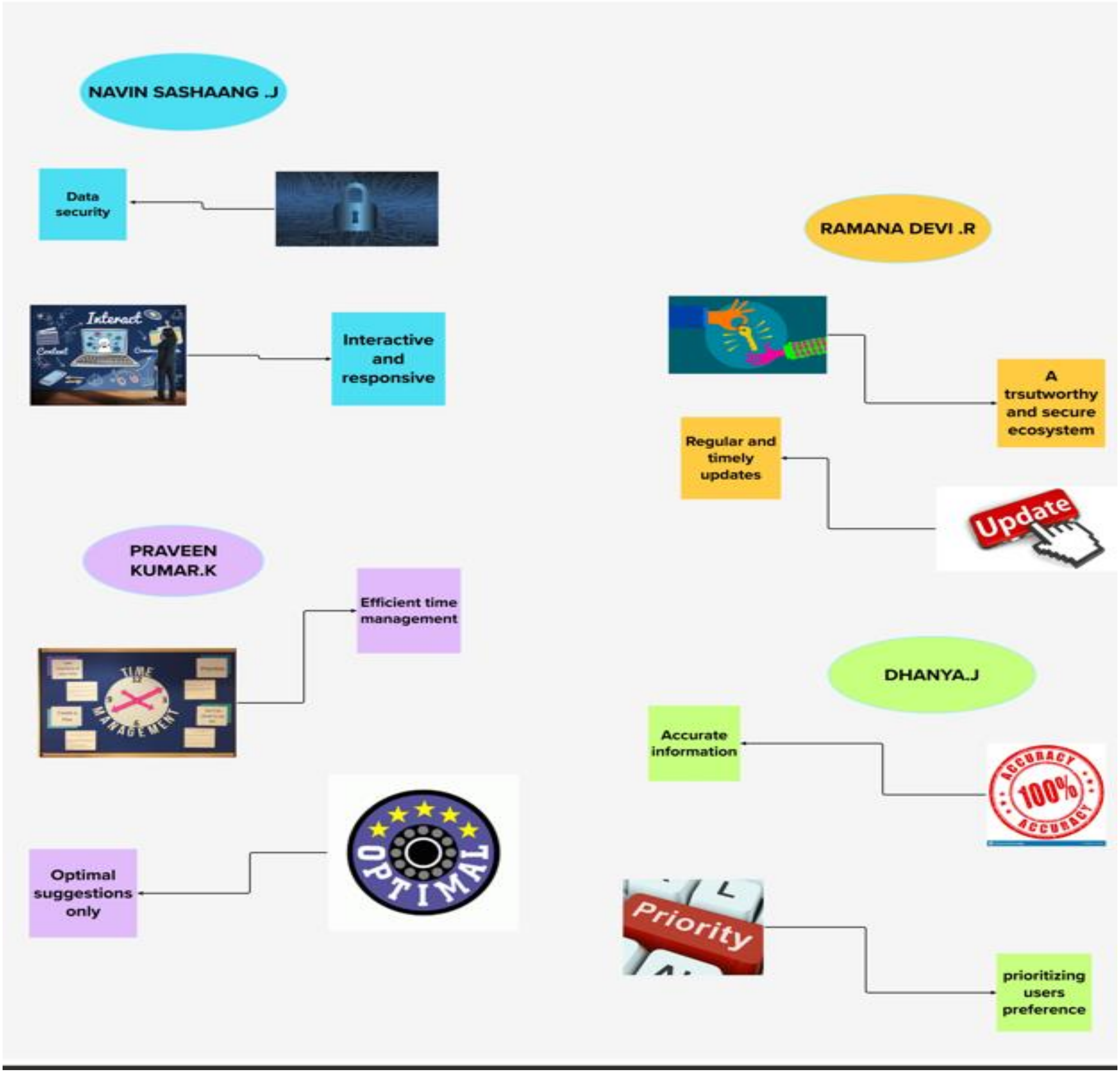


3

Group ideas

Take turns sharing your ideas while clustering similar or related notes as you go. Once all sticky notes have been grouped, give each cluster a sentence-like label. If a cluster is bigger than six sticky notes, try and see if you and break it up into smaller sub-groups.

⏱ 20 minutes



NAVIN SASHAANG .J

Data security

Interactive and responsive

PRAVEEN KUMAR.K

Efficient time management

Optimal suggestions only

RAMANA DEVI .R

A trsutworthy and secure ecosystem

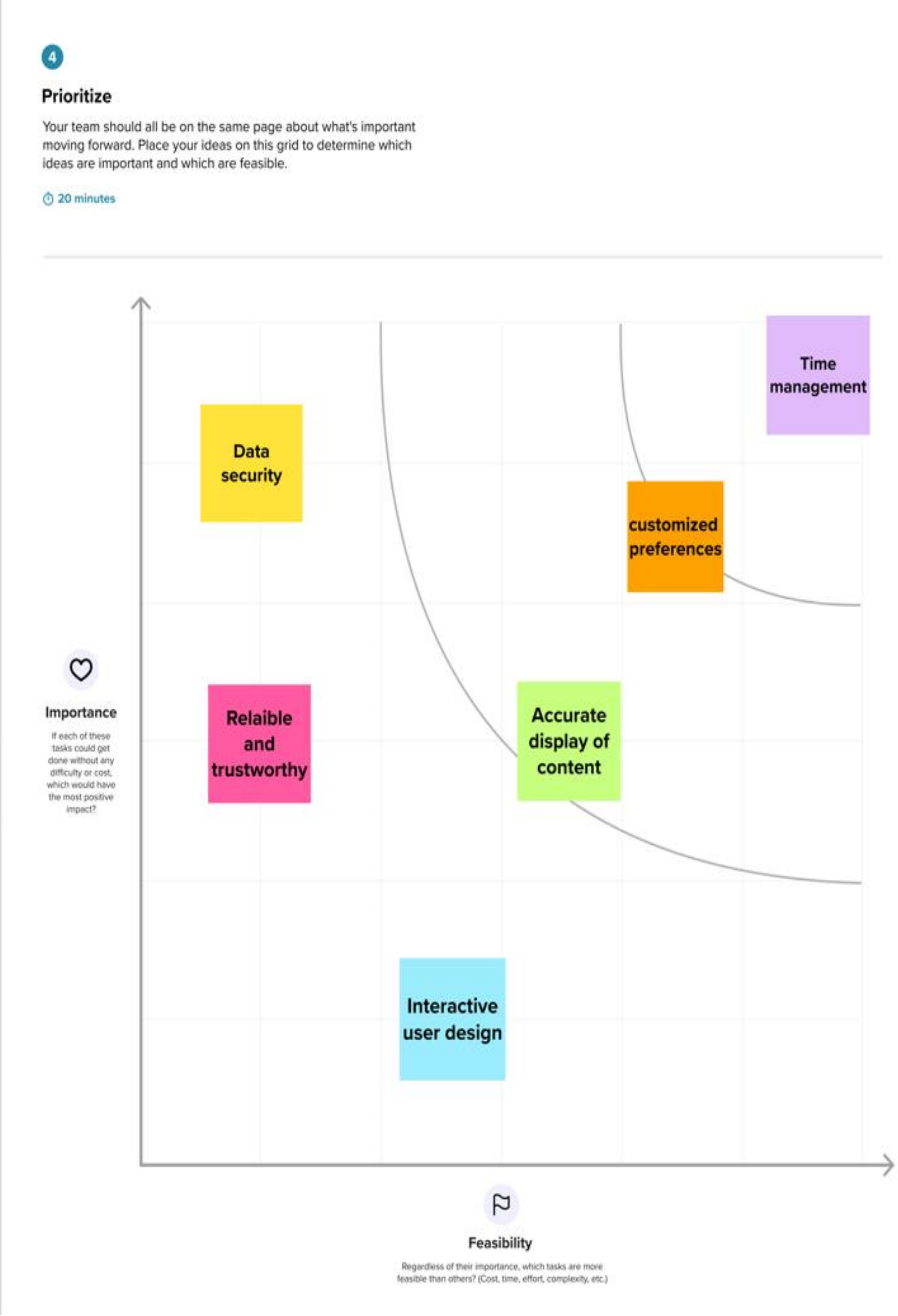
Regular and timely updates

DHANYA.J

Accurate information

prioritizing users preference

Step 4: Idea Prioritization



4

Prioritize

Your team should all be on the same page about what's important moving forward. Place your ideas on this grid to determine which ideas are important and which are feasible.

