



# **SKILL AND JOB RECOMMENDER APPLICATION**



## **HX8001 - PROFESSIONAL READINESS FOR INNOVATION, EMPLOYABILITY AND ENTREPRENEURSHIP**

### **REPORT**

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## **CHAPTER-1**

### **1. INTRODUCTION**

#### **1.1 Project Overview**

This web application to recommend a job and skills to the users and its categories using the chatbot. It is make the availability of job easier for the customer to access the job based on their skills. The chatbot will recommend the skills based on their job. It will have more categories of jobs with based on their skills. We propose an chatbot system which operates as a personal assistant for Skill and Job Recommender Application.

#### **1.2 Purpose**

Main purpose of the project is to search the job based on their skills and give a clear idea and suggestion to the user using the chatbot. Recommend skills based on the user request using chatbot. Chatbot cotains of different categories for the user.

### **2.LITERATURE SURVEY**

#### **2.1 Existing Problem**

In an existing platform the structure of an application is not clearly defined. In some of the applications there is an less availability of data and those application cannot recommend the more skills and jobs based on the requirements of the user. There requires more time to access the data. There requires a huge amount of time to response for the users request. There is an less accuracy and it can suggest the skills and job approximate to the user reques. It can consists of very less datasets.

#### **2.2 References**

[1] Wen O Chen, pan Zhou,Shaokang Dong, shimin Gong, menglan Hu, Kehao Wang, And Wu, Tree-Based Contextual Learning for Online Job or Candidate Recommendation With Big Data Support in Professional Social Networks, IEEE/Trans. Data Mining., Nov 2018, vol. 6,no. 2, pp77725-77739.

- [2] A. Calvo-Armengol. Job contact networks. *Journal of Economic Theory*, 115, 2004.
- [3] [Shaha T Al-Otaibi and Mourad Ykhlef. 2012. A survey of job recommender systems. *International Journal of Physical Sciences* , Vol. 7, 29 (2012), 5127–5142.
- [4] Deepani B. Guruge, Rajan Kadel, and Sharly J. Halder: The State of the Art in Methodologies of Course Recommender Systems—A Review of Recent Research. *Data* 6, no. 2: 18. (2021) 17.
- [5] Slamet, C., Andrian, R., Maylawati, D.S., Dharmalaksana, W., Ramdhani, M. et al. (2018) Web scraping and naïve bayes classification for job search engine in: *IOP Conference Series: Materials Science and Engineering* vol. 288 p. 012038 IOP Publishing.
- [6] Anna Giabelli, Lorenzo Malandri, Fabio Mercorio, Mario Mezzanzanica, and Andrea Seveso. Skills to Job: A recommender system that encodes job offer embeddings on graph databases. *Applied Soft Computing*, 101:107049, 2021.
- [7] N Deniz, A Noyan, and O G Ertosun. "Linking Person-job Fit to Job Stress: The Mediating Effect of Perceived Person-organization Fit". In: *Procedia - Social and Behavioral Sciences* 2017 (2015), pp. 369–376.
- [8] Guo, Xingsheng, Jerbi, Housseem, O' Mahony, Michael P. : An Analysis Framework for Content-based Job Recommendation. 22nd International Conference on Case-Based Reasoning (ICCBR), Cork, Ireland, 29 September - 01 October 2014, 2014.
- [9] S T Al-Otaibi and M. Ykhlef, "A survey of job recommender systems," *International Journal of the Physical Sciences*, vol. 7(29), pp. 5127-5142, July, 2012.
- [10] G"olec, A., and Kahya, E. 2007. A fuzzy model for competency-based employee evaluation and selection. *Computers & Industrial Engineering* 52:143–161.

## **2.3 Problem Statement Definition**

The Skill and Job recommender systems for job recruiting domain have emerged and enjoyed explosive growth in the last decades. User profiles and recommendation technologies in the Skill and Job recommender system have gained attention and investigated in academia and implemented for some application cases in industries. In this application, we introduce some basic concepts of user profile and some common recommendation technologies based on the user requirements.

## **3.IDEATION AND PROPOSED SYSTEM**

### **3.1 Empathy Map Canvas**

Our project can be developed using the chatbot. It consists of all the requirements for the user and the enough options of skills and job for their search. Initially the user can login to the web application and can use the chatbot to make the request based on their requirements and it will return the suitable skills and jobs based on their requirements. Finally the user can select with their interest using the recommendation of the chatbot.

