

# HX8001 - PROFESSIONAL READINESS FOR INNOVATION, EMPLOYABILITY AND ENTREPRENEURSHIP

#### **REPORT**

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**ANNA UNIVERSITY: CHENNAI - 600 025** 

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#### INDRODUCTION

With rapid increase in the usage of social networks sites across the world, there is also a steady increase in plasma donation requests as being noticed in the number of posts on these sites such as Face book and twitter seeking plasma donors.

Finding plasma donor is a challenging issue in almost every country. There are some plasma donor finder applications in the market such as Blood app by Red Cross and Blood Donor Finder application by Neologix.

#### 1.1 PROJECT OVERVIEW

Several software technologies including languages and framework are used to develop our plasma-donor web application known as "PLASMA DONOR APPLICATION".

These technologies includes HTML, CSS along with PYTHON and IBM CLOUD for database are used. The python is computer programming language often used to create websites and software, automate task and conduct the data analysis.

Python is a general-purpose language, meaning it can be used to create a variety of different programs and isn't specialized for any specific problem.

#### 1.2 PURPOSE

The main goal of our project is to design a user-friendly web application that is like a scientific vehicle from which we can help reduce mortality or help those affected by COVID19 by donating plasma from patients who have recovered without approved antiretroviral therapy planning for a deadly COVID19 infection.

Your application helps patients who need plasma-derived biotherapies to improve or save their lives. Those in need are suffering from life-threatening conditions such as hemophilia, immune deficiencies, and other blood disorders. Plasma is the essential ingredient in many medications and treatments.

#### LITERATURE SURVEY

#### 2.1 EXISTING PROBLEM

There are a quite good number of software packages that exist for PLASMA DONOR APPLICATION system. But when I visited most plasma donor center system portal. I found that existing system is limited only to those particular plasma center.

### **Problem Found In Existing System**

- At the present there is no software to keep any records in plasma center.
- It becomes difficult to provide any record immediately at times of emergency.
- Required more human efforts in maintaining the branch related information .
- Manually to keep the accounts is also tedious & risky job & to maintain those accounts in ledgers for a long period is also very difficult.
- Difficult to manage and maintain the files.
- Chance of damage of files, if the data is stored in the files for duration of time.
- Time consuming is retrieving, storing and updating the data.
- It is difficult to keep track the record about the donor & receiver he has donated or received the plasma at the last time.

#### 2.2 REFERENCES

#### **CASE STUDY - I**

**TITLE:** Instant Plasma donar Recipient connector web application

AUTHOR: Kalpana Devi Guntoju, Tejaswini Jalli, Sreeja Uppala, Sanjay

Mallisetti

**YEAR:** 2022

#### **ABSTRACT:**

The world is suffering from the COVID 19 crisis and no vaccine has been found yet, but there is another scientific way in which we can help reduce mortality or help people affected by COVID19 by donating plasma from recovered patients. In the absence of an approved antiviral treatment plan for a fatal COVID19 infection, plasma therapy is an experimental approach to treat COVID19-positive patients and help them faster recovery. Therapy is consideredcompetent. In the recommendation system, the donor who wants to donate plasma can donate by uploading their COVID19 certificate and the blood bank can see the donors who have uploaded the certificate and they can make a request to the donor and the hospital can register/login and search for the necessary things. plasma from a blood bank and they can request a blood bank and obtain plasma from the blood bank.

#### **CASE STUDY - II**

**TITLE:** Determinants of plasma donation: A review of the literature

**AUTHOR**: A.Beurel , F. Terrade, J.-P.Lebaudy, B. Danic

**YEAR:** 2017

#### **ABSTRACT:**

The major contribution of <u>Human Sciences</u> in the understanding of the whole blood donation behavior has been through the study of individuals' motivations and deterrents to donate. However, if whole blood donation has been very widely studied in the last sixty years, we still know very little about plasma donation in voluntary non-remunerated environments. Yet, the need for plasmaderived products has been strongly increasing for some years, and blood collection agencies have to adapt if they want to meet this demand. This article aims to review the main motivations and deterrents to whole blood donation, and to compare them with those that we already know concerning plasma donation. Current evidence shows similarities between both behaviors, but also differences that indicate a need for further research regarding plasma donation.

#### CASE STUDY – III

**TITLE**: Developing a plasma donor application using Function-as-a-service

in AWS

AUTHOR: Aishwarya R Gowri

**YEAR**: 2020

#### **ABSTRACT:**

A plasma is a liquid portion of the blood, over 55% of human blood is plasma. Plasma is used to treat various infectious diseases and it is one of the oldest methods known as plasma therapy. Plasma therapy is a process where blood is donated by recovered patients in order to establish antibodies that fights the infection. In this project plasma donor application is being developed by using AWS services. The services used are AWS Lambda, API gateway, DynamoDB, AWS Elastic Compute Cloud with the help of these AWS services, it eliminates the need of configuring the servers and reduces the infrastructural costs associated with it and helps to achieve serverless computing. For instance, during COVID 19 crisis the requirement for plasma increased drastically as there were no vaccination found in order to treat the infected patients, with plasma therapy therecovery rates where high but the donor count was very low and in such situations it was very important to get the information about the plasma donors. Saving the donor information and notifying about the current donors would be a helping hand as it can save time and help the users to track down the necessary information about the donors.