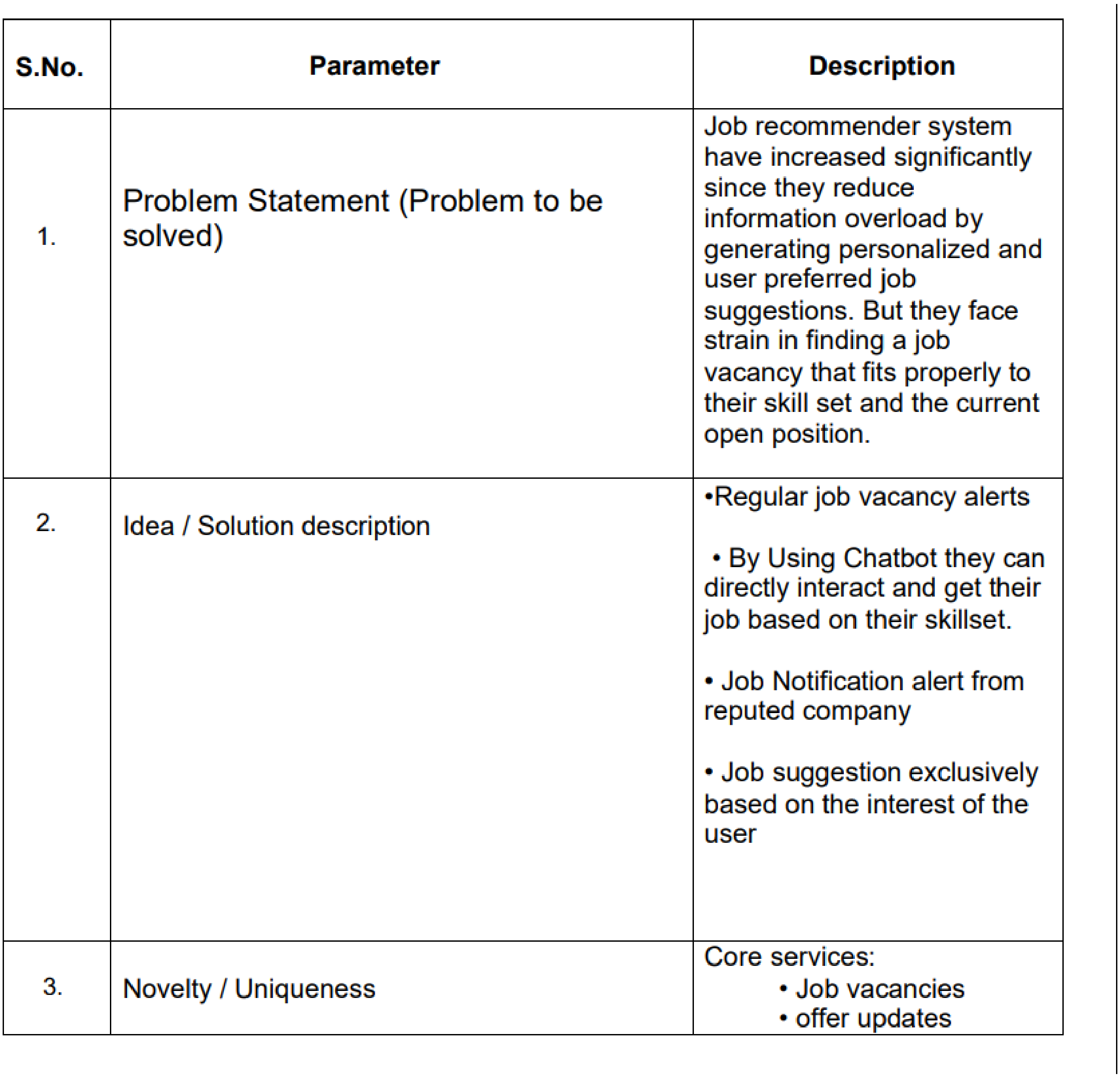
⏱ 20 minutes

If each of these tasks could get done without any difficulty or cost, which would have the most positive impact?

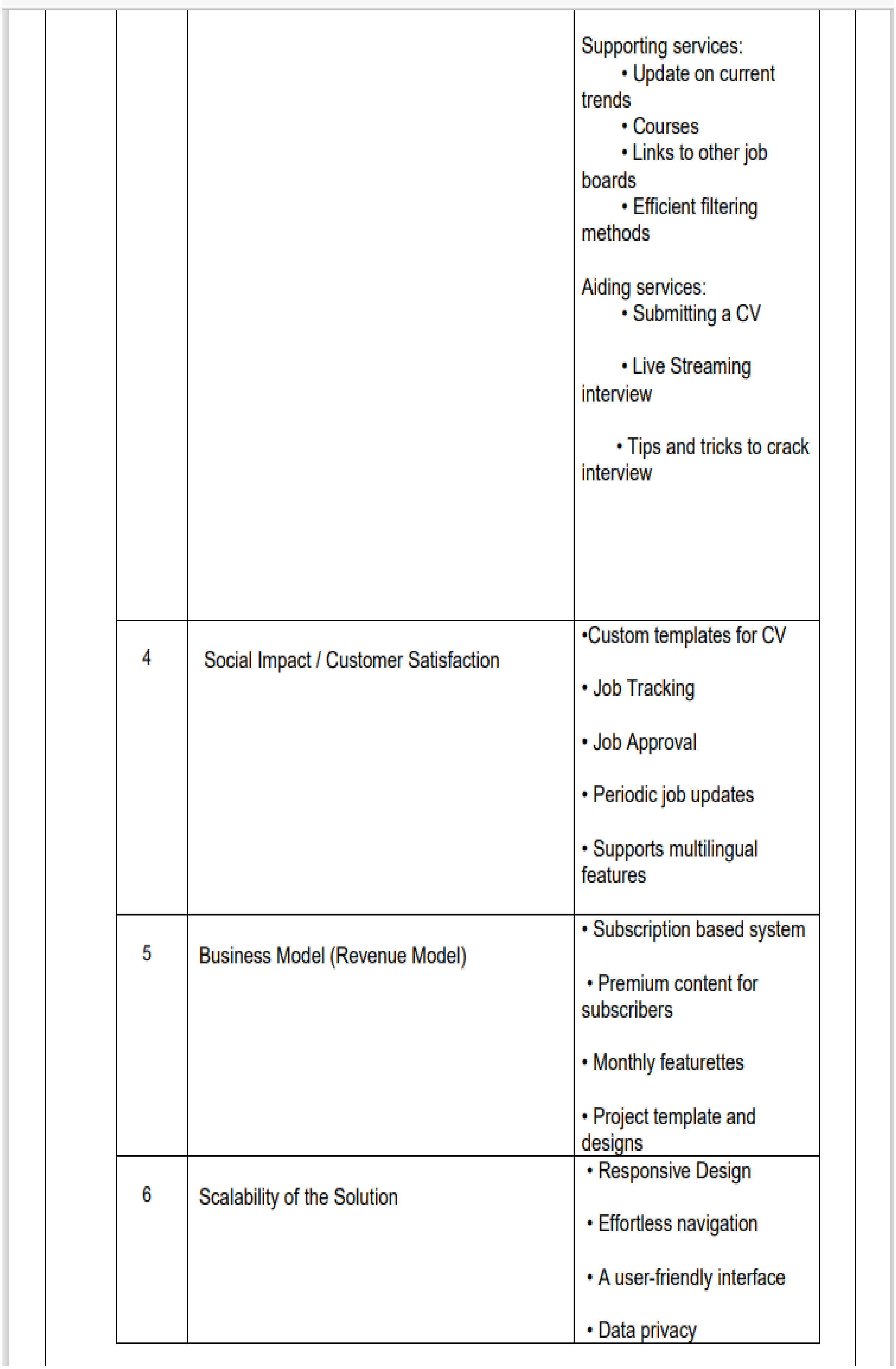
Regardless of their importance, which tasks are more feasible than others? (Cost, time, effort, complexity, etc.)

3.3 PROPOSED SOLUTION

Freshly graduated students and employee’s Looking for job change are finding it difficult to find a job suitable to their skills. Finding the right kind of job vacancies which suits your skill set perfectly is difficult. An undergraduate pass out is well versed in the field of cybersecurity and network connections finds it difficult to scout an opportunity that is suitable to their skillset. A platform that will keep her updated on job vacancies regularly and update the status of her current application

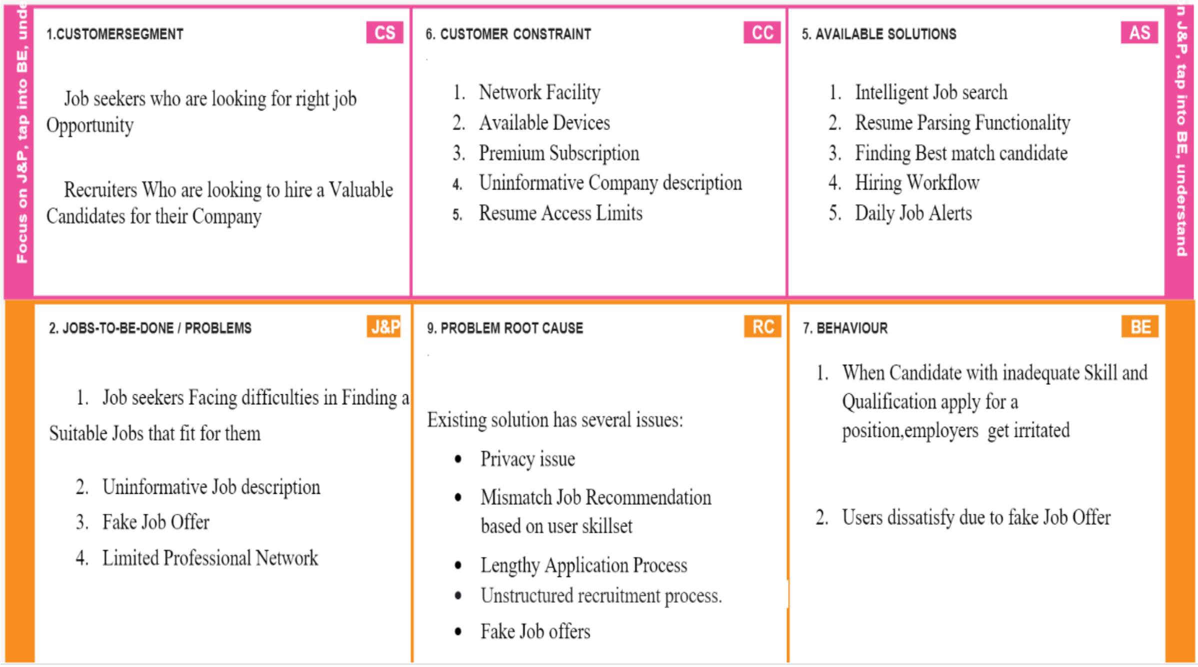


S.No.	Parameter	Description
1.	Problem Statement (Problem to be solved)	Job recommender system have increased significantly since they reduce information overload by generating personalized and user preferred job suggestions. But they face strain in finding a job vacancy that fits properly to their skill set and the current open position.
2.	Idea / Solution description	•Regular job vacancy alerts • By Using Chatbot they can directly interact and get their job based on their skillset. • Job Notification alert from reputed company • Job suggestion exclusively based on the interest of the user
3.	Novelty / Uniqueness	Core services: • Job vacancies • offer updates



		Supporting services: • Update on current trends • Courses • Links to other job boards • Efficient filtering methods Aiding services: • Submitting a CV • Live Streaming interview • Tips and tricks to crack interview
4	Social Impact / Customer Satisfaction	•Custom templates for CV • Job Tracking • Job Approval • Periodic job updates • Supports multilingual features
5	Business Model (Revenue Model)	• Subscription based system • Premium content for subscribers • Monthly featurettes • Project template and designs
6	Scalability of the Solution	• Responsive Design • Effortless navigation • A user-friendly interface • Data privacy