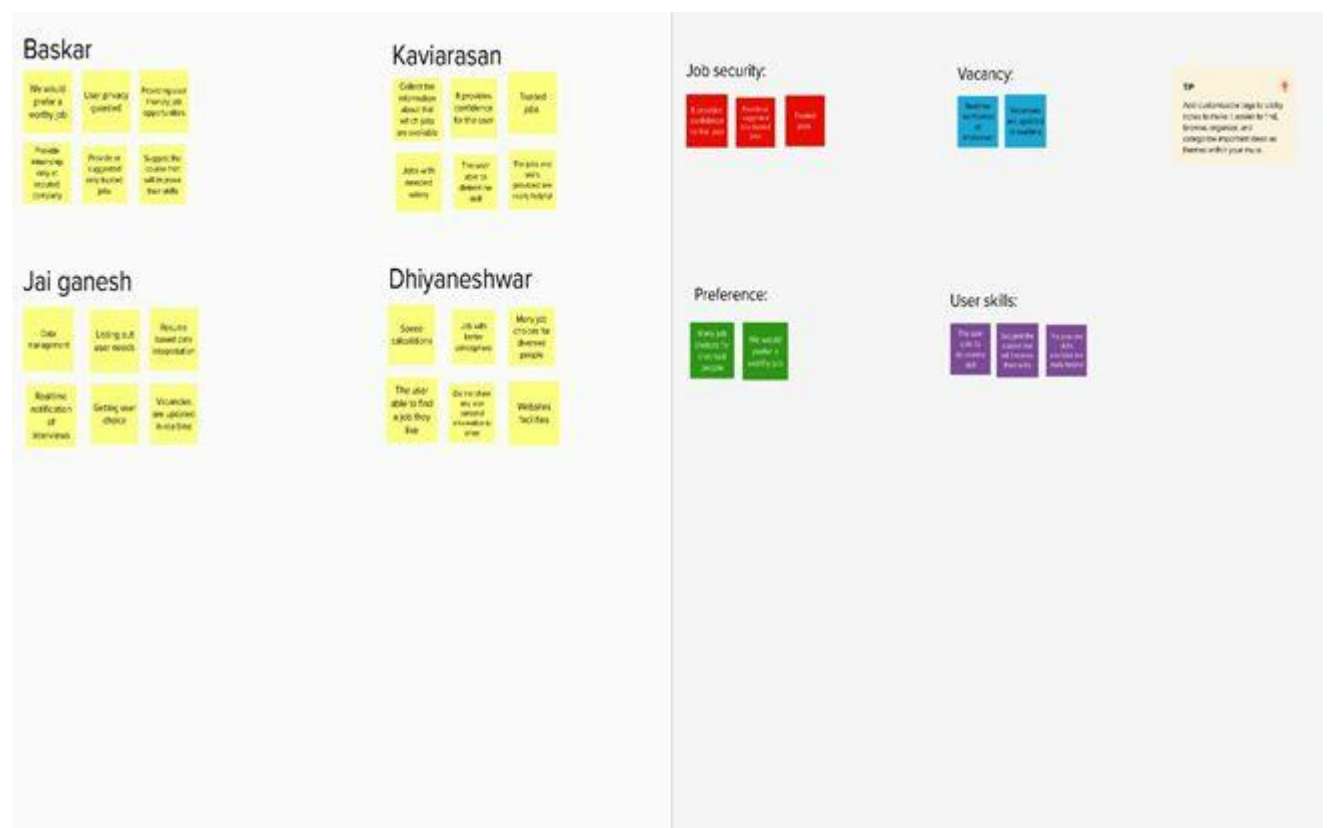
## **3.IDEATION & PROPOSED SOLUTION**

### 3.1 EMPATHY MAP CANVAS

Our project can be developed using the chatbot. It consists of all the requirements for the user and the enough images for their search. Initially the user can login to the web application and can use the chatbot to make the request based on their requirements and it will show the variety of fashion products. Finally the user can select with their interest using the recommendation of the chatbot.

### 3.2 Ideation & Brainstroming

Our project is a user-friendly interface and we trained the Chatbot in our web application. There is an enough options are provided for the users. This application can be accessed in different platform. All the data are stored in the database and data base can be responsive quickly based on the users request. Chatbot can be build with many options it can recommend the product based on user need.



### 3.2.1 Idea prioritization

In this idea prioritisation the basic ideas can be implemented to satisfy the requirements of the user. Initially the user can login to our application for searching the skills and jobs based on their needs. The Chatbot can quickly respond to the user request. It has user-friendly interface so the user can easily access the jobs and skills in our application. The data of the user can be stored in the cloud storage. Chatbot can reduce the time of the user. Then the database can be quickly respond to the user request and by using our application. Our application can be easily used in any platform at anywhere and anytime.



### 3.3 PROPOSED SOLUTION

#### PROPOSED SOLUTION-I



S. No	Parameter	Description
1	Problem statement(problem to be solved)	I am Student I’m trying to get a job in testing But I am not having a practical Knowledge Because the Subject is not having practical session Which makes me feel unapplicable for the job.
2	Idea/solution description	Not having the proper knowledge about software testing. So, I can’t able to get the job. For this I want to gain the knowledge about testing.
3	Novelty/Uniqueness	The problem is occurred due lack of practical knowledge in software testing.so , it take time to get a job.
4	Social impact/customer satisfaction	By doing more course on software testing , we get a job without any rejections.
5	Business model(Revenue model)	By doing course, we gain knowledge on software testing and it helps increase the resume of Job application.
6	Scalability of the solution	After solving this problem ,we gets the benefits of permanent jobs and decent salary.

#### PROPOSED SOLUTION-II





S.No	Parameter	Description
1	Problem statement(problem to be solved)	I am a Programmer and I am trying to get a job in the company But lack in communication Because I feel doubtful when I speak English Which makes me feel frustrated.
2	Idea/solution description	The problem is caused due to lack in English speaking skill. so, I want to improve my communication with others by trying to speak in English and reading English newspapers daily.
3	Novelty/Uniqueness	To recover this problem it time to develop the English speaking skill. And it consumes more time to gain knowledge.
4	Social impact/customer satisfaction	By. improving our skill we gain more respect in our society and easily we can get the job
5	Business model(Revenue model)	It helps to increase the business knowledge of the company.
6	Scalability of the solution	After solving the problem we will not feel doubtful when we speak and we will not get frustrated.

### PROPOSED SOLUTION-III



S.No	Parameter	Description
------	-----------	-------------

1	Problem statement(problem to be solved)	I am a web content creator and I am trying to get a job in reputed company But I couldn't get a job Because the company has enough web content developers and Which makes me feel out of luck and worthless.
2	Idea/solution description	The problem is caused due to more Web content creators are placed in the company which I am trying to get a job. The above mentioned problem is clear when the vacancy is available in that company.
3	Novelty/Uniqueness	The problem you marked is rarely occurs in the company. So, it take time to disable the problem
4	Social impact/coustomer satisfaction	The employee whose work is lagging in their company can be replaced by other talented new employee
5	Business model(Revenue model)	By replacing the employee it helps to increase the reputation of the company
6	Scalability of the solution	After solving this problem the company gain the talented employee and that employee gets the chance to work in his dreamed company.

## PROPOSED SOLUTION-IV



S.No	Parameter	Description
1	Problem statement(problem to be solved)	I am student and I'm trying to get a part time job& i know programming But I don't get a job which I expected Because lack of experience, Which makes me feel worthless.
2	Idea/solution description	The problem is caused due to not getting the graduation certificate.T he above mentioned problem can be solved after getting graduation and eligibility

3	Novelty/Uniqueness	We can't do this problem any more p because we want to be graduated to do work in the company. Graduation is the basic need . So, We want to wait until we finish our graduation. So, Time is consumed to get the job in the company
4	Social impact/coustomer satisfaction	By getting graduated,we increase our respect as a student in the society and eligibility to get a job in the reputed company
5	Business model(Revenue model)	Being graduated, not only we prefer for programmer job , we can also apply for more job's in the IT field and computer programming jobs
6	Scalability of the solution	After getting graduated, we get more benefits to choose among several jobs

## 4. REQUIREMENT ANALYSIS

### 4.1 Functional Requirements

#### Sign in / Login:

Register with username, password.