### 2.3 PROBLEM SOLUTION DEFINITION

### PROBLEM STATEMENT - I



# PROBLEM STATEMENT - II



# PROBLEM STATEMENT - III

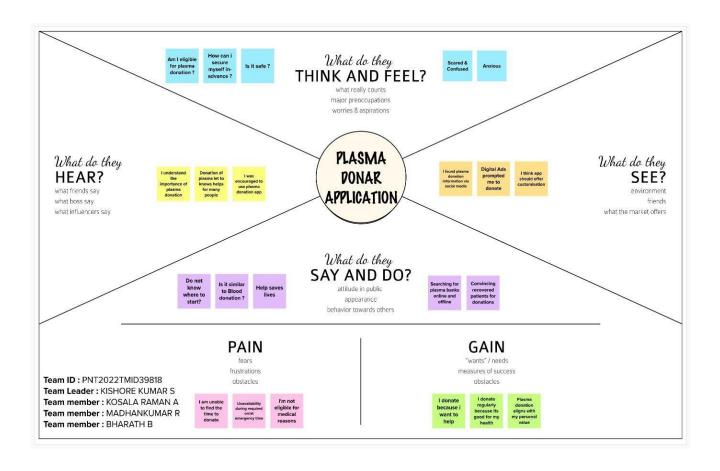


#### PROBLEM STATEMENT - IV



### **IDEATION AND PROPOSED SOLUTION**

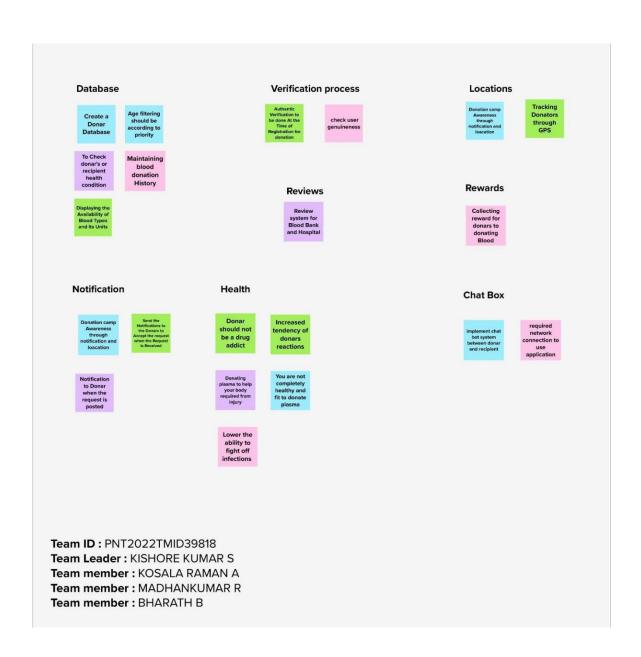
# 3.1 EMPATHY MAP CANVAS



# 3.2 IDEATION AND BRAINSTORMING

# **Step-1: Brainstorm, Idea Listing and Grouping**

kishore kumar S	kosalaraman A	
Interconnect donars on a single network single network splication required network network network splication required network check user connection to use genuineness	Donating plasma can save the lives You are not completely healthy and fit to donate plasma	Denation camp Awareness through notification and loacation
Lower the ability to blood donars to donation infections History Blood	Age filtering should be according to priority Implement chat bot system between donar and recipient	Create a Donar Database
Bharath B	Madhankumar	R
Tracking Displaying the Donators Availability of through GPS Authentic Verification to Avoid and the The of Registration for Gonation	To Check donar's or recipient health condition mail	After donated plasma it should be stored and frozen
Send the Molifications to the Donar sib Accept the request when the Request is Reviewed addict reactions	Review Donating system for plasma to help Blood Bank and Hospital injury	Notification to Donar when the request is posted
nm ID : PNT2022TMID39818 nm Leader : KISHORE KUMAR S nm member : KOSALA RAMAN A		
ım member : MADHANKUMAR R ım member : BHARATH B	l	



# **Step-2: Idea Prioritization**



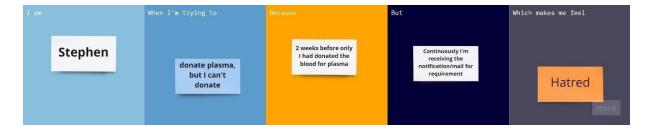
# 3.3 PROPOSED SOLUTION

# Proposed solution – I



S. No.	Parameter	Description
1.	Problem Statement (Problem to be solved)	I am Mr. Madhavan rao when I'm trying to use the plasma donar application but I'm not convenient to use the application because I'm expecting more specification, if more specifications are added, which makes me feel enthusiastic.
2.	Idea / Solution description	The suggestion which are said by the user will be noted and the apt suggestions will be added
3.	Novelty / Uniqueness	Everyone will have different ideas and different queries but the most important suggestions will be added upon the application.
4.	Social Impact / Customer Satisfaction	Almost Customer will be satisfied on the problem, if once again the problem occurs, it can be easily recovered.
5.	Business Model (Revenue Model)	On the revenue bases, this donar application will be profit for Hospital, NGO's and private organizations.
6.	Scalability of the Solution	The problem of the donar was solved and also as per the user flexibility the requirements can be modified.

# Proposed solution – II



S. No.	Parameter	Description
1.	Problem Statement (Problem to be solved)	I am Stephen when I'm trying to donate plasma, But I can't donate Because 2 weeks before only I had donated the blood for plasma, but continuously I'm receiving the notification/mail for requirement which makes me feel Hatred.
2.	Idea / Solution description	Stephen needs to update his plasma donation details in the Application, if Still the issue occurs use "Contact Us" option in the application
3.	Novelty / Uniqueness	This problem rarely occurs to the users/donar and not a common problem. It will be rectified from the "technical team".
4.	Social Impact / Customer Satisfaction	The Customer will be more satisfied with the solution and if once again the problem occurs, it can be easily recovered.
5.	Business Model (Revenue Model)	On the revenue bases, this donar application will be profit for Hospital, NGO's and private organizations.
6.	Scalability of the Solution	The thought of the user/donar about the application will changed and also as per the user flexibility the requirements can be modified.

# **Proposed solution – III**



S. No.	Parameter	Description
1.	Problem Statement (Problem to be solved)	I am a student I'm trying to use Plasma Donar Application Because I want to use the application, But I don't how to use the donar application & I never used before which makes me feel Anxiety.
2.	Idea / Solution description	The user should have basic knowledge about the application, read the user manual or else use the "Chat Bot" for the guidance to use the application efficiently.
3.	Novelty / Uniqueness	It is common problem face by the new users who are trying to use the application. If the user once learns how to use, then there will be no issue.
4.	Social Impact / Customer Satisfaction	The solution will be satisfied to the user. If any problem occurs once again it will be rectified.
5.	Business Model (Revenue Model)	On the revenue bases, this donar application will be profit for Hospital, NGO's and private organizations.
6.	Scalability of the Solution	The problem of the donar was solved and also as per the user flexibility the requirements can be modified.

# $\label{eq:proposed_solution} \textbf{Proposed solution} - \textbf{IV}$



S. No.	Parameter	Description
1.	Problem Statement (Problem to be solved)	I am a student I'm trying to find Plasma Because in the need of emergency, But I don't whether the required unit of plasma is available or not which makes me feel disappointment.
2.	Idea / Solution description	The user should know the required unit of plasma and then check the availability of plasma in the application.
3.	Novelty / Uniqueness	It is not unique problem, these kind of problems faced by the new users or who don't know to how use the application
4.	Social Impact / Customer Satisfaction	The user will be more satisfied with the solution and there will be less chance of these kind of problem that repeat again.
5.	Business Model (Revenue Model)	On the revenue bases, this donar application will be profit for Hospital, NGO's and private organizations.
6.	Scalability of the Solution	The mindset of the user about the application will changed and also as per the user flexibility the requirements can be modified.

#### 3.4 PROBLEM SOLUTION FIT

#### Problem-Solution fit canvas 2.0 Purpose / Vision CS AS 1. CUSTOMER SEGMENT(S) 6. CUSTOMER CONSTRAINTS 5. AVAILABLE SOLUTIONS Define CS, fit into CC - The suggestions made by the user/customer - The user/customer who belonging to the - There is no boundation of using this are implemented in these kinds of application because the user/customer who is medical department. applications. having knowledge of this application can work on it easily. -In the such cases the most important suggestions of the user/customer are developed and made available in updates. 2. JOBS-TO-BE-DONE / PROBLEMS 9. PROBLEM ROOT CAUSE RC 7. BEHAVIOUR BE - The user/customer found inconvenient in - The user/customer is new to use this - The user/customer use different different this plasma donar application that the user application. devices in their hands. expecting more specification could be added - The user/customer have no knowledge - Medical people can use this application if possible. about this application. regularly while comparing to others. - When the user/customer missed out the proper guidance about how to use handle this application. 3. TRIGGERS TR 10. YOUR SOLUTION SL 8. CHANNELS of BEHAVIOUR - Online dentify strong TR & EM - Awareness videos/content made the donar to donate - The awareness of the application motivates - The suggestion which made by the the plasma. user/customer user will be noted and the apt the users to use this application - Advertise online with influence to test the product suggestions will be added in further updates. and promote it. 4. EMOTIONS: BEFORE / AFTER EM Offline - To encourage and motivate the medical field-oriented Before - When the users/customers expected specification not met personnel to use the application. makes them enthusiastic After - As the user/customers who recovered from there errors they will become comfortable and friendly with this environment.



### **REQUIREMENT ANALYSIS**

# 4.1 FUNCTIONAL REQUIREMENT

In software engineering and systems engineering, a functional requirement defines a function of a system or its components.

#### **Access Website:**

Software operator should be capable to access web-application through either an application browser or similar service on the PC. There should not be any limitation to access web-application.

#### **Software operator Registration:**

Given that software operator has accessed web-application, then the software operator should be able to register through the web-application. The donor software operator must provide first name, gender, plasma group, location, contact, software operator name and password.

#### **New Releases:**

When a new/update/revise version of the web-application is released, the appearance will be automatically appears when the software operator access the web-application.

#### **Software operator log-in:**

Given that the software operator has registered, then the software Operator should be able to login to the web-application. The login information will be stored on the database for future use.

#### Search result in a list view:

Search result can be viewed in a list. Each element in the list represents a specific donor. Each element should include first name, gender, plasma group, location, contact according to the software operator position.

### Request plasma:

Software operator (Clinic) should be able to request for plasma at emergency situation, software operator need to define plasma group, location, required date, contact. The plasma request requested will be sent to plasma bank and then to the Inventory to check the availability. If available, the requested plasma will be sent to the requested donor (Clinic).