3.4 PROBLEM SOLUTION FIT


Focus on J&P, tap into BE, und
n J&P, tap into BE, understand
CS
CC
AS
J&P
RC
BE

1.CUSTOMERSEGMENT

Job seekers who are looking for right job Opportunity

Recruiters Who are looking to hire a Valuable Candidates for their Company

6. CUSTOMER CONSTRAINT

1. Network Facility
2. Available Devices
3. Premium Subscription
4. Uninformative Company description
5. Resume Access Limits

5. AVAILABLE SOLUTIONS

1. Intelligent Job search
2. Resume Parsing Functionality
3. Finding Best match candidate
4. Hiring Workflow
5. Daily Job Alerts

2. JOBS-TO-BE-DONE / PROBLEMS

1. Job seekers Facing difficulties in Finding a Suitable Jobs that fit for them
2. Uninformative Job description
3. Fake Job Offer
4. Limited Professional Network

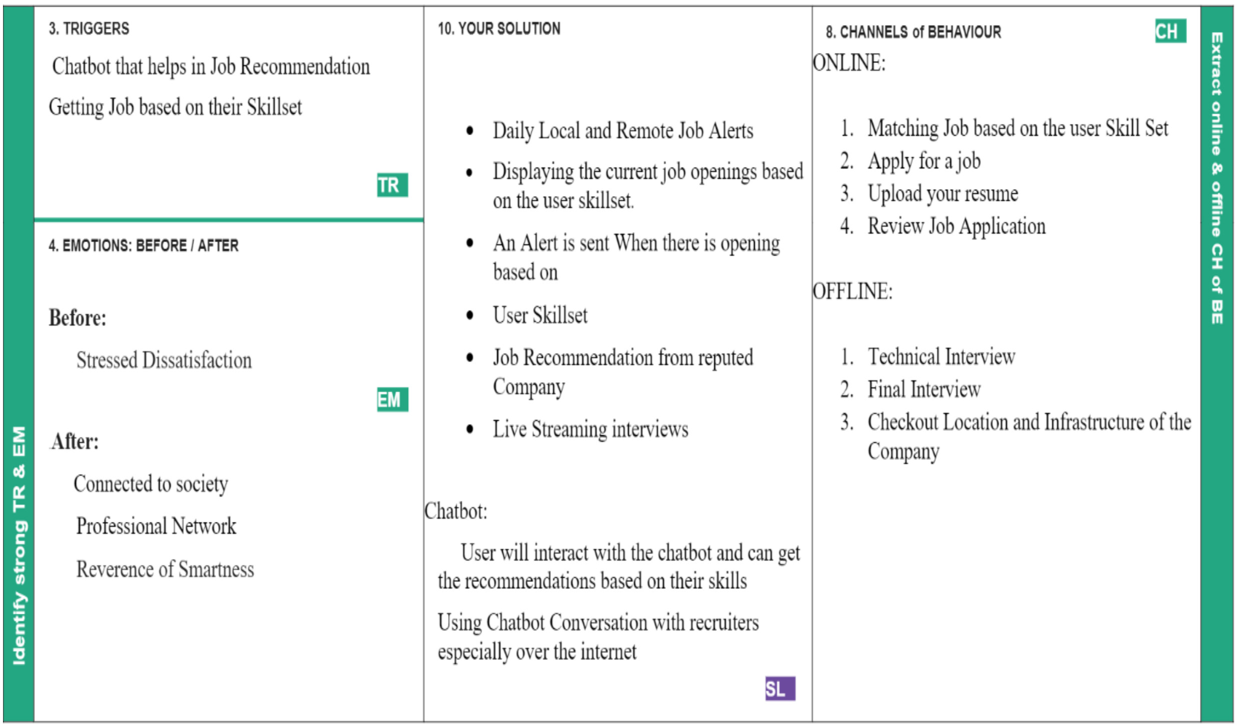
9. PROBLEM ROOT CAUSE

Existing solution has several issues:

- Privacy issue
- Mismatch Job Recommendation based on user skillset
- Lengthy Application Process
- Unstructured recruitment process.
- Fake Job offers

7. BEHAVIOUR

1. When Candidate with inadequate Skill and Qualification apply for a position,employers get irritated
2. Users dissatisfy due to fake Job Offer


Identify strong TR & EM
Extract online & offline CH of BE
TR
EM
SL
CH

3. TRIGGERS

Chatbot that helps in Job Recommendation

Getting Job based on their Skillset

4. EMOTIONS: BEFORE / AFTER

Before:

Stressed Dissatisfaction

After:

Connected to society

Professional Network

Reverence of Smartness

10. YOUR SOLUTION

- Daily Local and Remote Job Alerts
- Displaying the current job openings based on the user skillset.
- An Alert is sent When there is opening based on
- User Skillset
- Job Recommendation from reputed Company
- Live Streaming interviews

Chatbot:

User will interact with the chatbot and can get the recommendations based on their skills

Using Chatbot Conversation with recruiters especially over the internet

8. CHANNELS of BEHAVIOUR

ONLINE:

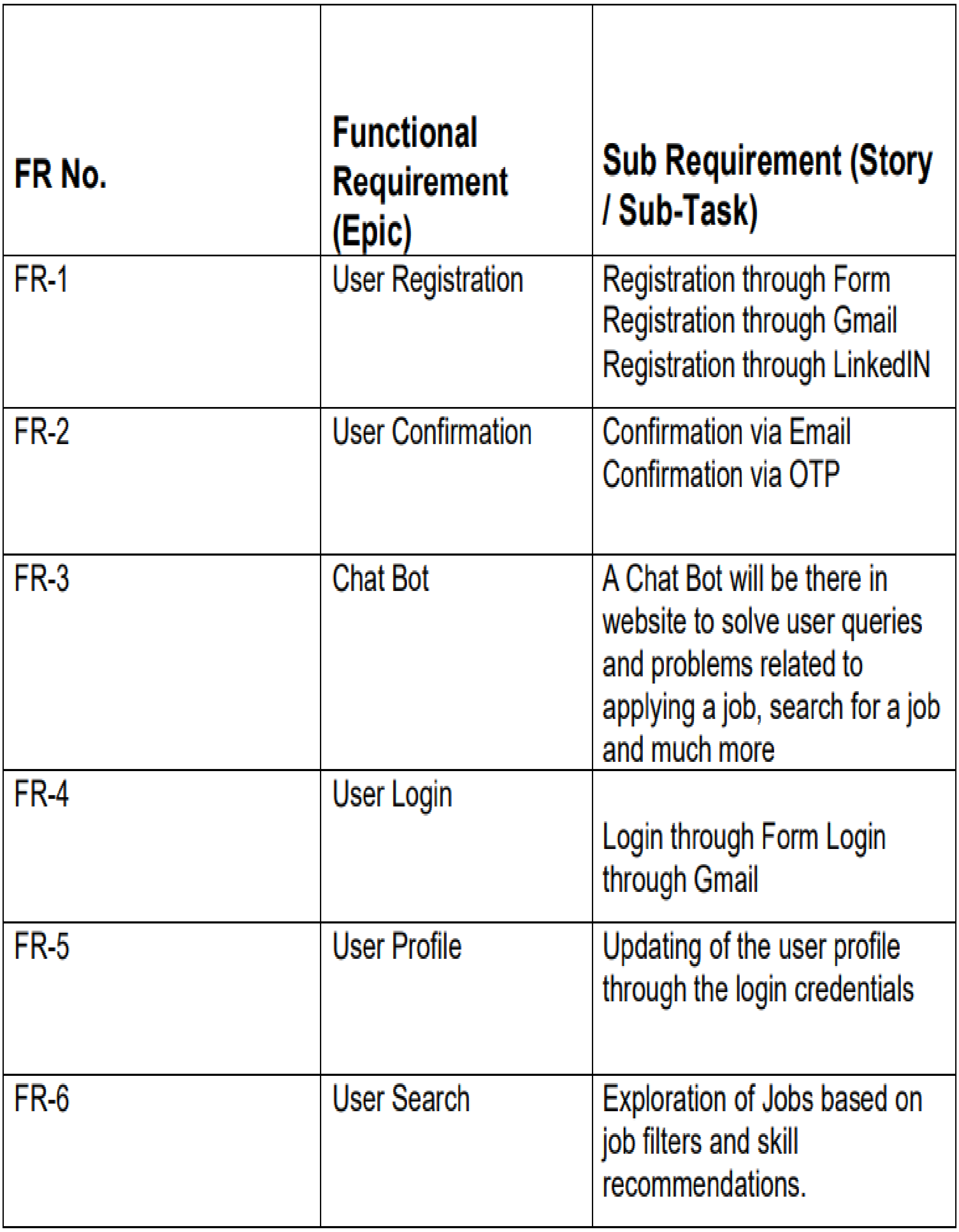
1. Matching Job based on the user Skill Set
2. Apply for a job
3. Upload your resume
4. Review Job Application

OFFLINE:

1. Technical Interview
2. Final Interview
3. Checkout Location and Infrastructure of the Company

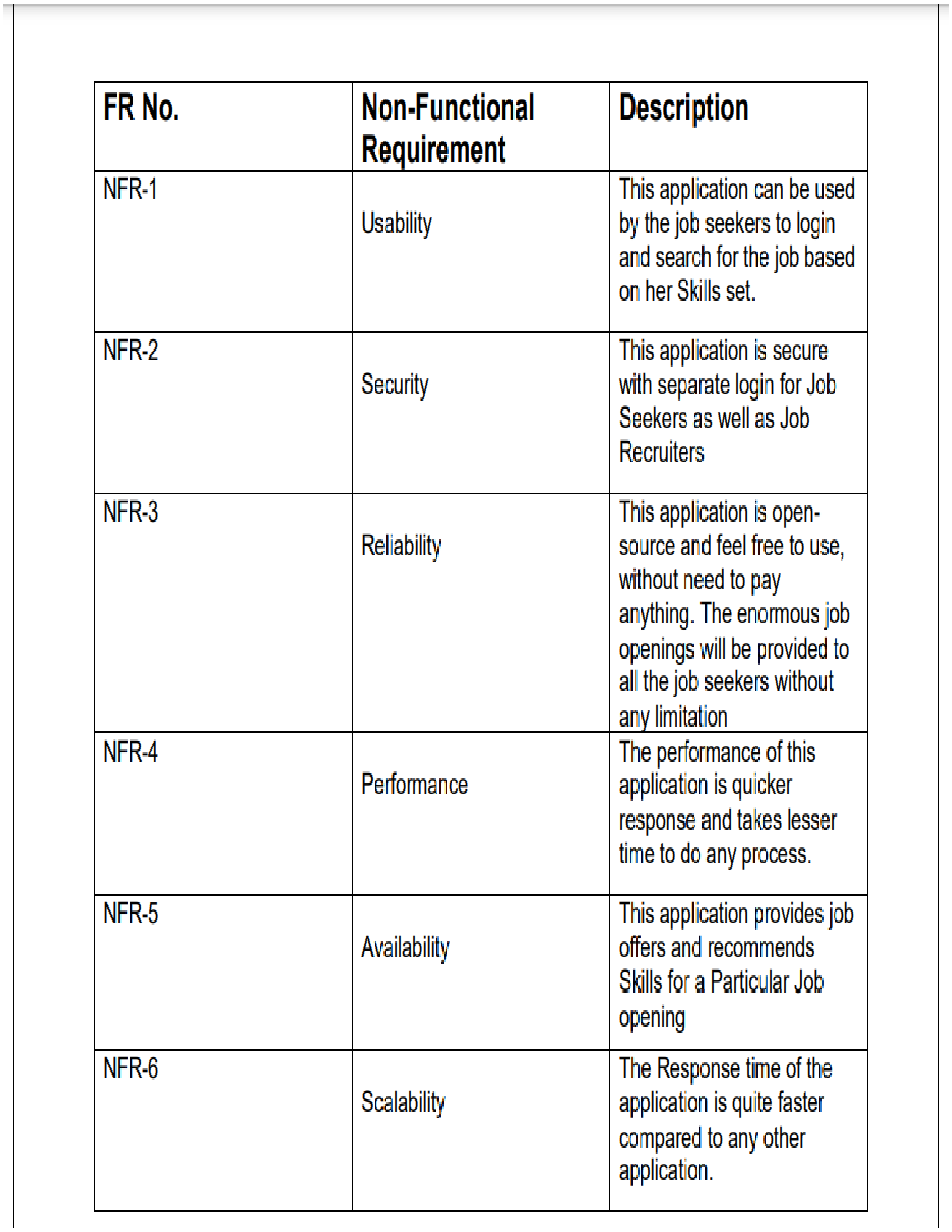
4. REQUIREMENT ANALYSIS

4.1 FUNCTIONAL REQUIREENTS



FR No.	Functional Requirement (Epic)	Sub Requirement (Story / Sub-Task)
FR-1	User Registration	Registration through Form Registration through Gmail Registration through LinkedIN
FR-2	User Confirmation	Confirmation via Email Confirmation via OTP
FR-3	Chat Bot	A Chat Bot will be there in website to solve user queries and problems related to applying a job, search for a job and much more
FR-4	User Login	Login through Form Login through Gmail
FR-5	User Profile	Updating of the user profile through the login credentials
FR-6	User Search	Exploration of Jobs based on job filters and skill recommendations.

4.2 NON-FUNCTIONAL REQUIRMENTS

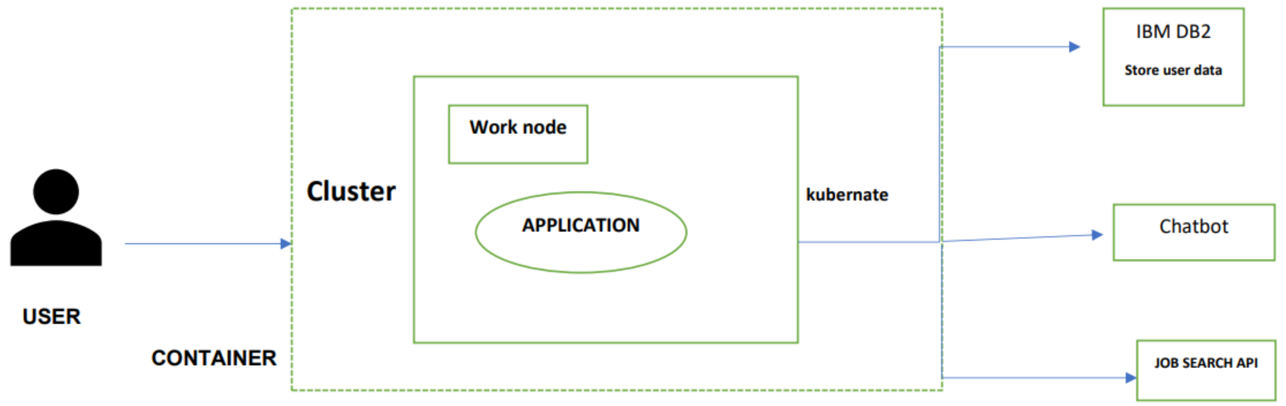


FR No.	Non-Functional Requirement	Description
NFR-1	Usability	This application can be used by the job seekers to login and search for the job based on her Skills set.
NFR-2	Security	This application is secure with separate login for Job Seekers as well as Job Recruiters
NFR-3	Reliability	This application is open-source and feel free to use, without need to pay anything. The enormous job openings will be provided to all the job seekers without any limitation
NFR-4	Performance	The performance of this application is quicker response and takes lesser time to do any process.
NFR-5	Availability	This application provides job offers and recommends Skills for a Particular Job opening
NFR-6	Scalability	The Response time of the application is quite faster compared to any other application.