#### Profile Registration:

Register with username, password, email, qualification, skills. This data will be stored in a database.

#### Job profile display:

Display job profiles based on availability, location, skills.

#### Chatbot:

A chat on the webpage to solve user queries and issues.

#### Job Registration:

The company's registration/Description details will be sent to the registered email id of the user.

**Logout:**

Use logout option after completing job registration process.

**4.2 Non-Functional Requirements**

**Usability:** The webpage will be designed in such a way that any non-technical user can easily navigate through it and complete the job registration work.

**Security:**

Using of python flask to cloud connect will provide security to the project. Database will be safely stored in DB2.

**Reliability:**

To make sure the webpage doesn't go down due to network traffic.

**Performance:**

Focus on loading the webpage as quickly as possible irrespective of the number of user/integrator traffic.

**Availability:**

The webpage will be available to all users (network connectivity is necessary) at any given point of time.

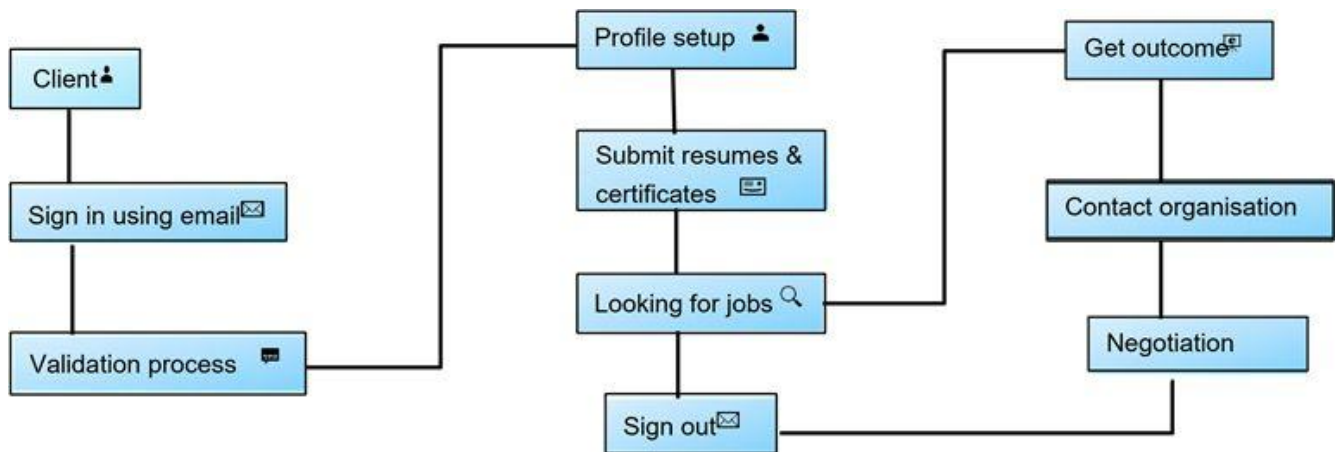
**Scalability:**

Increasing the storage space of database can increase the number of users. Add some features in future to make the webpage unique and attractive.

## **5. PROJECT DESIGN**

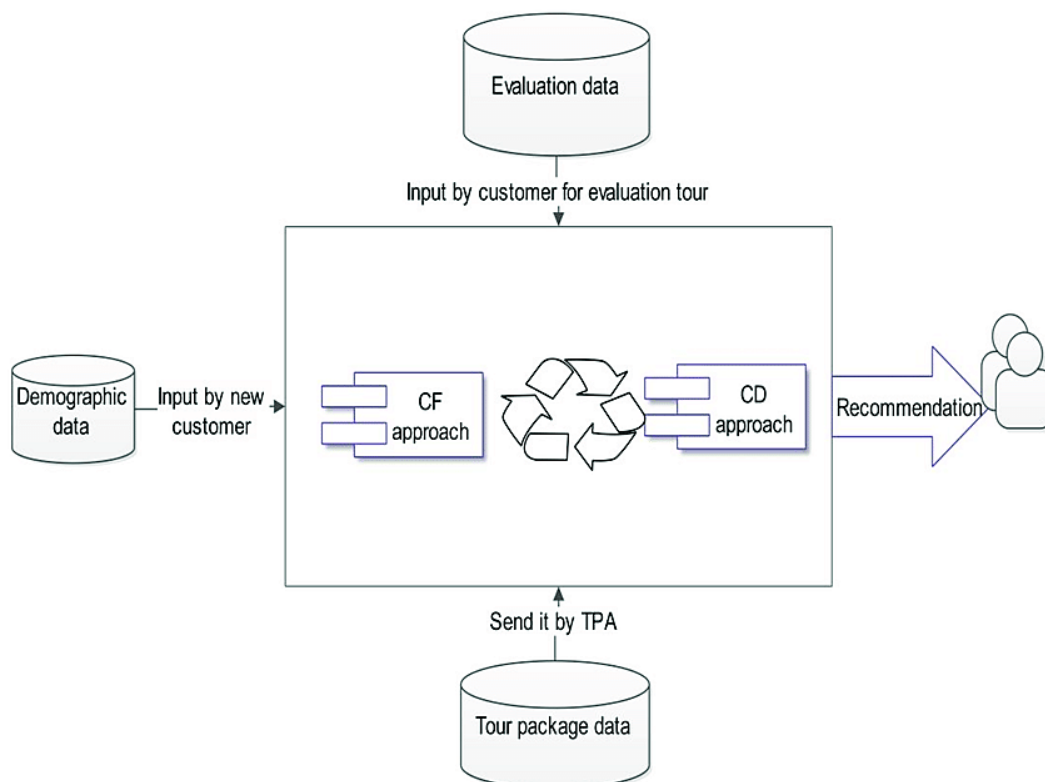
### **5.1 Data Flow Diagram**

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

In this webapplication the user can enter their credentials in the register or login page. Then the chatbot will recommend the related job and skills to the user. All the details can be stored in the database. The admin can change or remove the options in the webapplication.