#### **View Request:**

The plasma Bank should be able to view received request and then respond to them and can search requests by selecting two options select plasma group and provision.

#### Search plasma Bank Stock:

Receiving the blood or plasma request from Clinic, the blood or plasma stock in the Blood or plasma Bank Inventory will be searched to match the requested blood or plasma request.

### **View Blood or plasma request Details:**

The Clinic, Blood or plasma Bank should be able to view the Blood or plasma requestId, time of the blood or plasma request placed, name of the clinic, location and the address of the clinic. In addition to this an additional feature of tracking the distribution person which includes his location and the checkpoints passed.

#### **View Distribution Status:**

The Clinic, Blood or plasma Bank should be able to view the status of the distribution time. If the distribution seems to be delayed then the clinic manager must to able to call the distribution person to get the update/revise on the distribution.

## 4.2 NON-FUNCTIONAL REQUIREMENTS

In systems engineering and requirements engineering, a non-functional requirement is a requirement that specifies criteria that can be used to judge the operation of a system, rather than specifies behaviors.

#### **Maintainability:**

The plasma donar application System have must have high level of Maintainability.

# **Serviceability**

If issue arises in the plasma donar application System, then then project must be programmed in such a way that developer can service it again.

#### **Environmental**

The plasma donar application System must be working in latest operating system environments like windows 7, windows 8, windows 10 and on Linux.

# **Data Integrity**

All the data in the plasma donar application System must be accurate and reliable.

# **Usability**

The plasma donar application System must have a good looing user friendly interface.

# Recoverability

The plasma donar application System must have a proper data backup mechanism.

# **Interoperability**

The plasma donar application System must work with or use the parts or equipment of another system.

# **Capacity**

The plasma donar application System must fulfill on storage requirements, today and in the future. The Blood bank Management System must be scale up for increasing volume demands.

#### **Performance**

The plasma donar application System must perform well in different scenarios.

## **Security**

The plasma donar application System must be secured with proper user name and passwords.

## Regulatory

The plasma donar application System must obey all the governmental requirements and constraints.

# **Availability**

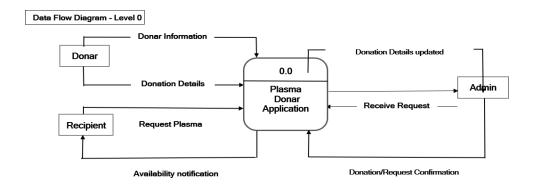
The plasma donar application System must be available 24 hours a day with no bandwidth issues.

# Manageability

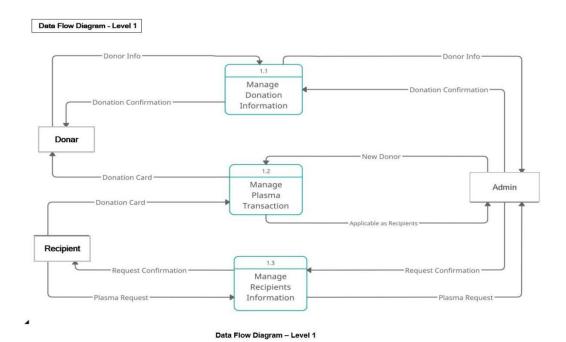
The plasma donar application System must Alerts when the system suffers from a recoverable interruption.

# **PROJECT DESIGN**

# **5.1 DATA FLOW DIAGRAM**



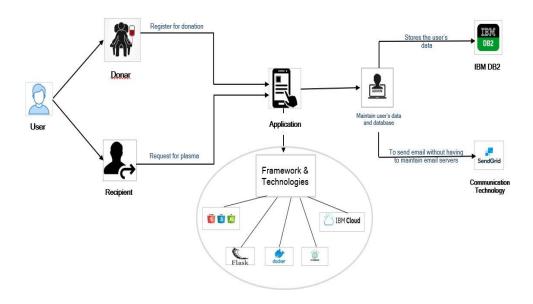
Data Flow Diagram - Level 0



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# 5.2 SOLUTION AND TECHNOLOGY ARCHITECTURE

#### Technical Architecture:



# **5.3 USER STORIES**

User Type	Function al Require ment (Epic)	User Story Number	User Story / Task	Acceptance criteria	Priority	Release
Custome r (Mobile user)	Registration	USN-1	As a user, I can register for the application byentering my email, phone number, password.	I can access my account /profile.	High	Sprint-1
		USN-2	As a user, I will receive confirmation emailonce 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 withemail account.	Medium	Sprint-1
	Login	USN-5	As a user, I can log into the application byentering 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 forwhich 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 thequeries of the users.	I can reply to their queriesand solve their related problems.	High	Sprint-3
Administrator	Registration	USN-9	As an Administrator, I can view the databaseof the registered users.	I can check and verify the persons who are the registered their mail 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 wellas 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

# **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 Nov2022
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: Sprint – I to 4** 

average velocity 
$$(AV) = Velocity$$
Sprint duration

$$AV = 20/6 = 3.34$$

Average Velocity = 3.34

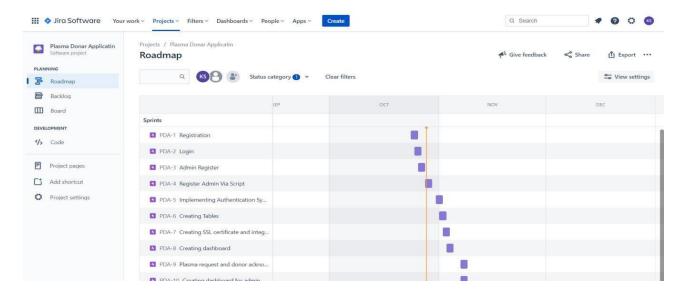
# **6.2 SPRINT DELIVERY SCHEDULE**

Sprint	Functional Requirement (Epic)	User Story Number	User Story / Task	Stor y Poi nts	Priority	Team Members
Sprint-1	Registration	USN-1	A User can register and create the user account.	6	High	Kosalaraman A Bharath B
Sprint-1	Login	USN-2	A User can sign-in to the application by entering the registered email id and password.	6	High	Kosalaraman A Madhankumar R
Sprint-1	Admin Register	USN-3	An admin can register through the admin registry.	4	Medium	Kishore kumar S Bharath B
Sprint-1	Register Admin Via Script	USN-4	Creating an Admin Account using a python script. As for security reasonswe should implement a separate python script.	4	High	Bharath B Kosalaraman A Madhankumar R
Sprint-2	Implementing Authentication System	USN-5	creating an authentication system for both admin and users using flask application	6	High	Kishore kumar S Kosalaraman A
Sprint-2	Creating Tables	USN-6	Creating Db2 account and creating the tables in DB2 in IBM cloud db2	4	Medium	Madhankumar R Bharath B

Sprint	Functional Requirement (Epic)	User Story Number	User Story / Task	Story Points	Priority	Team Members
Sprint-2	Creating SSL certificate and integrating with python code	USN-7	Creating the SSL certificate to connect db2 via python code.	6	High	Kishore kumar S Kosalaraman A
Sprint-2	Creating dashboard	USN-8	Admin and Donor can interact with our application.	4	Medium	Bharath B
Sprint-3	Plasma request and donor acknowledge feature	USN-9	Admin can create plasma requests which will be shown inthe user portal.	6	High	Kosalaraman A Madhankumar R
Sprint-3	Creating dashboard for admin	USN-10	Admin dashboard, admin can view the total request has been requested for plasma by the recipient/user.	6	High	Kishore kumar S Kosalaraman A
Sprint-3	Integrating the Watson chat bot	USN-11	Users can use the chatbot for basic clarification using the chatbot.	4	Medium	Madhankumar R Kishore kumar S
Sprint-3	Integration with SendGrid.	USN-12	The source/verification mail for both user(donar and recipient) .	4	Medium	Madhankumar R Bharath B
Sprint-4	Docker installation	USN-13	Installing Docker CLI	4	Low	Bharath B

