PROJECT REPORT SUBMISSION

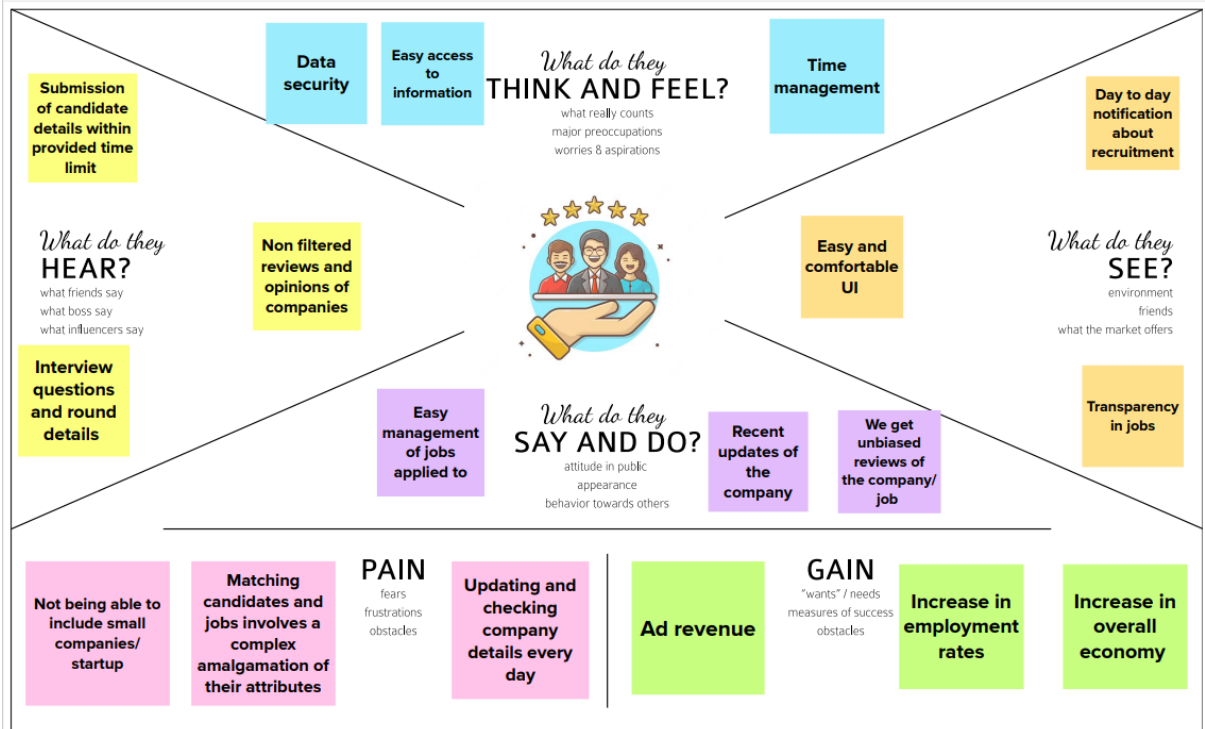| Date	19 November 2022
Team ID	PNT2022TMID32708
Project Name	Job/Skill Recommender

IDEATION PHASE

1. **Literature Survey**

   A survey on various papers published by professionals regarding the topic to further our understanding of how to go ahead with the project of Job and Skill Recommender.