## 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, phone number, password.	I can access my account /profile.	High	Sprint-1
		USN-2	As a user, I will receive confirmation email once I have registered for the application	I can receive verification email for confirmation.	High	Sprint-1
		USN-3	As a user, I can register for the application through social media site/account.	I can register & access my account/profile with social media account.	Low	Sprint-2
		USN-4	As a user, I can register for the application through Gmail, Yahoo mail, Outlook...	I can register the app with email account.	Medium	Sprint-1
	Login	USN-5	As a user, I can log into the application by entering email & password.	I can register & access user profile/account with Gmail account.	High	Sprint-1
	Requesting/recipient	USN-6	As a recipient, I can request the blood group for which I need plasma.	I can get plasma through Donation center while plasma is available.	High	Sprint-2
Customer (Webuser)	Profile	USN-7	As a user, I can see registration page, login page and chat bot for which the user can access to donate and to request for the required blood group plasma.	I can login through email and social media account for registration.	Medium	Sprint-2
Customer Care Executive	Help desk /User support	USN-8	As a customer care executive, I can solve the queries of the users.	I can reply to their queries and solve their related problems.	High	Sprint-3
Administrator	Registration	USN-9	As an Administrator, I can view the database of the registered users.	I can check and verify the persons who are the registered their email Id's and information's.	Medium	Sprint-4
	Dashboard	USN-10	As an Administrator, I can view how many members requested for what kind of blood group for plasma.	I can check the number of requirements and monitor the availability.	Low	Sprint-4

Chabot	User-Interface	USN-11	In addition to the customer care executive, I can solve all the queries of the donor as well as the recipient.	I can reply to all the Questions which are asked by the users that are related to the service we provided.	Medium	Sprint-4
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## CHAPTER-6

### 6.1 SPRINT PLANNING AND ESTIMATION

#### Project Tracker:

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).

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

## 6.2 SPRINT DELIVERY SCHEDULE

Sprint	Functional Requirement (Epic)	User Story Number	User Story / Task	Priority	Acceptance criteria	Team Members
Sprint-1	UI Design	USN-1	As a user, I can see and experience an awesome user interface in the website	Medium	Better Impression about a website	Baskar L Kaviarasan N Dhiyaneshwar R Jai Ganesh S
Sprint-1	Registration	USN-2	As a user, I can register for the application by entering my email, password, and confirming my password.	High	I can access my account / dashboard	Baskar L Kaviarasan N Dhiyaneshwar R Jai Ganesh S
Sprint-1		USN-3	As a user, I will receive confirmation email once I have registered for the application	High	I can receive confirmation email & click confirm	Baskar L Kaviarasan N Dhiyaneshwar R Jai Ganesh S

Sprint-1		USN-4	As a user, I can register for the application through Facebook	Low	I can register & access the dashboard with Facebook Login	Baskar L Kaviarasan N Dhiyaneshwar R Jai Ganesh S
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Sprint-1		USN-5	As a user, I can register for the application through Gmail	Medium	I can receive confirmation email & click confirm	Baskar L Kaviarasan N Dhiyaneshwar R Jai Ganesh S
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Sprint-1	Login	USN-6	As a user, I can log into the application by entering email & password	High	I can access my account / dashboard	Baskar L Kaviarasan N Dhiyaneshwar R Jai Ganesh S
Sprint-1	Flask	USN-7	As a user, I can access the website in a second	High	I can access my account / dashboard	Baskar L Kaviarasan N Dhiyaneshwar R Jai Ganesh S

Sprint	Functional Requirement (Epic)	User Story Number	User Story / Task	Priority	Acceptance criteria	
Sprint-1	Dashboard	USN-8	As a user, If I Logged in correctly, I can view my dashboard and I can navigate to any pages which are already listed there.	High	I can access all the pages/ dashboard	Baskar L Kaviarasan N Dhiyaneshwar R Jai Ganesh S
			<b>Submission Of Sprint-1</b>			
Sprint-2	User Profile	USN-9	As a user, I can view and update my details	Medium	I can modify my details/data	Baskar L Kaviarasan N Dhiyaneshwar R Jai Ganesh S
Sprint-2	Database	USN-10	As a user, I can store my details and data in the website w	Medium	I can store my data	Baskar L Kaviarasan N Dhiyaneshwar R Jai Ganesh S
Sprint-2	Cloud Storage	USN-11	As a user, I can upload my photo, resume and much more in the website.	Medium	I can Upload my documents and details	Baskar L Kaviarasan N Dhiyaneshwar R Jai Ganesh S
Sprint-2	Chatbot	USN-12	As a user, I can ask the Chatbot about latest job openings, which will help me and show the recent job openings based on my profile	High	I can know the recent job openings	Baskar L Kaviarasan N Dhiyaneshwar R Jai Ganesh S

Sprint-2	Identity-Aware	USN-13	As a User, I can access my account by entering by correct login credentials. My user credentials is only displayed to me.	High	I can have my account safely	Baskar L Kaviarasan N  Dhiyaneshwar R Jai Ganesh S
			<b>Submission of Sprint-2</b>			

Sprint	Functional Requirement (Epic)	User Story Number	User Story / Task	Priority	Acceptance criteria	Team Members
Sprint-3	Sendgrid service	USN-14	As a user, I can get a notification or mail about a job opening with the help of sendgrid service.	Medium	I can get a notification in a second.	Baskar L Kaviarasan N Dhiyaneshwar R Jai Ganesh S
Sprint-3	Learning Resource	USN-15	As a user, I can learn the course and I will attain the skills which will be useful for developing my technical skills.	High	I can gain the knowledge and skills	Baskar L Kaviarasan N Dhiyaneshwar R Jai Ganesh S
Sprint-3	Docker	USN-16	As a user, I can access the website in any device	High	I can access my account in any device	Baskar L Kaviarasan N Dhiyaneshwar R Jai Ganesh S
Sprint-3	Kubernetes	USN-17	As a user, I can access the website in any device	High	I can access my account in any device	Baskar L Kaviarasan N Dhiyaneshwar R Jai Ganesh S