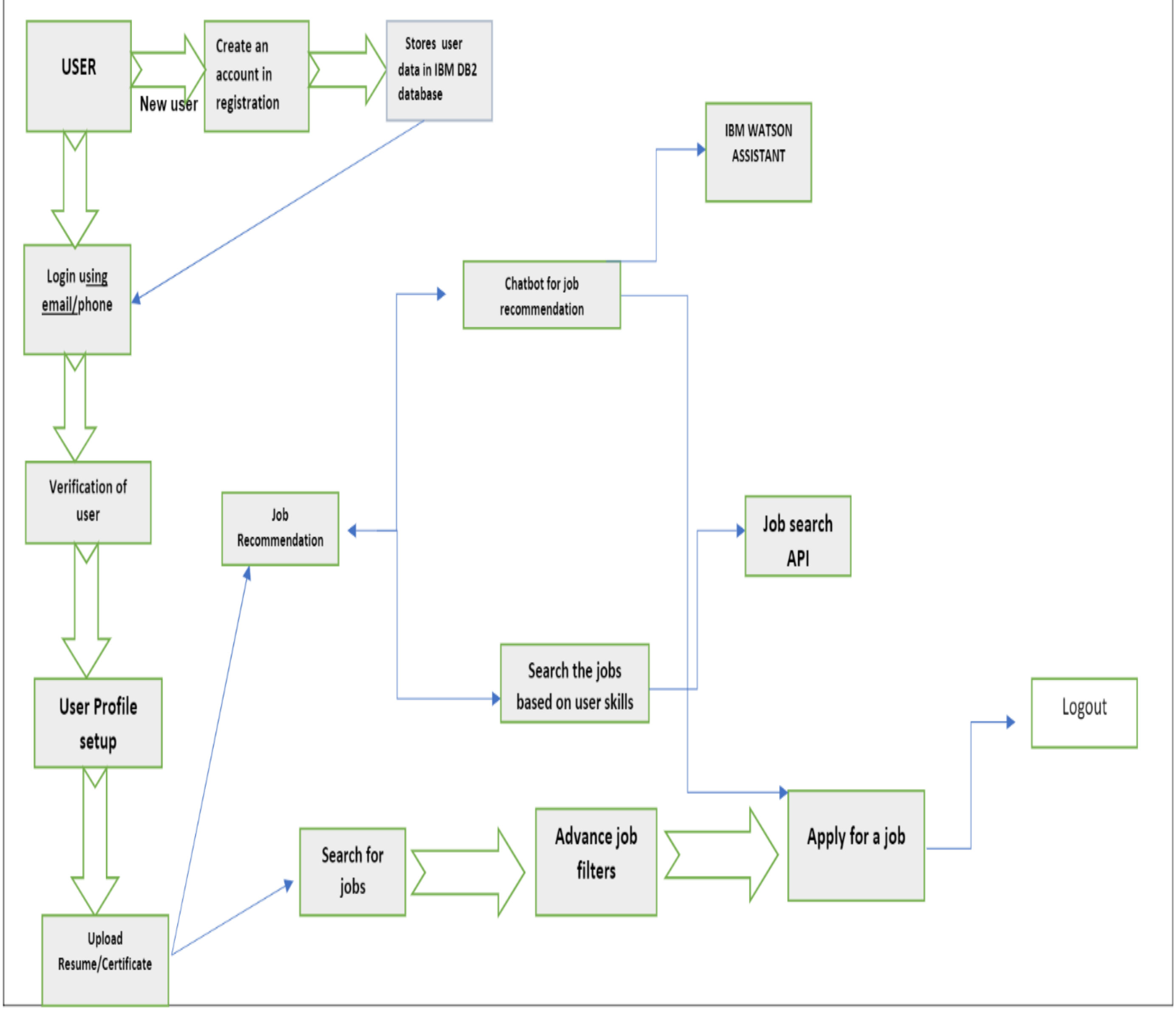
5. PROJECT DESIGN

5.1 DATA FLOW DIAGRAMS

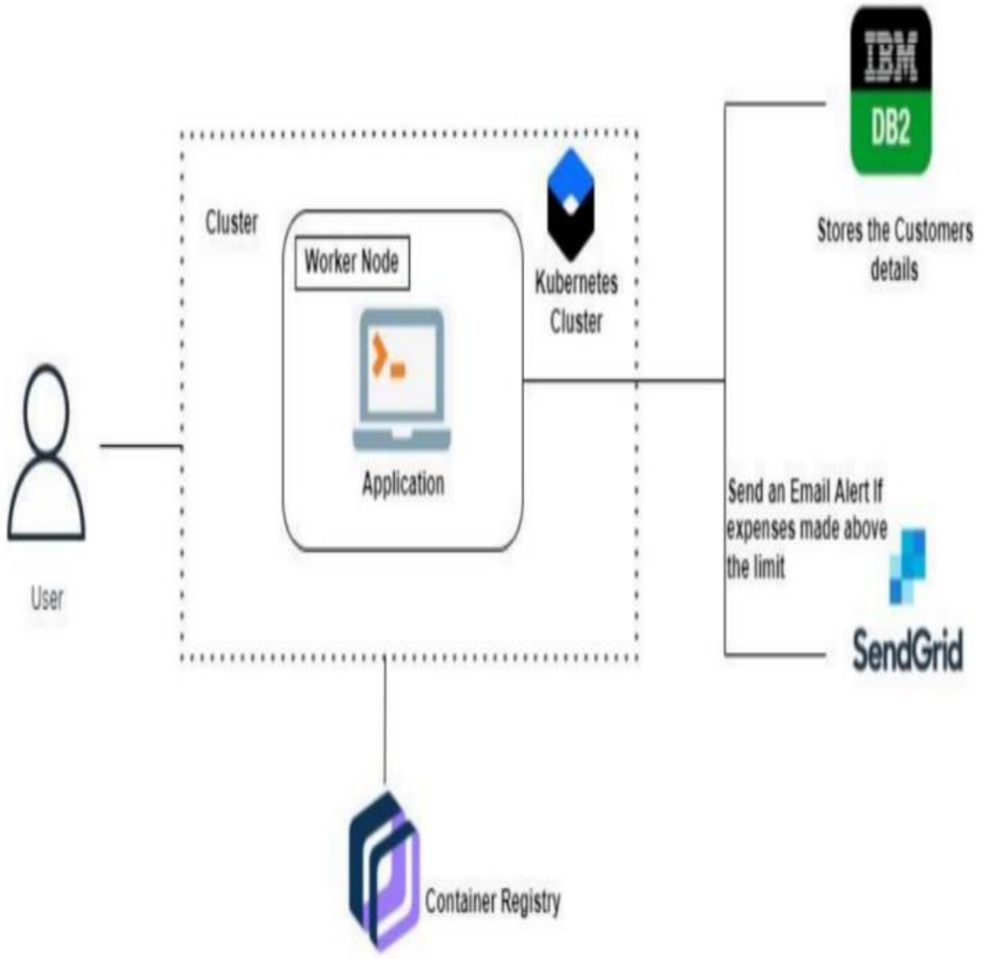
A Data Flow Diagram (DFD) is a traditional visual representation of the information flows within a system. A neat and clear DFD can depict the right amount of the system requirement graphically. It shows how data enters and leaves the system, what changes the information, and where data is stored.



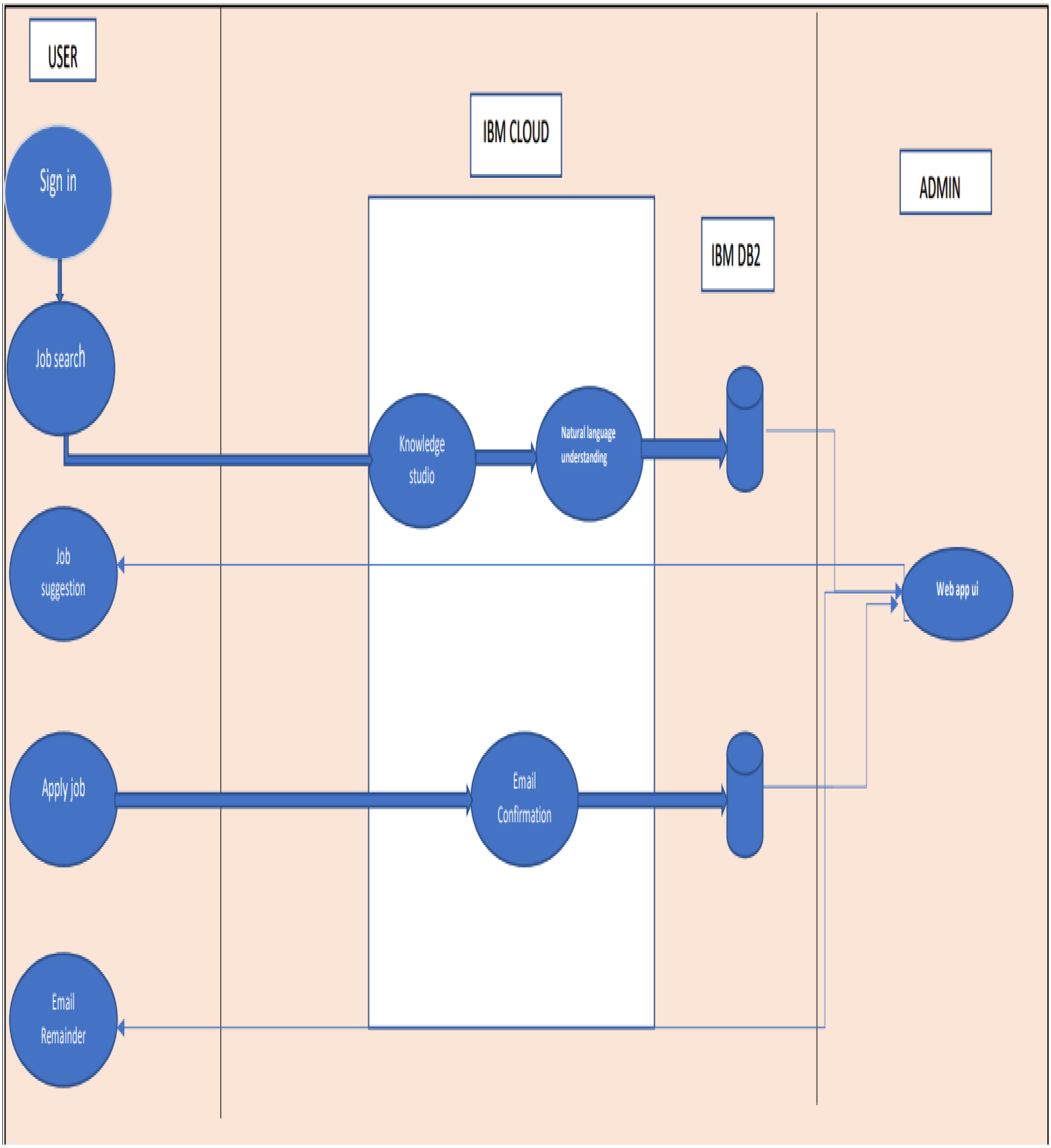
Example: DFD Level 0 (Industry Standard)