2. **Empathy Map**

   A diagrammatic Representation of our Project and the Effects it has on the Society as unemployment is at an all time high due to the Pandemic.
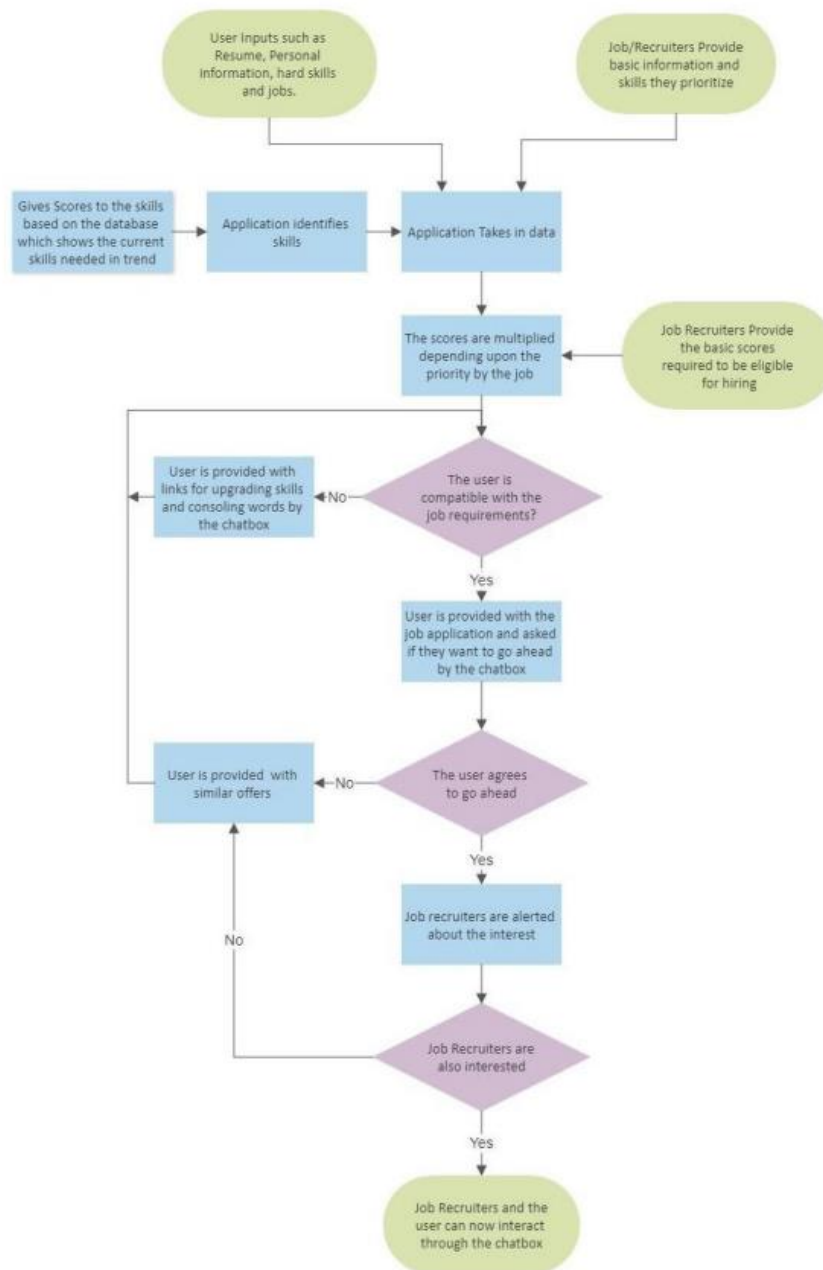

3. **Ideation**

   An in-detail explanation of the web application, its key features as well as our priorities while making the application.

PROJECT DESIGN PHASE 1

1. **Proposed Solution**

   A paper to further emphasize the novelty, Customer Satisfaction, Uniqueness and scalability of our solution such as using skill score and direct interaction with the company.

2. **Problem Solution Fit**

   A schematic Representation of who the web application is for, Root Cause of the problem i.e., Lack of transparency of the hiring Companies, Emotions of the web application users regarding the Job/Skill recommender.

3. **Solution Architecture**

   A diagrammatic representation for easier understanding of how the web application works and how the users and company employees interact, along with the and easier understanding of the method used to select employees based on their Skills.

Flowchart text:

- User Inputs such as Resume, Personal Information, hard skills and jobs.
- Job/Recruiters Provide basic information and skills they prioritize
- Gives Scores to the skills based on the database which shows the current skills needed in trend
- Application identifies skills
- Application Takes in data
- The scores are multiplied depending upon the priority by the job
- Job Recruiters Provide the basic scores required to be eligible for hiring
- User is provided with links for upgrading skills and consoling words by the chatbox
- The user is compatible with the job requirements? — No
- Yes
- User is provided with the job application and asked if they want to go ahead by the chatbox
- User is provided with similar offers
- The user agrees to go ahead — No
- Yes
- Job recruiters are alerted about the interest
- Job Recruiters are also interested — No
- Yes
- Job Recruiters and the user can now interact through the chatbox

I am	I'm trying to	But	Because	Which makes me feel
A fresher or a Job seeker	find a job which matches with my skillset and helps me unlock my full potential	finding jobs which match my skillset is tough to find in the market	most of the companies prefer to hire and train the employees according to thier needs	helpless and frustrated

PROJECT DESIGN PHASE 2

1. **Customer Journey**
   A detailed representation of Steps, Interactions, Goals and Motivations, Positive moments, Negative moments and Areas of Opportunity for the web application.