Sprint-3	Deployment in cloud	USN-18	As a user, I can access the website in any device	High	I can access my account in any device	Baskar L Kaviarasan N Dhiyaneshwar R Jai Ganesh S
Sprint-3	Technical support	USN-19	As a user, I can get a customer care support from the website which will solve my queries.	Medium	I can tackle my problem & queries.	Baskar L Kaviarasan N Dhiyaneshwar R Jai Ganesh S

Sprint	Functional Requirement (Epic)	User Story Number	User Story / Task	Priority	Acceptance criteria	Team Members
Sprint-4	System testing	USN-17	As a user, I can access the website without any interruption	High	I can access the website without any interruption	Baskar L Kaviarasan N Dhiyaneshwar R Jai Ganesh S
Sprint-4	Correction	USN-18	As a user, I can access the website without any interruption	High	I can access the website without any interruption	Baskar L Kaviarasan N Dhiyaneshwar R Jai Ganesh S

Sprint-4	Acceptance testing	USN-19	As a user, I can access the website without any interruption	High	I can access the website without any interruption	Baskar L Kaviarasan N Dhiyaneshwar R Jai Ganesh S
			<b>Submission of Sprint-4</b>			

			<b>Submission of Sprint-3</b>			
Sprint-4	Unit Testing	USN-15	As a user, I can access the website without any interruption	High	I can access the website without any interruption	Baskar L Kaviarasan N Dhiyaneshwar R Jai Ganesh S
Sprint-4	Integration testing	USN-16	As a user, I can access the website without any interruption	High	I can access the website without any interruption	Baskar L Kaviarasan N Dhiyaneshwar R Jai Ganesh S

## CHAPTER-7

### CODING AND SOLUTIONING

#### 7.1 FEATURE CODE

Admin login:

```
@import url('https://fonts.googleapis.com/css2?family=Limelight&family=...');
body {
    margin: 0;
    padding: 0;
    font-family: 'Limelight', cursive;
    background-image: url("../static/img3.jpg");
}
header {
    height: 100vh;
    -webkit-background-size: cover;
    background-size: cover;
    background-position: center center;
    position: relative;
}

.nav-area {
    width: 57%;
    position: absolute;
    top: 2%;
    right: 0%;
    list-style: none;
}
.nav-area li {
    display: inline-block;
    margin: 10px;
    padding: 13px 25px;
}
.nav-area li a {
    color: rgb(227, 222, 222);
    text-decoration: none;
    background-color: rgb(26, 29, 28);
    box-shadow: 2px 2px 5px white;
    padding: 5px 20px;
```

```

    box-shadow: 2px 2px 5px white;
    padding: 5px 20px;
    font-family: 'Source Serif Pro', serif;

    font-size: 16px;
    text-transform: uppercase;
    border-radius: 5px;
}

.nav-area li a:hover {
    background: rgb(10, 10, 10);
    color: rgb(220, 57, 57);
    box-shadow: 2px 2px 5px rgb(202, 81, 81);
    cursor: pointer;
}

.hello {
    position: fixed;
    width: 100vw;
    height: 100vh;
    background-position: center center;
    background-repeat: no-repeat;
    background-attachment: fixed;
    -webkit-background-size: cover;
    background-size: cover;
    z-index: -1;
}

.contact-form {
    position: absolute;
    top: 55%;
    left: 50%;
    border-radius: 20px;
    box-shadow: 2px 2px 5px rgb(232, 221, 221);
    transform: translate(-50%, -50%);
    width: 300px;
    height: 250px;
}

```

```
height: 350px;
padding: 80px 40px;
background: rgba(0, 0, 0, 0.5);
}

.contact-form h2 {
position: relative;
top: -25px;
margin: 0;
padding: 0 0 20px;
color: #fff;
text-align: center;
text-transform: uppercase;
}

.contact-form p {
margin-top: 3px;
padding: 0;
font-weight: bold;
color: #fff;
}

.contact-form input {
width: 100%;
margin-bottom: 20px;
}

.contact-form input[type="password"] {
border: none;
border-bottom: 1px solid #fff;
background: transparent;
outline: none;
height: 40px;
color: #fff;
font-size: 16px;
}

.contact-form input[type="text"]{
border: none;
```



```
border-bottom: 1px solid #fff;
background: transparent;
outline: none;
height: 40px;
color: #fff;
font-size: 16px;
}
.contact-form input[type="password"]:focus{
border-color: black;
}
.contact-form input[type="text"]:focus{
border-color: black;
}

.contact-form input[type=submit] {
height: 30px;
color: #fff;
font-size: 15px;
background: #161615;
box-shadow: 2px 2px 5px rgb(226, 223, 223);
cursor: pointer;
border-radius: 25px;
border: none;
outline: none;
margin-top: 15%;
}
.contact-form input[type=submit]:hover{
background-color: #e61616;
transition: 0.5s ease;
transform: translateY(10px);
}
```