5.2 SOLUTION & TECHNICAL ARCHITECTURE

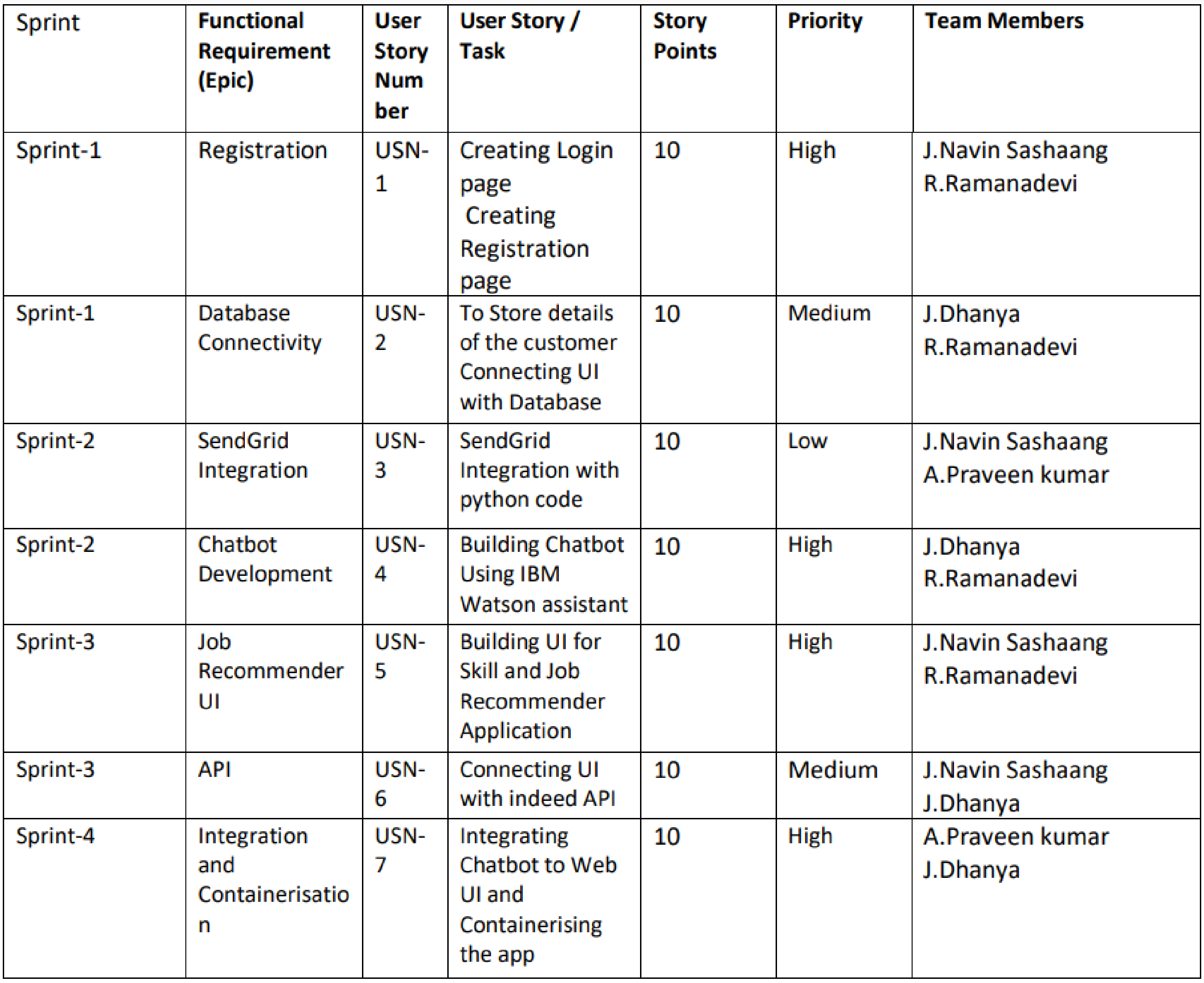


SOLUTION ARCHITECTURE

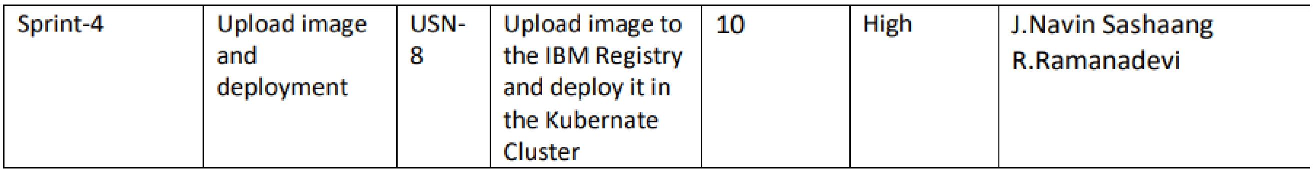


6. PROJECT PLANNING & SCHEDULING

6.1 SPRINT PLANNING & ESTIMATION

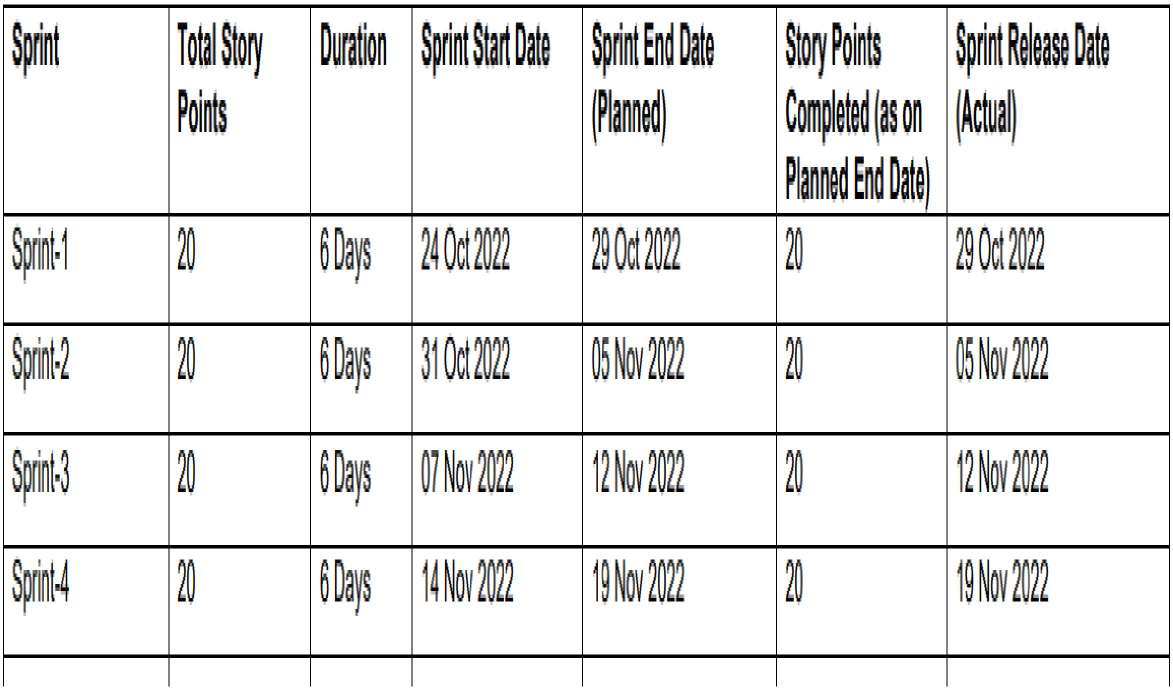


Sprint	Functional Requirement (Epic)	User Story Number	User Story / Task	Story Points	Priority	Team Members
Sprint-1	Registration	USN-1	Creating Login page Creating Registration page	10	High	J.Navin Sashaang R.Ramanadevi
Sprint-1	Database Connectivity	USN-2	To Store details of the customer Connecting UI with Database	10	Medium	J.Dhanya R.Ramanadevi
Sprint-2	SendGrid Integration	USN-3	SendGrid Integration with python code	10	Low	J.Navin Sashaang A.Praveen kumar
Sprint-2	Chatbot Development	USN-4	Building Chatbot Using IBM Watson assistant	10	High	J.Dhanya R.Ramanadevi
Sprint-3	Job Recommender UI	USN-5	Building UI for Skill and Job Recommender Application	10	High	J.Navin Sashaang R.Ramanadevi
Sprint-3	API	USN-6	Connecting UI with indeed API	10	Medium	J.Navin Sashaang J.Dhanya
Sprint-4	Integration and Containerisation	USN-7	Integrating Chatbot to Web UI and Containerising the app	10	High	A.Praveen kumar J.Dhanya



Sprint-4	Upload image and deployment	USN-8	Upload image to the IBM Registry and deploy it in the Kubernate Cluster	10	High	J.Navin Sashaang R.Ramanadevi

6.2 SPRINT DELIVERY SCHDULE

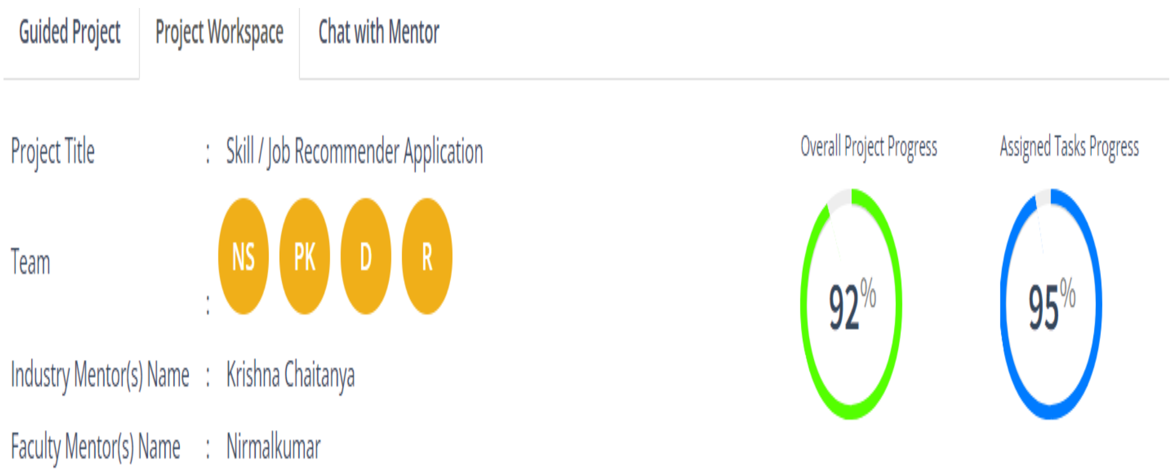


Sprint	Total Story Points	Duration	Sprint Start Date	Sprint End Date (Planned)	Story Points Completed (as on Planned End Date)	Sprint Release Date (Actual)
Sprint-1	20	6 Days	24 Oct 2022	29 Oct 2022	20	29 Oct 2022
Sprint-2	20	6 Days	31 Oct 2022	05 Nov 2022	20	05 Nov 2022
Sprint-3	20	6 Days	07 Nov 2022	12 Nov 2022	20	12 Nov 2022
Sprint-4	20	6 Days	14 Nov 2022	19 Nov 2022	20	19 Nov 2022

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)

$$AV = \frac{sprint\ duration}{velocity} = \frac{20}{10} = 2$$

6.3 REPORTS FROM JIRA



Project Title : Skill / Job Recommender Application

Team : NS PK D R

Industry Mentor(s) Name : Krishna Chaitanya

Faculty Mentor(s) Name : Nirmalkumar

7. CODING & SOLUTIONING

7.1 FEATURE 1

LOGIN

```
@app.route('/login',methods = ['GET'])
def login():
    global userid
    msg = ''
    if request.method == 'GET':
        email = request.args.get("email")
        password = request.args.get("password")

        sql = "SELECT * FROM USERDETAILS WHERE email = ? AND password = ?"
        stmt = ibm_db.prepare(db.conn,sql)

        ibm_db.bind_param(stmt,1,email)
        ibm_db.bind_param(stmt,2,password)
        ibm_db.execute(stmt)
        account = ibm_db.fetch_assoc(stmt)
        print(account)
        if account:
            return redirect(url_for("index.html"))
        else:
            msg = 'Invalid details. Please check the Email ID - Password combination.!'
            return render_template("home.html",msg=msg)
```

SIGNUP

```
#sign-up
@app.route('/register', methods=['GET','POST'])
def register():
    if request.method == 'POST':
        name = request.form['name']
        phone = request.form['Phone']
        email = request.form['email']
        password = request.form['password']
        sql = "SELECT * FROM USERDETAILS WHERE email = ?"
        stmt = ibm_db.prepare(db.conn, sql)
        ibm_db.bind_param(stmt,1,email)
        ibm_db.execute(stmt)
        account = ibm_db.fetch_assoc(stmt)
        print(account)
        if account:
            msg='Job Recommender Account Already exist.kindly login!'
            return render_template("home.html",msg=msg)

        else:
            sql ="INSERT INTO USERDETAILS(NAME,PHONE,EMAIL,PASSWORD)
VALUES('{0}','{1}','{2}','{3}')"

            res = ibm_db.exec_immediate(db.conn,sql.format(name,phone,email,password))
            msg='registration successful'
            return render_template("home.html",msg=msg)
    return render_template("register.html")
```

FEATURE 2

```
from sendgrid import SendGridAPIClient
from sendgrid.helpers.mail import Mail

message = Mail(
    from_email='navnoble910@gmail.com',
    to_emails='navnoble910@gmail.com',
    subject='Sending with Twilio SendGrid is Fun',
    html_content='<strong>and easy to do anywhere, even with Python</strong>')
try:
    sg = SendGridAPIClient('SG.bvY2rix4S963KLbOiu_dVg.I2E7DAjk8fwsrx-
ByoNsSM0N0BLKJdKH8J88BFQZt08')
    response = sg.send(message)
    print(response.status_code)
    print(response.body)
    print(response.headers)
except Exception as e:
    print(e)
```