2. **Functional Requirement**
   An explanation of Functional and non-Functional requirements of the web Application.

3. **Data Flow Diagrams**
   A traditional visual representation of how the information flows within the web application, it is a neat and clear DFD that 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.
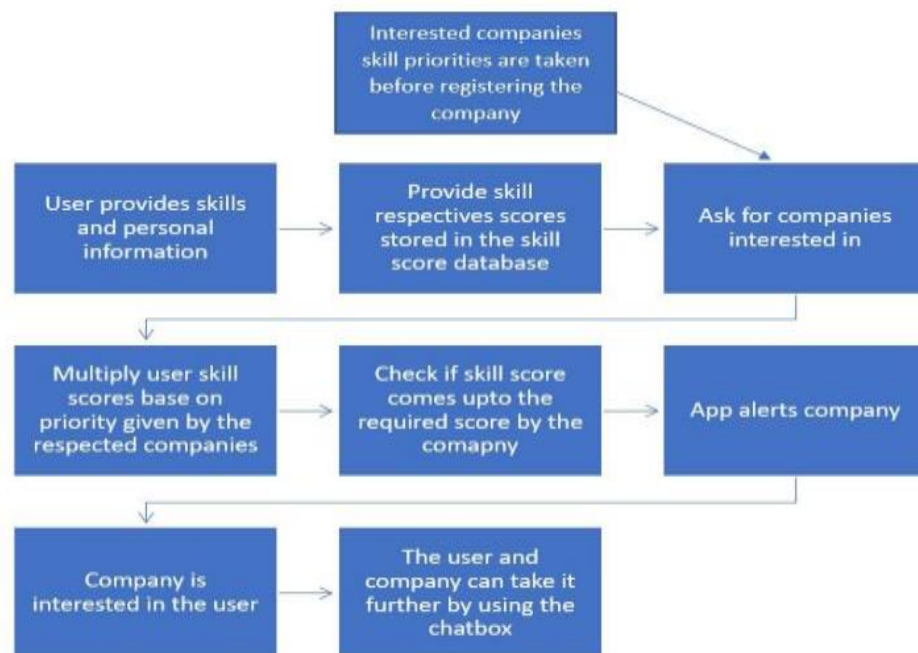
4. **Technology Architecture**
   It has the Architectural Diagram as well the Technologies used to implement the Web application.
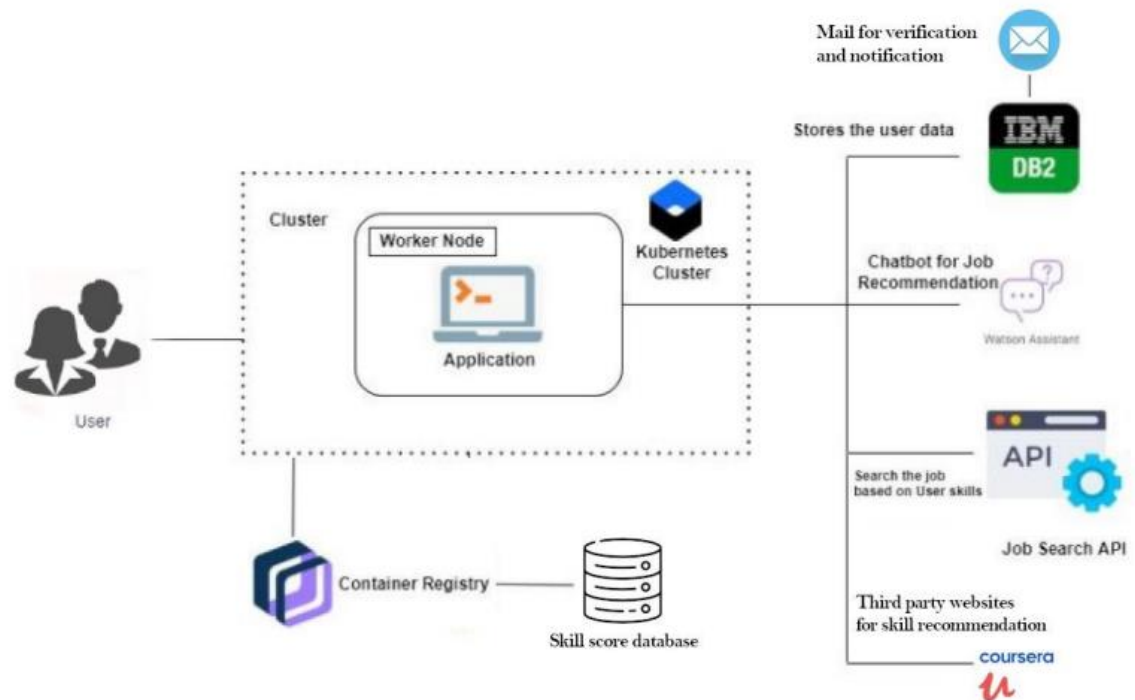
PROJECT PLANNING PHASE