## Admin Dashboard:

```
1  *{
2    margin: 0%;
3    padding: 0%;
4    box-sizing: border-box;
5    font-family: sans-serif;
6  }
7
8  body{
9    background-color: #222;
10 }
11 header{
12   height: 100vh;
13   background: url("C:\Users\aruna\Desktop\New folder\static\img10.jpg");
14   background-size: cover;
15   background-repeat: no-repeat;
16 }
17
18 .navigation{
19   position: fixed;
20   inset: 20px;
21   background: #ff282f;
22   width: 80px;
23   border-left: 10px solid #ff282f;
24   border-radius: 50px;
25   overflow: hidden;
26   box-shadow: 15px 15px 25px rgba(0,0,0,0.05);
27   transition: 0.5s;
28 }
29
30 .navigation.active{
31   width: 300px;
32   border-radius: 50px;
33 }
34
35 .navigation ul{
```

```
position: absolute;
top: 70px;
left: 0%;
width: 100%;
}

.navigation ul li{
position: relative;
list-style: none;
width: 100%;
border-top-left-radius: 30px;
border-bottom-left-radius: 30px;
}

.navigation ul li:hover{
background: #fff;
}

.navigation ul li:nth-child(1){
top: 20px;
margin-bottom: 40px;
background: none;
}

.navigation ul li:not(:first-child):hover::before
{
content: '';
position: absolute;
top: -20px;
right: 0;
width: 20px;
height: 20px;
background: transparent;
border-bottom-right-radius: 20px;
box-shadow: 7.5px 7.5px 0 7.5px rgb(255, 255, 255);
}
```

```
{
  content: '';
  position: absolute;
  bottom: -20px;
  right: 0px;
  width: 20px;
  height: 20px;
  background: transparent;
  border-top-right-radius: 20px;
  box-shadow: 7.5px -7.5px 0 7.5px ■ rgb(251, 251, 251);
}

.navigation ul li a{
  position: relative;
  display: block;
  width: 100%;
  display: flex;
  text-decoration: none;
  color: ■ antiquewhite;
}

.navigation ul li: hover: not(:first-child) a{
  color: ■ #222;
}

.navigation ul li a .icon{
  position: relative;
  display: block;
  min-width: 60px;
  height: 60px;
  line-height: 70px;
  text-align: center;
}

.navigation ul li a .icon ion-icon{
  font-size: 1.75em;
}
```

```

    transform: translateY(-5px);
    transition: 1s;
}

.toggle::after{
    content: '';
    position: absolute;
    width: 26px;
    height: 3px;
    border-radius: 3px;
    background: #365fa1;
    transform: translateY(5px);
    transition: 1s;
}

.navigation.active .toggle::before{
    transform: translateY(0px) rotate(-405deg);
}

.navigation.active .toggle::after{
    transform: translateY(0px) rotate(225deg);
}

.dash{
    position: fixed;
    inset: 300px;
    border-left: 10px solid #287bff;
    border-radius: 50px;
    overflow: hidden;
    top: 30%;

    height: 50%;
    width: 60%;
    font-size: 30px;

```

## CHAPTER-8

### TESTING

## 8.1 TEST CASE

Test case ID	Feature Type	Component	Test Scenario	Pre-Requisite	Steps To Execute	Test Data	Expected Result	Actual Result	Status	Comments	TC for Automation(Y/N)	BUG ID	Executed By
LoginPage_TC_001	Functional	Home Page	Verify user is able to see the Login/Signup page whenever get into the application		1.Enter URL and click go 2.Click on the login/signup page 3.Verify login/Signup by entering the details	-	Login/Signup page should display	Working as expected	Pass				kosalaraman
LoginPage_TC_002	UI	Home Page	Verify the UI elements in Login/Signup page		1.Enter URL and click go 2.Click on Login/signup and get into next respective page. 3.Verify login/Signup page with below UI elements: a.email text box b.password text box c.Login button d.New User? Create account link	-	Application should show below UI elements: a.email text box b.password text box c.Login button with orange colour d.New customer? Create account link	Working as expected	Pass				Kishore kumar
LoginPage_TC_003	Functional	Home page	Verify user is able to log into application with Valid credentials		1.Enter URL and click go 2.Click on login button 3.Enter Valid username/email in Email text box 4.Enter valid password in password text box 5.Click on login button	Username: demo@gmail.com password: 12345678	User should navigate to Donar/Recipient requesting page	Working as expected	pass				Madhankumar
LoginPage_TC_004	Functional	Login page	Verify user is able to log into application with Invalid credentials		1.Enter URL and click go 2.Click on login button 3.Enter Valid username/email in Email text box 4.Enter valid password in password text box 5.Click on login button	Username: demo@gmail.com password: Testing123	Application should show 'Incorrect email or password' validation message.	Working as expected	pass				Bharath
LoginPage_TC_005	Functional	Login page	Verify Admin is able to log into application with Valid credentials		1.Enter URL and click go 2.Click on login button 3.Enter Valid username/email in Email text box 4.Enter valid password in password text box 5.Click on login button	Username: adminrr@gmail.com password: admin@rrr	Admin should navigate to Donar/Recipient requesting page	Working as expected	pass				Kishore kumar
LoginPage_TC_006	Functional	Login page	Verify Admin is able to log into application with Invalid credentials		1.Enter URL(https://shopnizer.com/) and click go 2.Click on My Account dropdown button 3.Enter Invalid username/email in Email text box 4.Enter Invalid password in password text box 5.Click on login button	Username: adminrr@gmail.com password: Adminrr@	Application should show 'Incorrect email or password' validation message.	Working as expected	pass				kosalaraman

## 8.2 USER ACCEPTANCE TEST

### 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	Severity1	Severity2	Severity3	Severity4	Subtotal
By Design	10	4	2	3	20
Duplicate	1	0	1	0	2
External	2	2	1	1	6
Fixed	4	1	1	10	16
Not Reproduced	0	0	0	0	0
Skipped	1	1	0	1	3
Won't Fix	0	2	2	0	4
Totals	24	14	13	26	51

### 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	9	0	0	9
Client Application	10	0	0	10
Security	1	0	0	1
Outsource Shipping	0	0	0	0
Exception Reporting	9	0	0	9
Final Report Output	9	0	0	9
Version Control	1	0	0	1

## CHAPTER-9

### RESULT

#### 9.1 PERFORMANCE METRICS

- **Formal code metrics** - Such as Lines of Code (LOC), code complexity, Instruction Path Length, etc. In modern development environments, these are considered less useful.

- **Developer productivity metrics**—Such as active days, assignment scope, efficiency and code churn. These metrics can help you understand how much time and work developers are investing in a software project.
- **Agile process metrics**—Such as lead time, cycle time and velocity. They measure the progress of a dev team in producing working, shipping-quality software features.
- **Operational metrics**—Such as Mean Time Between Failures (MTBF) and Mean Time to Recover (MTTR). This checks how software is running in production and how effective operations staff are at maintaining it.
- **Test metrics**—Such as code coverage, percent of automated tests, and defects in production. This measures how comprehensively a system is tested, which should be correlated with software quality.
- **Customer satisfaction**—Such as Net Promoter Score (NPS), Customer Effort Score (CES) and Customer Satisfaction Score (CSAT). The ultimate measurement of how customers experience the software and their interaction with the software vendor.