Sprint	Functional Requirement (Epic)	User Story Number	User Story / Task	Story Points	Priority	Team Members
Sprint-4	Creating docker image	USN-14	Setting up the docker environmentand creating the docker image file	6	High	Bharath B Madhankumar R
Sprint-4	Kubernetes	USN-15	creating pods in Kubernetes and uploading it in IBM cloud	6	Medium	Kishore kumar S Madhankumar R Kosalaraman A
Sprint-4	End-to-End Testing	USN-16	Implementing End-to-End testing	6	High	Kishore kumar S Kosalaraman A

# **6.2 REPORT FROM JIRA**



#### **CODING AND SOLUTIONING**

#### 7.1 FEATURE CODE

#### **Admin Login:**

```
<!DOCTYPE html>
<html lang="en" >
  <meta charset="UTF-8">
  <title>Admin Login</title>
  <link href="https://fonts.googleapis.com/css?family=Open+Sans"</pre>
rel="stylesheet">
  <link href="https://maxcdn.bootstrapcdn.com/font-awesome/4.7.0/css/font-</pre>
awesome.min.css" rel="stylesheet" integrity="sha384-
wvfXpqpZZVQGK6TAh5PV1GOfQNHSoD2xbE+QkPxCAF1NEevoEH3S10sibVcOQVnN"
crossorigin="anonymous">
  <link rel="stylesheet" type="text/css" href="../static/adminlogin.css">
</head>
<div class="loader bg">
    <div class="loader"></div>
  </div>
<!-- partial:index.partial.html -->
<div class="box-form">
    <div class="left">
        <div class="overlay">
        <h1>Wc Admin!</h1>
        Good governance depends on ability to take responsibility
             by both administration as well as people...
        <span>
            <h3>&nbsp; &nbsp;<u>login with social media</u></h3>
            <a href="https://www.facebook.com/login/"><i class="fa fa-</pre>
facebook" aria-hidden="true"></i></a>
href="https://accounts.google.com/ServiceLogin?rart=ANgoxccWMJUYH-
Qa3XU QXDV2zFIXhG7Wy7iJAIPJ8JsqryC6xHQj-SeDlstF-
bGjgZ0BZWyPE5U3qrh9MUAqzry3Wytg4n8Ig"><i class="fa fa-google" aria-
hidden="true"></i>&nbsp;Login with Gmail</a>
            <!-- <a href="#"><i class="bi bi-google" aria-
hidden="true"></i></a> -->
        </span>
        </div>
```

```
</div>
        <div class="right">
        <h5>Admin!</h5> <!-- <p>Don't have an account? <a href="#">Creat
        <div class="inputs">
            <input type="text" placeholder="user id">
            <input type="password" placeholder="password">
        </div>
            <br><br><br><
        <div class="remember-me--forget-password">
    <!-- <label>
        <input type="checkbox" name="item" />
        <span class="text-checkbox">Remember me</span>
    </label> -->
    <br>
            <button><a href="/admin">Login</a></button>
            <!-- <p>forget password? -->
        </div>
            <br>
            Don't have an account? <a href="/adminreg">Create Your</a>
Account</a> it takes less than a minute
    </div>
</div>
<!-- partial -->
<script
src="https://cdnjs.cloudflare.com/ajax/libs/jquery/3.4.1/jquery.min.js"></scri</pre>
pt>
<script>
    setTimeout(function(){
        $('.loader_bg').fadeToggle();
    }, 1600);
  </script>
</body>
```

# **Donar Login:**

```
<!DOCTYPE html>
<html lang="en" >
  <meta charset="UTF-8">
  <title>Donar Login</title>
 <link rel="stylesheet"</pre>
href="https://cdnjs.cloudflare.com/ajax/libs/normalize/5.0.0/normalize.min.css
<link rel="stylesheet" href="../static/logincss.css">
</head>
<center><h4>{{msg}}</h4></center>
<body>
 <div class="loader_bg">
    <div class="loader"></div>
    </div>
<!-- partial:index.partial.html -->
<div id="login-form-wrap">
  <h2>Donar Login</h2>
  <form id="login-form">
    <input type="text" id="email" name="email" placeholder="Email" required><i</pre>
class="validation"><span></span><span></i>
   <input type="password" id="password" name="password"</pre>
placeholder="password" required><i
class="validation"><span></span><span></i>
    <a href="/donar">
        <button type="button" class="btn btn-success">Log in
        </a>
    </form>
  <div id="create-account-wrap">
    Are you New ? <a href="/donregistration">Create Account</a>
  </div><!--create-account-wrap-->
</div><!--login-form-wrap-->
<!-- partial -->
<script
src="https://cdnjs.cloudflare.com/ajax/libs/jquery/3.4.1/jquery.min.js"></scri</pre>
```

```
<script>
  setTimeout(function(){
     $('.loader_bg').fadeToggle();
  }, 1600);
</script>
</body>
</html>
```

#### **Admin Dashboard:**

```
<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">
href="https://fonts.googleapis.com/css?family=Merriweather&display=swap"
rel="stylesheet">
    <link rel="stylesheet" href="assets/css/bootstrap.min.css">
    <link rel="stylesheet" href="assets/css/fontawsom-all.min.css">
    <link rel="stylesheet" type="text/css" href="../static/donar.css">
    <link rel="stylesheet" href="assets/plugins/grid-gallery/css/grid-</pre>
gallery.min.css">
    link
href="https://cdn.jsdelivr.net/npm/bootstrap@5.2.1/dist/css/bootstrap.min.css"
rel="stylesheet" integrity="sha384-
iYQeCzEYFbKjA/T2uDLTpkwGzCiq6soy8tYaI1GyVh/UjpbCx/TYkiZhlZB6+fzT"
crossorigin="anonymous">
    <title>Admin Page</title><header class="p-3 text-bg-dark">
    <div class="container">
       <div class="d-flex flex-wrap align-items-center justify-content-center</pre>
justify-content-lg-start">
           <a href="/" class="d-flex align-items-center mb-2 mb-lg-0 text-</pre>
white text-decoration-none">
               <svg class="bi me-2" width="40" height="32" role="img" aria-</pre>
label="Bootstrap"><use xlink:href="#bootstrap"/></svg>
           center mb-md-0">
             <b><center>&nbsp;&nbsp; &nbsp;&nbsp; &nbsp;&nbsp;
   ∽$ADMIN DASHBOARD, Nice to see you Again Admin!</center>
</b> &nbsp;&nbsp;
```

```
</div>
    </div>
    </header>
  <body>
    <div class="loader bg">
      <div class="loader"></div>
    </div>
    <br><a href="/mail">
      <button style="margin-left: 1400px;" type="button" class="btn btn-</pre>
success">Mail</button></a>
    <div class="content-center">
            <button type="button" class="btn btn-warning btn-lg"><a</pre>
href="/plasmadon">Donation requests</a></button>
            <button type="button" class="btn btn-danger btn-lg"><a</pre>
href="/plasmareq">Recipient requests</a></button>
        </center>
        <br><a href="/">
        <button style="margin-left: 20px;" type="button" class="btn btn-</pre>
success">Log out</button></a>
<script
src="https://cdnjs.cloudflare.com/ajax/libs/jquery/3.4.1/jquery.min.js"></scri</pre>
  </body>
  <style>
        body{
      background: rgb(2,0,36);
      background: linear-gradient(270deg, rgba(2,0,36,1) 0%, rgba(9,9,121,1)
0%, rgba(0,212,255,1) 100%);
    button a:link {
 text-decoration: none;
  color: #000000;
button a:visited { text-decoration: none; color:#ffffff;}
button a:hover { text-decoration: none; color:#ffffff; }
```

```
a:active { text-decoration: none; color: #ffffff;}

table, th, td {
  border: 1px solid black;
}

</style>

<script>
  setTimeout(function(){
    $('.loader_bg').fadeToggle();
  }, 1600);

</script>
</html>
```