1. <u>Prepare Milestone and Activity List</u>
   Compilation and detailed explanation of all the tasks submitted till date.
2. <u>Sprint Delivery Plan</u>
   Activity about what to do in further plans and how the web application has been divided into Further sprints.
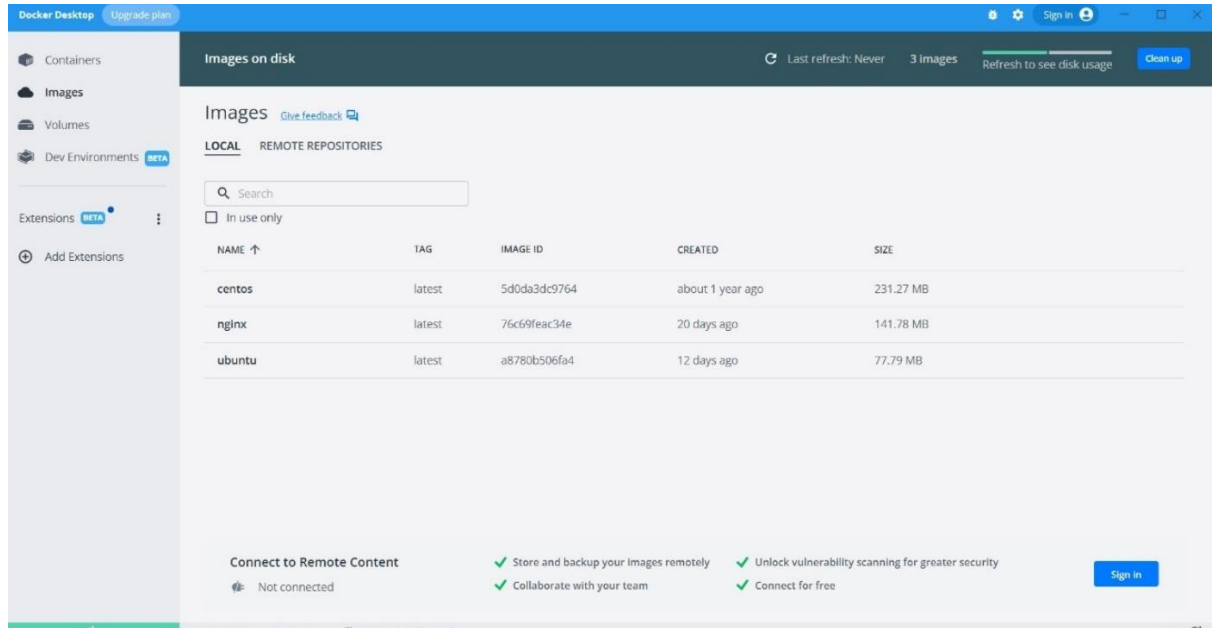
SETTING UP APPLICATION ENVIROMENT