## CHAPTER – 10

### ADVANTAGES AND DISADVANTAGES



## Advantages

- **Speed:** This website is fast and offers great accuracy as compared to manual registered keeping.
- **Maintenance:** Less maintenance is required
- **User Friendly:** It is very easy to use and understand. It is easily workable and accessible for everyone.
- **Fast Results:** It would help you to provide plasma donors easily depending upon the availability of it.

## Disadvantages

- **Internet:** It would require an internet connection for the working of the website.
- **Auto-Verification:** It cannot automatically verify the genuine users.

## CHAPTER-11 CONCLUSION

The efficient way of finding plasma donor for the infected people is implemented using the plasma donor website that is hosted on Aws platform. To ensure the smooth functioning of the website operations.

I have hosted the website in AWS platform to make sure the operations are running successfully AWS lambda function is used and to deploy the application AWS EC2 service is used.

## APPENDIX-14

### 14.1 SOURCE CODE

#### Index.Html

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

```

<head>
  <meta charset="UTF-8">
  <title>Skill/Job Recommender</title>
  <link rel="shortcut icon" type="image/jpg" href="../static/img3.jpg">
  <link href="https://fonts.googleapis.com/css2?family=Poppins:wght@400;600;700;900&display=
swap" rel="stylesheet">
  <link rel="stylesheet" href="../static/home.css">
</head>
<body>
  <header>
    <div class="wrapper">
      <ul class="nav-area">
        <li><a href="login.html">User Login</a></li>
        <li><a href="register.html">Register</a></li>
        <li><a href="userdashboard.html">Home</a></li>
      </ul>
    </div>
    <div class="welcome-text">
      <h1 data-text="Skill/Job Recommender">Skill/Job Recommender...</h1>
    </div>
    <br><br>
    <div class="quote">
      <h1>We're here to help you...</h1>
    </div>
  </header>
</body>
</html>

```

## Home.css

```

* {
  margin: 0;
  padding: 0;
  outline: none;
}
body {
  font-family: 'Poppins', sans-serif;
}
header {
  background-image: url(../static/home.jpg);
  height: 100vh;
  -webkit-background-size: cover;
  background-size: cover;
  background-position: center center;
  position: relative;
}

```

```
.wrapper{
  background: linear-gradient(0deg, #222224 0%, #39a4a4 100%);
  backdrop-filter: blur(60px);
  border: 1px solid rgba(155, 149, 162, 0.922);
  height: 17%;
}
```

```
.nav-area {
  width: 57%;
  position: absolute;
  top: 20%;
  right: 05%;
  list-style: none;
}
```

```
.nav-area li {
  display: inline-block;
  margin: 10px;
  padding: 13px 25px;
}
```

```
.nav-area li a {
  color: rgb(227, 222, 222);
  text-decoration: none;
  background-color: rgb(26, 29, 28);
  box-shadow: 2px 2px 5px white;
  padding: 5px 20px;
  font-family: 'Source Serif Pro', serif;
  font-size: 16px;
  text-transform: uppercase;
  border-radius: 5px;
}
```

```
.nav-area li a:hover {
  background: rgb(10, 10, 10);
  color: rgb(220, 57, 57);
  box-shadow: 2px 2px 5px rgb(202, 81, 81);
  cursor: pointer;
}
```

```
.welcome-text{
  min-height: 2vh;
  width: 60%;
  position: relative;
  justify-content: center;
  align-items: center;
  top: 28%;
  left: 28%;
}
```

```
.welcome-text h1{
  font-size: 60px;
  color: rgba(213, 211, 211, 0.052);
  -webkit-text-stroke: 2px #1a241f;
  text-shadow: 1px 1px 5px rgba(222, 216, 216, 0.685);
}
```

```

}
.welcome-text h1::before{
  content: attr(data-text);
  position: absolute;
  top: 0%;
  left: 0%;
  width: 100%;
  height: 100%;
  background: #F6F8F9;
  background: radial-gradient(circle farthest-corner at center center, #F6F8F9 0%, #67a9ca 30%,
#63b5f0 60%, #92c0ee 100%);
  -webkit-background-clip: text;
  -webkit-text-fill-color: transparent;
  -webkit-text-stroke: 3px #1c1e1ab9;
  overflow: hidden;
  border-right: 2px solid red;
  animation: animate 5s linear infinite;
}

@keyframes animate
{
  0%,10%,100%{
    width: 0%;
  }
  30%,70%,97%{
    width: 100%;
  }
}

.quote {
  position: absolute;
  width: 50%;
  left: 29%;
  top: 60%;
  text-align: center;
}

.quote h1 {
  text-align: center;
  color:rgb(232, 42, 42);
  text-shadow: 2px 2px 5px white;
  text-transform: uppercase;
  font-size: 25px;
  font-weight: bold;
  font-family: 'Libre Bodoni', serif;
  letter-spacing: 10px;
  animation: text 3s linear infinite;
}

```

Register.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>Registration</title>
  <link rel="shortcut icon" type="image/jpg" href="../static/img3.jpg">
  <link rel="stylesheet" href="../static/register.css">
</head>
<body>
  <header><div class="wrapper">
    <ul class="nav-area">
      <li><a href="#">Home</a></li>
      <li><a href="#">About</a></li>
      <li><a href="#">Contact</a></li>
      <li><a href="#">Registration</a></li>
    </ul>
    <div class="registration_form">
      <div class="title">
        Registration Form
      </div>
      <form action="/uploaddata" method="POST">
        <div class="form_wrap">
          <div class="input_grp">
            <div class="input_wrap">
              <label for="firstname">First Name</label>
              <input type="text" id="firstname" name="firstname" placeholder="firstname">
            </div>
            <div class="input_wrap">
              <label for="lastname">Last Name</label>
              <input type="text" id="lastname" name="lastname" placeholder="lastname">
            </div>
          </div>
          <div class="input_wrap">
            <label for="username">username</label>
            <input type="text" id="username" name="username" placeholder="username">
          </div>
          <div class="input_wrap">
            <label for="email">Email</label>
            <input type="email" id="email" name="email" placeholder="email">
          </div>
          <div class="input_wrap">
            <label for="password">Password</label>
            <input type="password" id="password" name="password" placeholder="password">
          </div>
          <div class="input_wrap">
            <label for="address">State</label>
            <input type="text" id="address" name="address" placeholder="state">
          </div>
          <div class="input_wrap">
            <input type="submit" value="Register Now" class="submit_btn">
          </div>
        </form>
      </div>
    </div>
  </div>

```