#### **Donar requesting page:**

```
<!DOCTYPE html>
<html lang="en">
    <meta charset="UTF-8">
    <meta http-equiv="X-UA-Compatible" content="IE=edge">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
href="https://fonts.googleapis.com/css?family=Merriweather&display=swap"
rel="stylesheet">
    <link rel="stylesheet" href="assets/css/bootstrap.min.css">
    <link rel="stylesheet" href="assets/css/fontawsom-all.min.css">
    <link rel="stylesheet" type="text/css" href="../static/donar.css">
    <link rel="stylesheet" href="assets/plugins/grid-gallery/css/grid-</pre>
gallery.min.css">
    k
href="https://cdn.jsdelivr.net/npm/bootstrap@5.2.1/dist/css/bootstrap.min.css"
rel="stylesheet" integrity="sha384-
iYQeCzEYFbKjA/T2uDLTpkwGzCiq6soy8tYaI1GyVh/UjpbCx/TYkiZhlZB6+fzT"
crossorigin="anonymous">
    <title>Donar Req</title>
</head>
<body>
    <header class="p-3 text-bg-dark">
        <div class="container">
            <div class="d-flex flex-wrap align-items-center justify-content-</pre>
center justify-content-lg-start">
                <a href="/" class="d-flex align-items-center mb-2 mb-lg-0</pre>
text-white text-decoration-none">
```

```
<svg class="bi me-2" width="40" height="32" role="img"</pre>
aria-label="Bootstrap"><use xlink:href="#bootstrap"/></svg>
               </a>
              content-center mb-md-0">
                  <a href="/" class="nav-link px-2 text-</a>
white"><b>Home</b></a> &nbsp;&nbsp;
                  <a href="#" class="nav-link px-2 text-</a>
white"><b>About</b></a> &nbsp;&nbsp;
                  <a href="#" class="nav-link px-2 text-</a>
white"><b>Blogs</b></a> &nbsp;&nbsp;
                  <a href="#" class="nav-link px-2 text-</a>
white"><b>Camps</b></a>
              <div class="text-end">
                <button type="button" class="btn btn-outline-secondary"><a</pre>
href="/adminlogin">Admin Login</a></button>
                <button type="button" class="btn btn-outline-info"><a</pre>
href="/recipientlogin">Looking for plasma?</a></button>
                <button type="button" class="btn btn-outline-warning"><a</pre>
href="/donarlogin">Donate Now!</a></button>
               </div>
           </div>
       </div>
   </header>
   <div class="marquee">
   <marquee width="80%" direction="left" height="20px" scrolldelay="100">
       Welcome Donar ! You are the Saviour, Your donation □ can save the
lot of lifes ♥ Thanks for donating 🛛 🏻
   </marquee>
   </div>
       <div class="foot">
           <center><h3>DONATION DETAILS</h3></center>
             <button style="margin-left: 20px;" type="button" class="btn btn-</pre>
success">Log out</button></a>
           <center>{{msg}}</center>
           <center>
           <form action="{{ url_for('giveplasma') }}" method="POST">
              >
              Name
              <input type = "text" name="name" required/>
```

```
Age
           <input type="number" name="age" required/>
           Gender
           <input type="radio" name="gender" value="Male"/>Male
Mobile No
           <input type="number" name="mnumb" maxlength="10"
required/>
           Email
           <input type="text" name="email" maxlength="50"
required/>
           City
           <input type = "text" name="city" required/>
           Address
           <textarea name="address" required></textarea>
           Blood Group
           <select name="bloodgroup" id="blood" required>
              <option>A+ve</option>
              <option>A-ve</option>
              <option>B+ve</option>
              <option>B-ve</option>
              <option>AB+ve</option>
              <option>AB-ve</option>
              <option>O+ve</option>
              <option>0-ve</option>
           </select>
```

```
Any Health Issues
              <input type="text" name="issue" maxlength="3"
required/> (type "Yes" or "No")
              >
              Last blood donated date
              <input type="date" name="lastbd" required>
              Book Slot
              <input type="date" name="slot" required/>
            
              <center>
              <input type="submit" value="Submit">
              <!-- <button type="button" class="btn btn-success"><a
               <!-- <button type="button" class="w3-button w3-green"
              </center>
            </form>
           </center>
           </div>
           <footer class="bg-dark text-center text-white">
              <!-- Grid container -->
              <div class="container p-4 pb-0">
                <!-- Section: Social media -->
                <section class="mb-4">
                  <!-- Facebook -->
                  <!-- <a class="btn btn-outline-light btn-floating m-1"
href="#!" role="button"
                    >f</b></a> -->
                  <!-- Twitter -->
                  <a class="btn btn-outline-light btn-floating m-1"</pre>
href="#!" role="button"
                    ><i class="fab fa-twitter"></i</pre>
                  ></a>
                  <!-- Google -->
```

```
<a class="btn btn-outline-light btn-floating m-1"</pre>
href="#!" role="button"
                        ><i class="fab fa-google"></i</pre>
                      ></a>
                      <!-- Instagram -->
                      <a class="btn btn-outline-light btn-floating m-1"</pre>
href="#!" role="button"
                        ><i class="fab fa-instagram"></i</pre>
                      ></a>
                      <!-- Linkedin -->
                      <a class="btn btn-outline-light btn-floating m-1"</pre>
href="#!" role="button"
                        ><i class="fab fa-linkedin-in"></i</pre>
                      ></a>
                      <a class="btn btn-outline-light btn-floating m-1"</pre>
href="#!" role="button"
                        ><i class="fab fa-github"></i</pre>
                      ></a>
                    </section>
                    <!-- Section: Social media -->
                 <!-- Grid container -->
                 <!-- Copyright -->
                 <div class="text-center p-3" style="background-color: rgba(0,</pre>
0, 0, 0.2);">
                   © 2020 Copyright:
                   <a class="text-white"</pre>
href="#">kishorekumar1409@gmail.com</a>
                 </div>
                  <!-- Copyright -->
               </footer>
</body>
</html>
```

# **TESTING**

# 8.1 TEST CASE

Test case ID	Feature Type	Compon	Test Scenario	Pre-Requisite	Steps To Execute	Test Data	Expected Result	Actual Result	Stat	Commnets	TC for Automation(Y/N)	BUG	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_ OO2	и	Home Page	Verify the UI elements in Login/Signup page		1Enter URL and click go 2. Click on Login/signup and get into next respective page. 3. Verify login/Signup page with below U 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		1Enter UFIL and oliok go 2.Cliok on login button 3.Enter Yalid username/email in Email test box 4.Enter Valid password in password test bos 5.Cliok 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 usernameremail in Email text box 4.Enter valid password in password text box 5.Click on login button	Username: demo@gmail password: Testing123	Application should show "noorrect 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		1Enter UPL and click go 2.Click on login button 3.Enter Valid username/email in Email test box 4.Enter valid password in password test box 5.Click on login button	Username: adminrrr@gmail.com password: admin@rrr	Admin should navigate to Donar/Recipient requesting page	Working as expected	pass				Kishore kumar
LoginPage_TC_ QQ6	Functional	Login page	Verily Admin is able to log into application with InValid credentials		1Enter UPL(https://shopenzer.com/) and ollok go 2 Click on My Account dropdown button 3 Enter InY alid username/email in Email test box 4 Enter Invalid password in password test box 5 Click on login button	Üsername: adminrr@gmail.com password: Adminrrr®	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	4	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	18	10	7	16	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

#### 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.

## **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.

## **FURTURE SCOPE**

Upgrading the UI that is more user-friendly which will help many users to access the website and also ensures that many plasma donors can be added into the community.

Using elastic load balancer, it helps to handle multiple requests at the same time which will maintain the uptime of the website with negligible downtime.