1. Create Flask Project
2. Create IBM Cloud Account
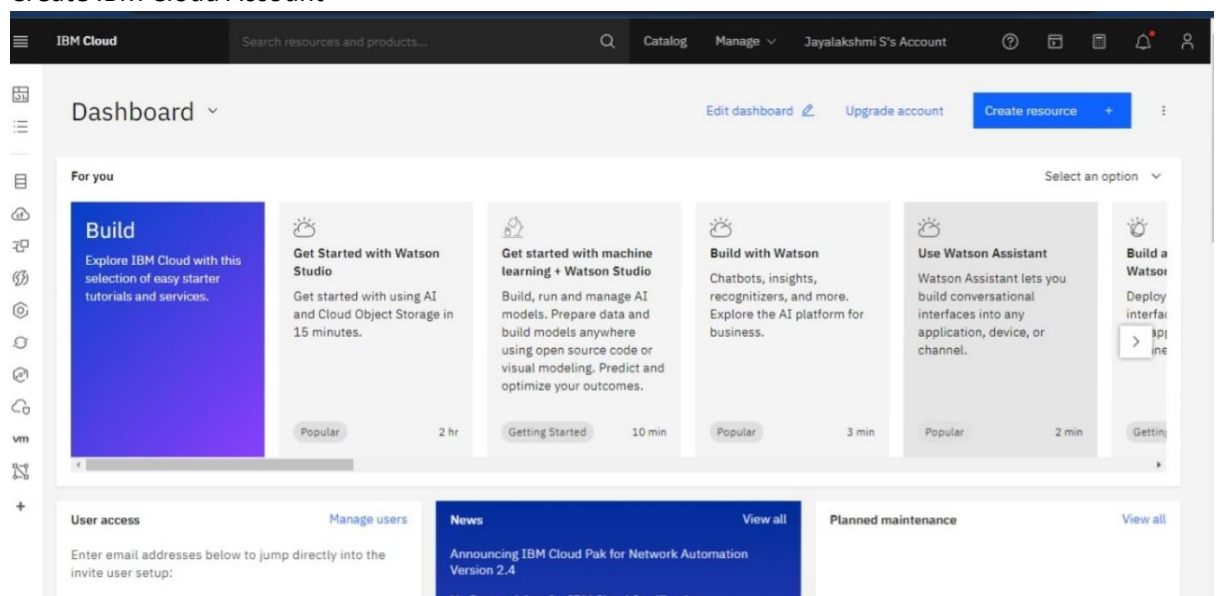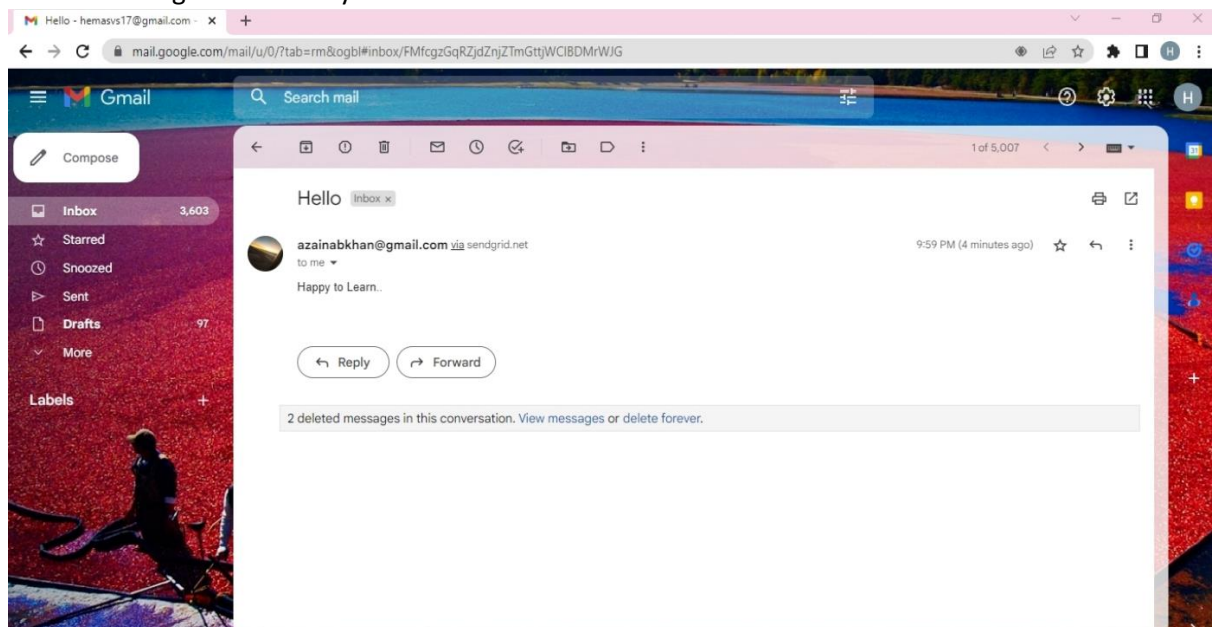