```

        </div>
    </form>
    <br>
    <span class="alert {{indicator}}">{{a}}</span>
    <div class="links" style="margin-top: 10px;">
        <p>Already a member? <a href="login.html" style="text-decoration: none; border-bottom:
1px solid rgb(231, 33, 33);border-radius: 0px;">Click here</a></p>
    </div>
</div>
</div>
</div>
</header>
</body>
</html>

```

## Register.css

```

@import url('https://fonts.googleapis.com/css2?family=Limelight&family=Merriweather&display=
swap');

*{
    margin: 0;
    padding: 0;
    box-sizing: border-box;
    list-style: none;
    font-family: 'Limelight', cursive;
}

header {
    background-image: url("../static/index.jpg");
    height: 100vh;
    -webkit-background-size: cover;
    background-size: cover;
    background-position: center center;
    position: relative;
}

.nav-area {
    width: 58%;
    position: absolute;

    top: 4%;
    right: 04%;
    list-style: none;
}

.nav-area li {
    display: inline-block;
    margin: 10px;
    padding: 13px 25px;
}

.nav-area li a {
    color: rgb(227, 222, 222);
    text-decoration: none;
    background-color: rgb(26, 29, 28);
    box-shadow: 2px 2px 5px white;
}

```

```
padding: 5px 20px;
font-family: 'Source Serif Pro', serif;

font-size: 16px;
text-transform: uppercase;
border-radius: 5px;
}
.nav-area li a:hover {
background: rgb(10, 10, 10);
color: rgb(220, 57, 57);
box-shadow: 2px 2px 5px rgb(202, 81, 81);
cursor: pointer;
}
```

```
.wrapper{
min-height: 100vh;
display: flex;
justify-content: center;
align-items: center;
}
```

```
.registration_form{
position: absolute;
top: 55%;
left: 50%;
border-radius: 20px;
box-shadow: 2px 2px 5px rgb(232, 221, 221);
transform: translate(-50%, -50%);
padding: 25px;
border-radius: 20px;
width: 400px;
background: rgba(0, 0, 0, 0.5);
}
```

```
.registration_form .title{
text-align: center;
font-size: 20px;
text-transform: uppercase;
color: #ebd0ce;
letter-spacing: 5px;
font-weight: 700;
}
p{
color: white;
}
```

```
.links {
padding-top: 3%;
}
.links a {
color: red;
}
.form_wrap{
margin-top: 3%;
}
```

```
}  
  
.form_wrap .input_wrap{  
  margin-bottom: 3%;  
}  
  
.form_wrap .input_wrap:last-child{  
  margin-bottom: 0;  
}  
  
.form_wrap .input_wrap label{  
  display: block;  
  margin-bottom: 3px;  
  color:rgb(212, 212, 212);  
}  
  
input{  
  margin-top: 10px;  
}  
  
.form_wrap .input_grp{  
  display: flex;  
  justify-content: space-between;  
}  
  
.form_wrap .input_grp input[type="text"]{  
  width: 165px;  
}  
  
.form_wrap .input_grp input[type="email"]{  
  width: 165px;  
}  
  
.form_wrap .input_grp input[type="password"]{  
  width: 165px;  
}  
  
.form_wrap input[type="text"]:focus{  
  border-color: black;  
  box-shadow: 0 0 8px 0 black;  
  transition:1s ease;  
}  
  
.form_wrap input[type="email"]:focus{  
  border-color: black;  
  box-shadow: 0 0 8px 0 black;  
  transition:1s ease;  
}  
  
.form_wrap input[type="password"]:focus{  
  border-color: black;  
  box-shadow: 0 0 8px 0 black;  
  transition:1s ease;  
}  
  
.form_wrap input[type="text"]{  
  width: 100%;  
  border-radius: 3px;  
  border: 1px solid #9597a6;  
  background: transparent;  
  padding: 10px;
```



```
outline: none;
color: aliceblue;
}
```

```
.form_wrap input[type="email"]{
width: 100%;
border-radius: 3px;
border: 1px solid #9597a6;
background: transparent;
padding: 10px;
outline: none;
color: aliceblue;
}
```

```
.form_wrap input[type="password"]{
width: 100%;
border-radius: 3px;
border: 1px solid #9597a6;
background: transparent;
padding: 10px;
outline: none;
color: aliceblue;
}
```

```
links a{
color: #e61616;
}
```

```
.form_wrap input[type="text"]:focus{
border-color: #ebd0ce;
}
```

```
.form_wrap input[type="email"]:focus{
border-color: #ebd0ce;
}
```

```
.form_wrap input[type="password"]:focus{
border-color: #ebd0ce;
}
```

```
.form_wrap .submit_btn{
height: 30px;
width: 350px;
color: #fff;
font-size: 15px;
background: #161615;
box-shadow: 2px 2px 5px rgb(226, 223, 223);
cursor: pointer;
border-radius: 25px;
border: none;
outline: none;
margin-top: 7%;
}
```

```
.submit_btn:hover{
background-color: #e61616;
transition: 0.5s ease;
transform: translateY(10px);
}
```

```
}  
[REDACTED]  
.alert {  
  width:100%;  
  height:20px;  
  color:white;  
  padding: 4px 10px;  
  font-size:12px;  
[REDACTED]  
}  
.success {  
  color:#010203;  
  font-weight:bold;  
}  
[REDACTED]  
.failure {  
  color:red;  
  font-weight:bold;  
  border: 2px solid red;  
}  
}
```

## 13.2 GITHUB AND PROJECT DEMO LINKS

[https://drive.google.com/file/d/1vEPHCX6IXDm4iaM7hvS6nIoZ2cmh5I4\\_/view?usp=sharing](https://drive.google.com/file/d/1vEPHCX6IXDm4iaM7hvS6nIoZ2cmh5I4_/view?usp=sharing)