#### **APPENDIX**

#### **SOURCE CODE:**

For source code Check out the below link:

https://drive.google.com/drive/folders/1IdBiCjI3pjyN0EyOvRFf9hA63td2\_ EK6?usp=sharing

#### **SOURCE CODE:**

## App.py

```
from flask import Flask,render_template,request,url_for,redirect
from markupsafe import escape
import ibm_db
conn = ibm_db.connect("DATABASE=bludb; HOSTNAME=2f3279a5-73d1-4859-88f0-
a6c3e6b4b907.c3n41cmd0nqnrk39u98g.databases.appdomain.cloud;PORT=30756;SECURIT
Y=SSL;SSLServerCertificate=DigiCertGlobalRootCA.crt;UID=blk20068;PWD=LsEEBW71f
9uXFNsf",'','')
app = Flask(__name__)
@app.route('/')
def index():
    return render_template('index.html')  # index - home page
# admin credentials
@app.route('/adminlogin')
def adminlogin():
  return render_template('adminlogin.html')  # admin log in page
@app.route('/adminreg')
def adminreg():
  return render_template('adminreg.html') # admin sign up page
@app.route('/recipregistration')
def recipregistration():
```

```
return render_template('recipregistration.html') ## recipient signup page
uh
@app.route('/recipientlogin')
def recipientlogin():
  return render_template('reclogin.html') ## recipt login page
@app.route('/recipientrec',methods = ['POST', 'GET'])
def recipientrec():
  if request.method == 'POST':
    fname = request.form['fname']
    lname = request.form['lname']
    dob = request.form['dob']
    email = request.form['email']
    mnumb = request.form['mnumb']
    gender = request.form['gender']
    address = request.form['address']
    pin = request.form['pin']
    sql = "SELECT * FROM recipientrec WHERE fname =?"
    stmt = ibm_db.prepare(conn, sql)
    ibm db.bind param(stmt,1,fname)
    ibm_db.execute(stmt)
    account = ibm db.fetch assoc(stmt)
    if account:
       return render_template('reclogin.html', msg="Already your account
exists, please try to log in")
    else:
     insert_sql = "INSERT INTO recipientrec VALUES (?,?,?,?,?,?,?)"
     prep_stmt = ibm_db.prepare(conn, insert_sql)
     ibm_db.bind_param(prep_stmt, 1, fname)
     ibm_db.bind_param(prep_stmt, 2, lname)
     ibm_db.bind_param(prep_stmt, 3, dob)
     ibm_db.bind_param(prep_stmt, 4, email)
     ibm_db.bind_param(prep_stmt, 5, mnumb)
     ibm db.bind param(prep stmt, 6, gender)
     ibm_db.bind_param(prep_stmt, 7, address)
     ibm_db.bind_param(prep_stmt, 8, pin)
     ibm db.execute(prep stmt)
  return render_template('reclogin.html', msg="Account has been created
successfully..")
  return "success..."
```

```
### donar crediential
@app.route('/donregistration')
def donregistration():
  return render_template('donregistration.html') ## donar signup page uh
@app.route('/donarlogin')
def donarlogin():
  return render_template('donlogin.html') ## donar login page
# @app.route('/donarrequest')
# def donarrequest():
# return render template('donar.html') ## plasma requesting page
## donar details table
@app.route('/donrec',methods = ['POST', 'GET'])
def donrec():
 if request.method == 'POST':
    fname = request.form['fname']
    lname = request.form['lname']
    dob = request.form['dob']
    email = request.form['email']
    mnumb = request.form['mnumb']
    gender = request.form['gender']
    address = request.form['address']
    pin = request.form['pin']
    sql = "SELECT * FROM donarrec WHERE fname =?"
    stmt = ibm db.prepare(conn, sql)
    ibm db.bind param(stmt,1,fname)
    ibm_db.execute(stmt)
    account = ibm db.fetch assoc(stmt)
    if account:
       return render_template('donlogin.html', msg="Already your account
exists, please try to log in")
    else:
     insert_sql = "INSERT INTO donarrec VALUES (?,?,?,?,?,?,?)"
     prep_stmt = ibm_db.prepare(conn, insert_sql)
     ibm_db.bind_param(prep_stmt, 1, fname)
     ibm_db.bind_param(prep_stmt, 2, lname)
     ibm_db.bind_param(prep_stmt, 3, dob)
     ibm db.bind param(prep stmt, 4, email)
```

```
ibm_db.bind_param(prep_stmt, 5, mnumb)
     ibm db.bind param(prep stmt, 6, gender)
     ibm_db.bind_param(prep_stmt, 7, address)
     ibm_db.bind_param(prep_stmt, 8, pin)
     ibm_db.execute(prep_stmt)
  return render_template('donlogin.html', msg="Account has been created
successfully..")
  return "success..."
@app.route('/admin')
def admin():
  return render_template('admin.html')
@app.route('/donar')
def donar():
  return render_template('donar.html')
## donar registering for donation
@app.route('/giveplasma',methods = ['POST', 'GET'])
def giveplasma():
 if request.method == 'POST':
    name = request.form['name']
    age = request.form['age']
    gender = request.form['gender']
    mnumb = request.form['mnumb']
    email = request.form['email']
    city = request.form['city']
    address = request.form['address']
    bloodgroup = request.form['bloodgroup']
    issue = request.form['issue']
    lastbd = request.form['lastbd']
    slot = request.form['slot']
    sql = "SELECT * FROM donar WHERE name =?"
    stmt = ibm db.prepare(conn, sql)
    ibm db.bind param(stmt,1,name)
    ibm db.execute(stmt)
    account = ibm db.fetch assoc(stmt)
    if account:
     return render_template('donlogin.html', msg="Your request for donation
is successfully submitted..")
    else:
      insert_sql = "INSERT INTO donar VALUES (?,?,?,?,?,?,?,?,?,?)"
```

```
prep_stmt = ibm_db.prepare(conn, insert_sql)
      ibm db.bind param(prep stmt, 1, name)
      ibm db.bind_param(prep_stmt, 2, age)
      ibm_db.bind_param(prep_stmt, 3, gender)
      ibm_db.bind_param(prep_stmt, 4, mnumb)
      ibm db.bind param(prep stmt, 5, email)
      ibm_db.bind_param(prep_stmt, 6, city)
      ibm_db.bind_param(prep_stmt, 7, address)
      ibm_db.bind_param(prep_stmt, 8, bloodgroup)
      ibm_db.bind_param(prep_stmt, 9, issue)
      ibm_db.bind_param(prep_stmt, 10, lastbd)
      ibm db.bind_param(prep_stmt, 11, slot)
      ibm_db.execute(prep_stmt)
    return render_template('donar.html', msg="Your request for donation is
successfully submitted..")
@app.route('/plasmadon')
def plasmadon():
 donar = []
  sql = "SELECT * FROM donar"
  stmt = ibm_db.exec immediate(conn, sql)
  dictionary = ibm db.fetch both(stmt)
  while dictionary != False:
    # print ("The Name is : ", dictionary)
   donar.append(dictionary)
    dictionary = ibm_db.fetch_both(stmt)
  if donar:
    return render_template("plasmadon.html", donar = donar)
@app.route('/delete/<name>')
def delete(name):
  sql = f"SELECT * FROM donar WHERE name='{escape(name)}'"
 print(sql)
  stmt = ibm db.exec immediate(conn, sql)
  donar = ibm db.fetch row(stmt)
  print ("The Name is : ", donar)
  if donar:
    sql = f"DELETE FROM donar WHERE name='{escape(name)}'"
    print(sql)
    stmt = ibm db.exec immediate(conn, sql)
    donar = []
    sql = "SELECT * FROM donar"
    stmt = ibm db.exec immediate(conn, sql)
    dictionary = ibm_db.fetch_both(stmt)
   while dictionary != False:
```

```
donar.append(dictionary)
      dictionary = ibm db.fetch both(stmt)
    if donar:
      return render_template("plasmadon.html", donar = donar, msg="Delete
successfully")
  # # while student != False:
  # # print ("The Name is : ", student)
  # print(student)
  return "success..."
@app.route('/mail')
def mail():
  return render_template('mail.html')
@app.route('/recipient')
def recipient():
 return render_template('recipient.html')
@app.route('/takeplasma',methods = ['POST', 'GET'])
def takeplasma():
  if request.method == 'POST':
    name = request.form['name']
    age = request.form['age']
    gender = request.form['gender']
    mnumb = request.form['mnumb']
    proof = request.form['proof']
    address = request.form['address']
    plasma = request.form['plasma']
    sql = "SELECT * FROM recipient WHERE name =?"
    stmt = ibm db.prepare(conn, sql)
    ibm_db.bind_param(stmt,1,name)
    ibm db.execute(stmt)
    account = ibm_db.fetch_assoc(stmt)
    if account:
      return render_template('reclogin.html', msg="You are already a member,
please login using your details")
    else:
      insert sql = "INSERT INTO recipient VALUES (?,?,?,?,?,?)"
      prep stmt = ibm db.prepare(conn, insert sql)
```

```
ibm_db.bind_param(prep_stmt, 1, name)
      ibm db.bind param(prep stmt, 2, age)
      ibm_db.bind_param(prep_stmt, 3, gender)
      ibm_db.bind_param(prep_stmt, 4, mnumb)
      ibm_db.bind_param(prep_stmt, 5, proof)
      ibm db.bind param(prep stmt, 6, address)
      ibm db.bind_param(prep_stmt, 7, plasma)
      ibm_db.execute(prep_stmt)
    return render_template('recipient.html', msg="Registration successfull for
Plasma request..")
@app.route('/plasmareq')
def plasmareq():
  recipient = []
  sql = "SELECT * FROM recipient"
  stmt = ibm_db.exec_immediate(conn, sql)
  dictionary = ibm_db.fetch_both(stmt)
  while dictionary != False:
    # print ("The Name is : ", dictionary)
    recipient.append(dictionary)
    dictionary = ibm db.fetch both(stmt)
  if recipient:
    return render template("plasmareq.html", recipient = recipient)
@app.route('/delete/<name>')
def deleted(name):
  sql = f"SELECT * FROM recipient WHERE name='{escape(name)}'"
  print(sql)
  stmt = ibm db.exec immediate(conn, sql)
  recipient = ibm_db.fetch_row(stmt)
  print ("The Name is : ", recipient)
  if recipient:
    sql = f"DELETE FROM recipient WHERE name='{escape(name)}'"
    print(sql)
    stmt = ibm_db.exec_immediate(conn, sql)
    recipient = []
    sql = "SELECT * FROM recipient"
    stmt = ibm db.exec immediate(conn, sql)
    dictionary = ibm db.fetch both(stmt)
    while dictionary != False:
      recipient.append(dictionary)
      dictionary = ibm_db.fetch_both(stmt)
    if recipient:
```

```
return render_template("plasmareq.html", recipient = recipient,
msg="Delete successfully")

return "Deleted Successfully"

if __name __ == "__main__":
    app.run(port=5000, host="0.0.0.0", debug=True)
```