8. TESTING

Test Scenarios

1 Verify user is able to see login page

2 Verify user is able to login to application or not?

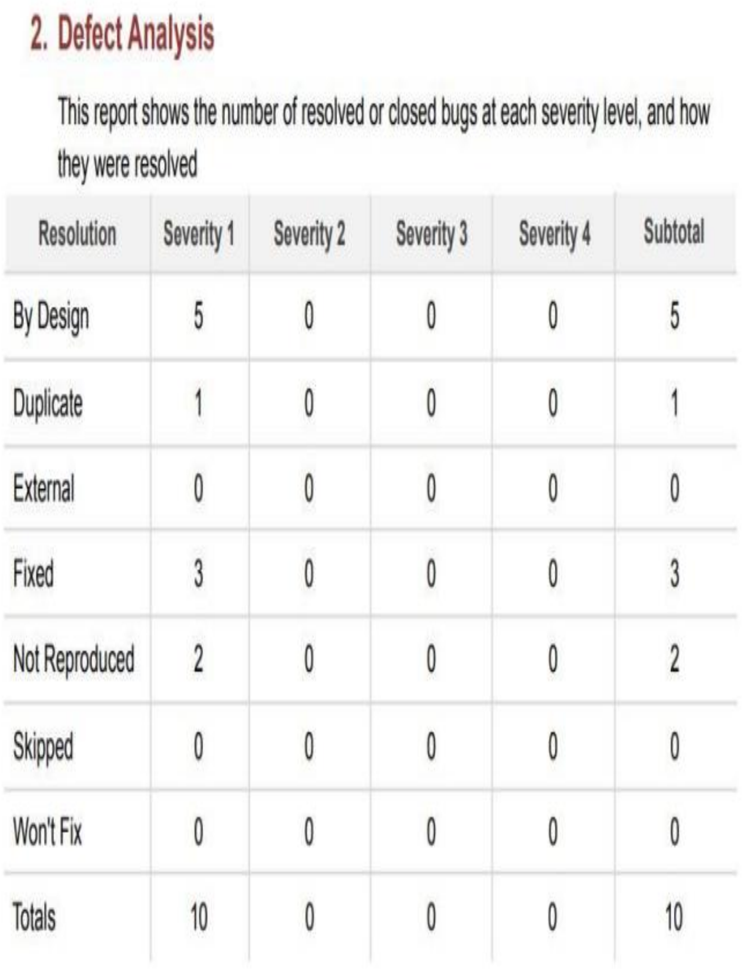
3 Verify user is able to navigate to create your account page?

4 Verify user is able to recovery password 5 Verify login page elements

8.2 USER ACCEPTANCE TESTING

1. Purpose of Document

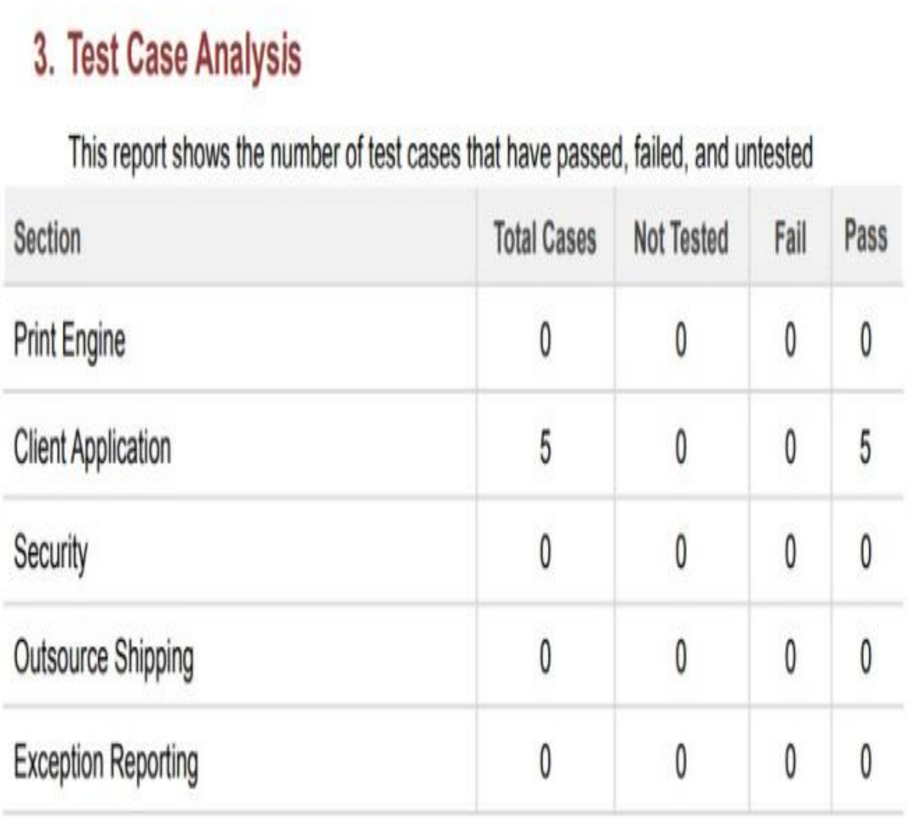
The purpose of this document is to briefly explain the test coverage and open issues of the [ProductName] project at the time of the release to User Acceptance Testing (UAT).



2. Defect Analysis

This report shows the number of resolved or closed bugs at each severity level, and how they were resolved

Resolution	Severity 1	Severity 2	Severity 3	Severity 4	Subtotal
By Design	5	0	0	0	5
Duplicate	1	0	0	0	1
External	0	0	0	0	0
Fixed	3	0	0	0	3
Not Reproduced	2	0	0	0	2
Skipped	0	0	0	0	0
Won't Fix	0	0	0	0	0
Totals	10	0	0	0	10



3. Test Case Analysis

This report shows the number of test cases that have passed, failed, and untested

Section	Total Cases	Not Tested	Fail	Pass
Print Engine	0	0	0	0
Client Application	5	0	0	5
Security	0	0	0	0
Outsource Shipping	0	0	0	0
Exception Reporting	0	0	0	0

9. ADVANTAGES & DISADVANTAGES

1. ADVANTAGES

The project is identified by the merits of the system offered to the user. The merits of this project are as follows; -

• It's a web-enabled project.

• This project offers user to enter the data through simple and interactive forms. This is very helpful for the client to enter the desired information through so much simplicity

- The user is mainly more concerned about the validity of the data, whatever he is entering. There are checks on every stages of any new creation, data entry or updation so that the user cannot enter the invalid data, which can create problems at later date.

- Sometimes the user finds in the later stages of using project that he needs to update some of the information that he entered earlier. There are options for him by which he can update the records. Moreover there is restriction for his that he cannot change the primary data field. This keeps the validity of the data to longer e0tent.

- User is provided the option of monitoring the records he entered earlier. He can see the desired records with the variety of options provided by him.

- From every part of the project the user is provided with the links through framing so that he can go from one option of the project to other as per the requirement. This is bound to be simple and very friendly as per the user is concerned. That is" we can sat that the project is user friendly which is one of the primary concerns of any good project.

- Data storage and retrieval will become faster and easier to maintain because data is stored in a systematic manner and in a single database.

- Decision making process would be greatly enhanced because of faster processing of information since data collection from information available on computer takes much less time then manual system.

- Allocating of sample results becomes much faster because at a time the user can see the records of last years.

- Easier and faster data transfer through latest technology associated with the computer and communication.

- Through these features it will increase the efficiency, accuracy and transparency.

2. DISADVANTAGES

- Wrong inputs will affect the project outputs.
- Internet Connection is mandatory.
- unverified data can cause problems.

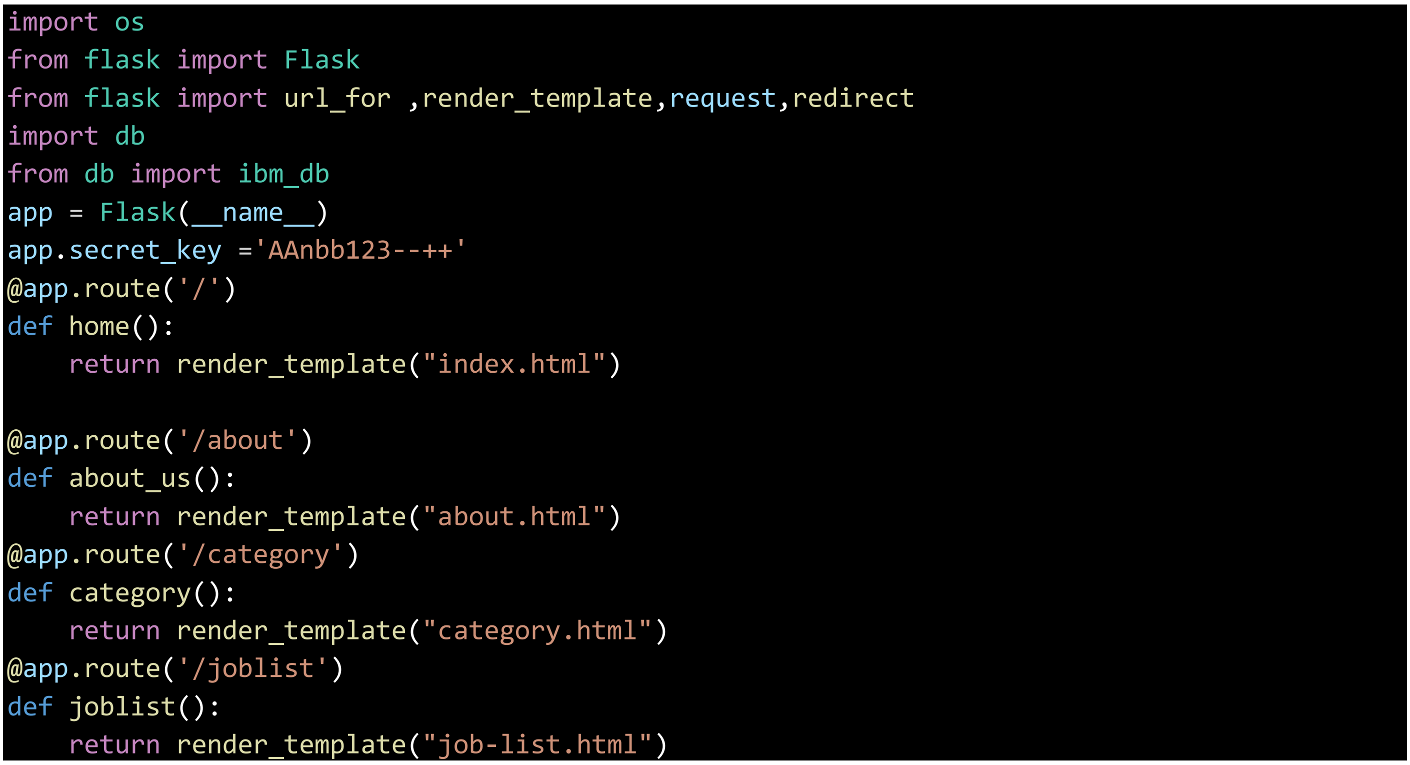
10. CONCLUSION

This project proved good for me as it provided practical knowledge of not only programming in ASP.NET and VB.NET web based application and no some extent windows Application and SQL Server, but also about all handling procedure related with "Skills and Job Recommender Application". It also provides knowledge about the latest technology used in developing web enabled application and client server technology that will be great demand in future. This will provide better opportunities and guidance in future in developing projects independently.