3. Create IBM Cloud CLI

4. Docker CLI Installation

5. Create an account In SendGrid

IMPLEMENTING WEB APPLICATION

1. Create UI To Interact with Application
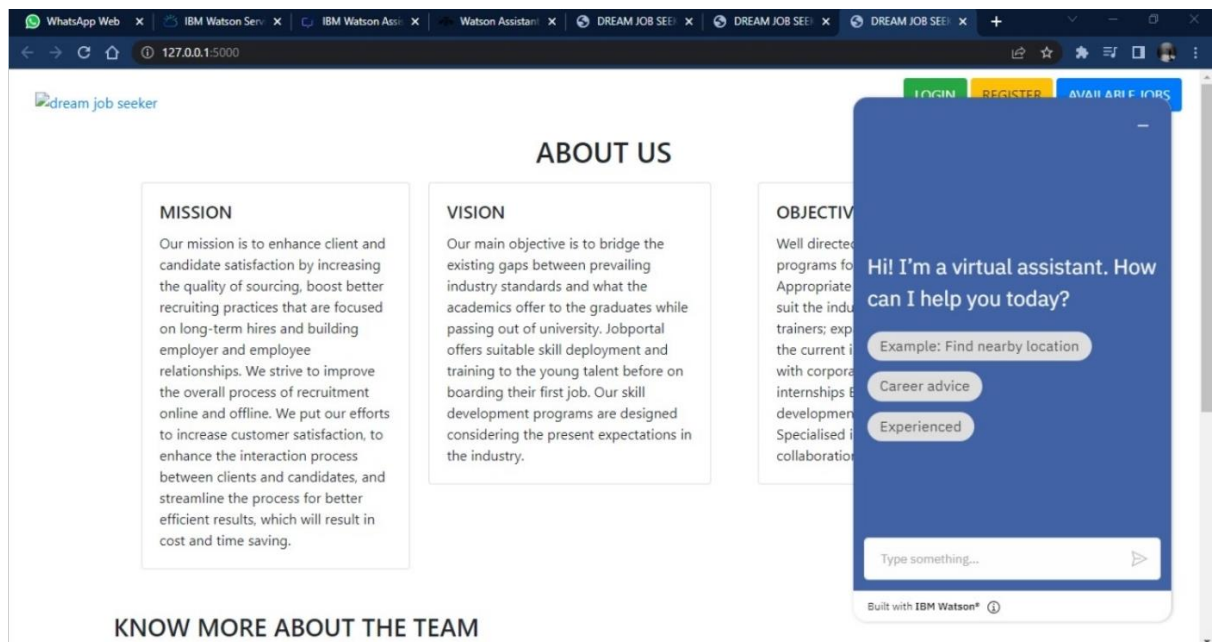2. Create IBM DB2 and Connect with Python

INTEGRATING SENDGRID SERVICE

1. SendGrid Integration with Python Code

DEVELOPING A CHATBOT

1. Building Chatbot and Integrate with App

DEPLOYMENT OF APP IN IBM CLOUD

1. Containerize the App
2. Upload Image to IBM Container Registry
3. Deploy in Kubernetes Cluster

PROJECT DEVELOPMENT PHASE

1. Delivery of Sprint 1
   - Creating the UI as well as the home page.
   - Creating a registration page for the user
   - Saving the users information onto the Database
2. Delivery of Sprint 2
   - Adding a chatbot to make the webpage further interactive
   - Asking the user about how they want to proceed with application
   - Successful registration and addition of users mail id
3. Delivery of Sprint 3
   - Addition of Skill scores
4. Delivery of Sprint 4
   - Deployment of the web application