## **TEMPLATES** >

#### Index.html

```
<!DOCTYPE html>
<html lang="en">
    <meta charset="UTF-8">
    <meta http-equiv="X-UA-Compatible" content="IE=edge">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <!-- CSS only -->
    link
href="https://fonts.googleapis.com/css?family=Merriweather&display=swap"
rel="stylesheet">
    <link rel="shortcut icon" href="assets/images/fav.jpg">
    <link rel="stylesheet" href="../static/bootstrap.min.css">
    <link rel="stylesheet" href="../static/fontawsom-all.min.css">
    <link rel="stylesheet" href="../static/grid-gallery.min.css">
    <link rel="stylesheet" href="../static/grid-gallery.css">
    link
href="https://cdn.jsdelivr.net/npm/bootstrap@5.2.1/dist/css/bootstrap.min.css"
rel="stylesheet" integrity="sha384-
iYQeCzEYFbKjA/T2uDLTpkwGzCiq6soy8tYaI1GyVh/UjpbCx/TYkiZhlZB6+fzT"
crossorigin="anonymous">
    <link rel="stylesheet" type="text/css" href="../static/style.css" />
    <title>Home page</title>
</head>
<body>
    <div class="loader bg">
        <div class="loader"></div>
      </div>
    <header class="p-3 text-bg-dark">
        <div class="container">
```

```
<div class="d-flex flex-wrap align-items-center justify-content-</pre>
center justify-content-lg-start">
              <a href="/" class="d-flex align-items-center mb-2 mb-lg-0</pre>
text-white text-decoration-none">
                  <svg class="bi me-2" width="40" height="32" role="img"</pre>
aria-label="Bootstrap"><use xlink:href="#bootstrap"/></svg>
              content-center mb-md-0">
                  <a href="/" class="nav-link px-2 text-</a>
white"><b>Home</b></a> &nbsp;&nbsp;
                  <a href="#" class="nav-link px-2 text-</a>
white"><b>About</b></a> &nbsp;&nbsp;
                  <a href="#" class="nav-link px-2 text-</a>
white"><b>Blogs</b></a> &nbsp;&nbsp;
                  <a href="#" class="nav-link px-2 text-</a>
white"><b>Camps</b></a>
              <div class="text-end">
                  <button type="button" class="btn btn-outline-secondary"><a</pre>
href="/adminlogin">Admin Login</a></button>
                  <button type="button" class="btn btn-outline-info"><a</pre>
href="/recipientlogin">Looking for plasma?</a></Looking></button>
                  <button type="button" class="btn btn-outline-warning"><a</pre>
href="/donarlogin">Donate Now!</a></button>
              </div>
          </div>
       </div>
   </header>
   <div class="slider-detail">
       <div id="carouselExampleIndicators" class="carousel slide" data-</pre>
ride="carousel">
          class="active">
              to="1">
          <div class="carousel-inner">
              <div class="carousel-item active">
                  <img class="d-block w-100" src="https://model001.s3.jp-</pre>
tok.cloud-object-storage.appdomain.cloud/slide-03.jpg" alt="First slide">
                  <div class="carousel-caption d-none d-md-block">
                     <h5 class=" bounceInDown">Donate Plasma & Save a
Life</h5>
```

```
"A donation of blood means a
few minutes to you, but a lifetime for somebody else."<br>
                           "A small step towards blood donation can give life
to someone's special."<br>
                           "Every blood donor is a life saver."
                       <div class=" vbh">
                           <div class="btn btn-success bounceInUp">DONATE
NOW!</div>
                       </div>
                   </div>
               </div>
               <div class="carousel-item">
                    <img class="d-block w-100" src="https://model001.s3.jp-</pre>
tok.cloud-object-storage.appdomain.cloud/slide-02.jpg" alt="Third slide">
                   <div class="carousel-caption vdg-cur d-none d-md-block">
                       <h5 class=" bounceInDown">Donate Blood & Save a
Life</h5>
                       "A donation of blood means a
few minutes to you, but a lifetime for somebody else."<br>
                           "A small step towards blood donation can give life
to someone's special."<br>
                           "Every blood donor is a life saver."
                       <div class=" vbh">
                           <div class="btn btn-danger bounceInUp"> Donate
Now </div>
                       </div>
                   </div>
               </div>
            </div>
            <a class="carousel-control-prev" href="#carouselExampleIndicators"</pre>
role="button" data-slide="prev">
               <span class="carousel-control-prev-icon" aria-</pre>
hidden="true"></span>
               <span class="sr-only">Previous</span>
            </a>
            <a class="carousel-control-next" href="#carouselExampleIndicators"</pre>
role="button" data-slide="next">
               <span class="carousel-control-next-icon" aria-</pre>
hidden="true"></span>
                <span class="sr-only">Next</span>
```

```
</div>
   </div>
   <!--******** About Us Starts Here **************
   <section id="about" class="contianer-fluid about-us">
      <div class="container">
          <div class="row session-title">
              <h2><u>About Us</u></h2>
               text will be added
          </div>
           <div class="row">
               <div class="col-md-6 text">
                   <h2>About Plasma Donars</h2>
                   when a patient needs plasma, he/she has to contact a
Medical center or a compatible blood group of a donor in their circle, family,
and friends. However, it is difficult to find suitable donor within a limited
group of people in a given time. In addition, there is no guarantee that
Medical center will have compatible plasma in stock. There is also steady
increase in plasma donation requests posts in social networking sites (like
Facebook, twitter, Instagram, etc.) requesting for donation.
                   Ease of access, requirements of plasma, and the plasma
donation statistics are taken into consideration while researching the topic.
There is a steady need for plasma.
                   Although this application helps finding donors, but the
ease of communication with those donors is not prompt and it requires man
power as the requester (patient or clinic) has to contact each donor
individually. Also, there is no application that provides a proper
communication channel to notify donors about the plasma donation
requirements.
                   Our application provides donors with functionalities
including "plasma request", "Ask for donation", "share with friend",(slot
alloted to donate plasma), at the same time the recipient can send requests
and use this application to maintain the donation activities.
               <div class="col-md-6 image">
                   <img src="https://model001.s3.jp-tok.cloud-object-</pre>
storage.appdomain.cloud/about.jpg" alt="">
               </div>
           </div>
      </div>
  </section>
      <div id="gallery" class="gallery container-fluid">
```

```
<div class="container">
             <div class="row session-title">
                 <h2><u>Checkout Our Gallery</u></h2>
            </div>
             <div class="gallery-row row">
                     <div id="gg-screen"></div>
                     <div class="gg-box">
                              <div class="gg-element">
                                  <img src="https://model001.s3.jp-tok.cloud-</pre>
object-storage.appdomain.cloud/g1.jpg">
                              </div>
                              <div class="gg-element">
                                  <img src="https://model001.s3.jp-tok.cloud-</pre>
object-storage.appdomain.cloud/g2.jpg">
                              </div>
                              <div class="gg-element">
                                  <img src="https://model001.s3.jp-tok.cloud-</pre>
object-storage.appdomain.cloud/g3.jpg">