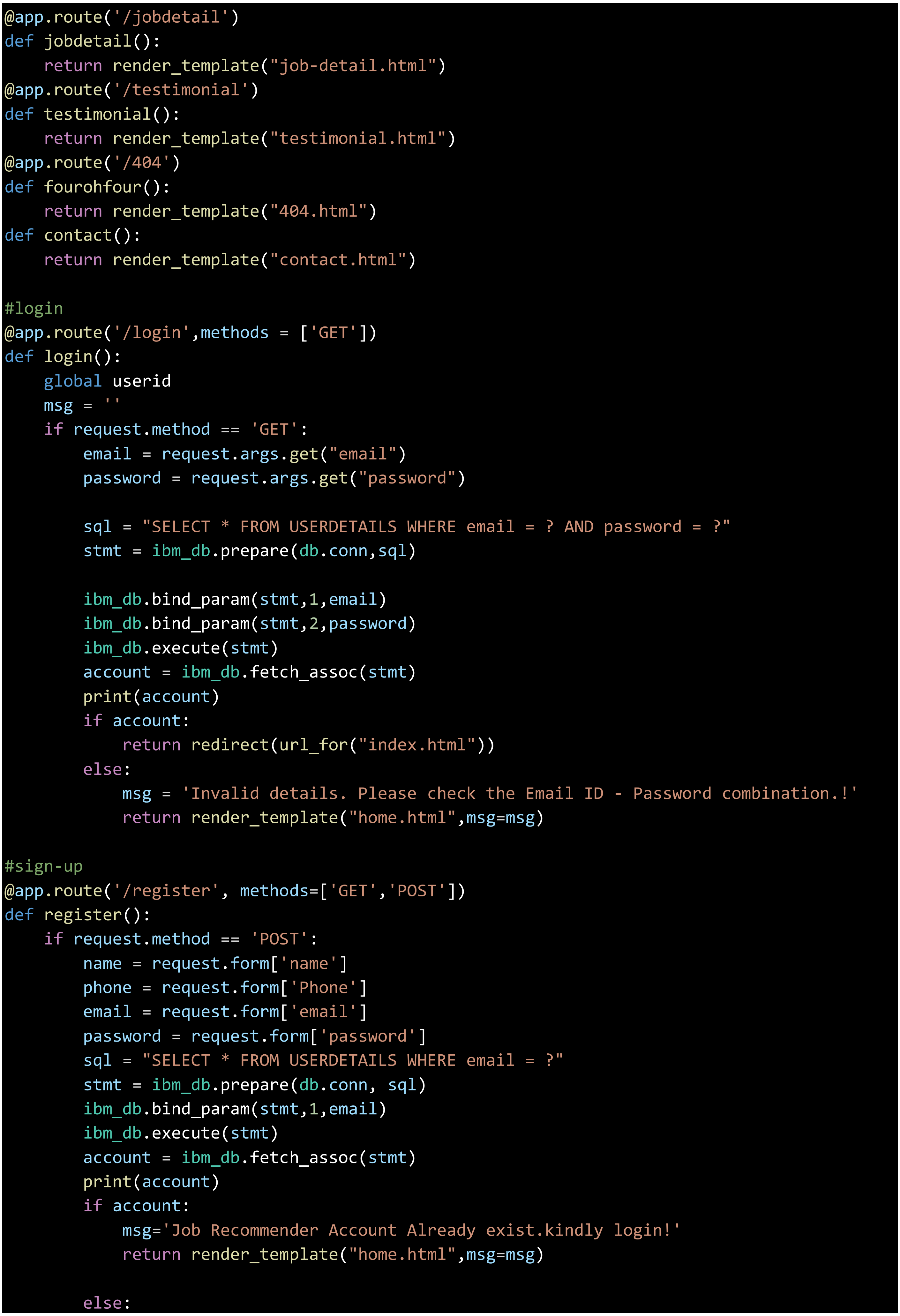
11. FUTURE SCOPE

Skills And Job Recommender Application is a web application to build such a way that. It is aimed at providing the best of opportunities to the aspirants on the grounds of their skillsets and talents. It focuses on diversifying the job application market to an extent where there will be opportunities for one and all making sure to be righteous and precise in providing services to the people who use them.

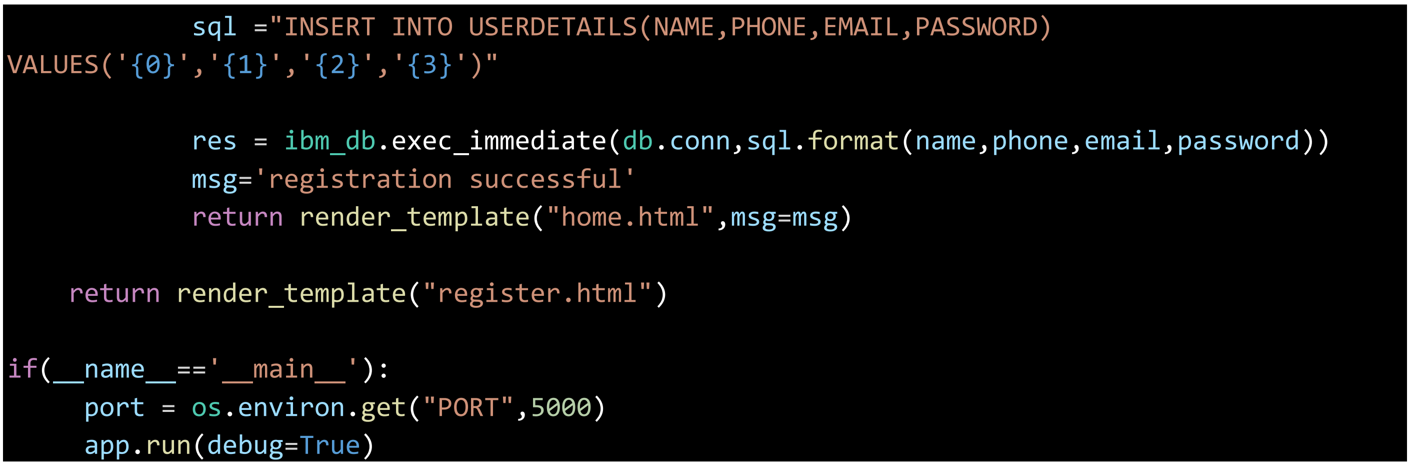
12. SOURCE CODE



```
import os
from flask import Flask
from flask import url_for ,render_template,request,redirect
import db
from db import ibm_db
app = Flask(__name__)
app.secret_key ='AAnbb123--++'
@app.route('/')
def home():
    return render_template("index.html")

@app.route('/about')
def about_us():
    return render_template("about.html")
@app.route('/category')
def category():
    return render_template("category.html")
@app.route('/joblist')
def joblist():
    return render_template("job-list.html")
```



```
@app.route('/jobdetail')
def jobdetail():
    return render_template("job-detail.html")
@app.route('/testimonial')
def testimonial():
    return render_template("testimonial.html")
@app.route('/404')
def fourohfour():
    return render_template("404.html")
def contact():
    return render_template("contact.html")

#login
@app.route('/login',methods = ['GET'])
def login():
    global userid
    msg = ''
    if request.method == 'GET':
        email = request.args.get("email")
        password = request.args.get("password")

        sql = "SELECT * FROM USERDETAILS WHERE email = ? AND password = ?"
        stmt = ibm_db.prepare(db.conn,sql)

        ibm_db.bind_param(stmt,1,email)
        ibm_db.bind_param(stmt,2,password)
        ibm_db.execute(stmt)
        account = ibm_db.fetch_assoc(stmt)
        print(account)
        if account:
            return redirect(url_for("index.html"))
        else:
            msg = 'Invalid details. Please check the Email ID - Password combination.!'
            return render_template("home.html",msg=msg)

#sign-up
@app.route('/register', methods=['GET','POST'])
def register():
    if request.method == 'POST':
        name = request.form['name']
        phone = request.form['Phone']
        email = request.form['email']
        password = request.form['password']
        sql = "SELECT * FROM USERDETAILS WHERE email = ?"
        stmt = ibm_db.prepare(db.conn, sql)
        ibm_db.bind_param(stmt,1,email)
        ibm_db.execute(stmt)
        account = ibm_db.fetch_assoc(stmt)
        print(account)
        if account:
            msg='Job Recommender Account Already exist.kindly login!'
            return render_template("home.html",msg=msg)

        else:
```



```
            sql ="INSERT INTO USERDETAILS(NAME,PHONE,EMAIL,PASSWORD)
VALUES('{0}','{1}','{2}','{3}')"

            res = ibm_db.exec_immediate(db.conn,sql.format(name,phone,email,password))
            msg='registration successful'
            return render_template("home.html",msg=msg)

    return render_template("register.html")

if(__name__=='__main__'):
     port = os.environ.get("PORT",5000)
     app.run(debug=True)
```

GITHUB LINK

https://github.com/IBM-EPBL/IBM-Project-894-1658329376