                              </div>
                              <div class="gg-element">
                                  <img src="https://model001.s3.jp-tok.cloud-</pre>
object-storage.appdomain.cloud/g4.jpg">
                              </div>
                              <div class="gg-element">
                                  <img src="https://model001.s3.jp-tok.cloud-</pre>
object-storage.appdomain.cloud/g5.jpg">
                              </div>
                              <div class="gg-element">
                                  <img src="https://model001.s3.jp-tok.cloud-</pre>
object-storage.appdomain.cloud/g6.jpg">
                              </div>
                              <div class="gg-element">
                                  <img src="https://model001.s3.jp-tok.cloud-</pre>
object-storage.appdomain.cloud/g7.jpg">
                              </div>
                              <div class="gg-element">
                                  <img src="https://model001.s3.jp-tok.cloud-</pre>
object-storage.appdomain.cloud/g8.jpg">
                              </div>
                              <div class="gg-element">
                                  <img src="https://model001.s3.jp-tok.cloud-</pre>
object-storage.appdomain.cloud/g9.jpg">
                              </div>
                              <div class="gg-element">
                                  <img src="https://model001.s3.jp-tok.cloud-</pre>
object-storage.appdomain.cloud/g10.jpg">
                              </div>
```

```
</div>
            </div>
        </div>
    </div>
     <!-- ############# Donation Process Start Here
     <section id="process" class="donation-care">
         <div class="container">
           <div class="row session-title">
               <h2><u>Donation Process</u></h2>
               <!-- <p><b>The donation process from the time you arrive center
until the time you leave.</b> -->
           </div>
            <div class="row">
                 <div class="col-md-3 col-sm-6 vd">
                    <div class="bkjiu">
                     <img src="https://model001.s3.jp-tok.cloud-object-</pre>
storage.appdomain.cloud/g1.jpg" alt="">
                     <h4><b>1 - </b>Registration</h4>
                     When you arrive at a plasma center, you will check in
at the front desk. You will need to show a valid photo ID, proof of address,
and proof of social security.
                     <button class="btn btn-sm btn-danger"><a</pre>
href="#">Readmore </a><i class="fas fa-arrow-right"></i></button>
                     </div>
                 </div>
                 <div class="col-md-3 col-sm-6 vd">
                    <div class="bkjiu">
                     <img src="https://model001.s3.jp-tok.cloud-object-</pre>
storage.appdomain.cloud/g2.jpg" alt="">
                        <h4><b>2 - </b>Screening</h4>
                     During the screening, you will give a blood sample and
get your vital signs checked, including your blood pressure, pulse, and
temperature
                     <button class="btn btn-sm btn-danger">Readmore <i</pre>
class="fas fa-arrow-right"></i></button>
                     </div>
                 </div>
                 <div class="col-md-3 col-sm-6 vd">
                    <div class="bkjiu">
                     <img src="https://model001.s3.jp-tok.cloud-object-</pre>
storage.appdomain.cloud/g4.jpg" alt="">
                       <h4><b>3 - </b>Physical Exam</h4>
```

```
> The first time you give plasma, you will receive a
brief physical exam given by a trained medical specialist to make sure you
stay in good health.
                     <button class="btn btn-sm btn-danger">Readmore <i</pre>
class="fas fa-arrow-right"></i></button>
                     </div>
                 </div>
                 <div class="col-md-3 col-sm-6 vd">
                    <div class="bkiiu">
                        <img src="https://model001.s3.jp-tok.cloud-object-</pre>
storage.appdomain.cloud/g1.jpg" alt="">
                        <h4><b>4 - </b>Donation</h4>
                         After approval, plasma center staff will set you
up at a plasmapheresis machine that collects whole blood from a vein in your
arm and it separates out the plasma.
                         <button class="btn btn-sm btn-danger">Readmore <i</pre>
class="fas fa-arrow-right"></i></button>
                    </div>
                 </div>
            </div>
         </div>
     </section>
              <!--######################## Our Blog Starts Here
#####################
              <div id="blog" class="blog-container contaienr-fluid">
                <div class="container">
                    <div class="session-title row">
                      <h2><u>Latest Blog</u></h2>
                      <!-- <p>Lorem ipsum dolor sit amet, consectetur
adipiscing elit. Fusce fringilla vel nisl a dictum. Donec ut est arcu. Donec
hendrerit velit consectetur adipiscing elit.
                    </div>
                    <div class="row news-row">
                        <div class="col-md-6">
                            <div class="news-card">
                                <div class="image">
                                    <img src="https://model001.s3.jp-</pre>
tok.cloud-object-storage.appdomain.cloud/blog_01.jpg" alt="">
                                </div>
                                <div class="detail">
                                    <h3>Give Thanks, Give Blood</h3>
                                    Blood donors share life. And for that,
thousands of people are thankful that blood donors give generously. After
donating blood, we wants to thank our loyal platelet donors with a t-shirt they
can wear loud and proud...
```

```
10 Comments <span>/</span>
                                       Blog Design <span>/</span>
                                       Read More
                                   </div>
                           </div>
                       </div>
                       <div class="col-md-6">
                           <div class="news-card">
                               <div class="image">
                                   <img src="https://model001.s3.jp-</pre>
tok.cloud-object-storage.appdomain.cloud/blog 02.jpg" alt="">
                               </div>
                               <div class="detail">
                                   <h3>Donar Celebrate Milestone</h3>
                                   A few Greenwood donors have gone above
and beyond in their blood donation journeys to save hundreds of local lives!
These donors are great examples of loyal, local lifesavers Thank you for your
continuous blood donations!
                                   17 Comments <span>/</span>
                                       Blog Design <span>/</span>
                                       Read More
                                   </div>
                           </div>
                       </div>
                       <div class="col-md-6">
                           <div class="news-card">
                               <div class="image">
                                   <img src="https://model001.s3.jp-</pre>
tok.cloud-object-storage.appdomain.cloud/blog_03.jpg" alt="">
                               </div>
                               <div class="detail">
                                   <h3>Plasma Donation Do's and Don'ts</h3>
                                   Whether you're a new or returning
plasma donor, or someone who is curious about giving plasma, you probably have
some questions about the donation process. In this blog, we're breaking down
the do's and don'ts of plasma donation... 
                                   09 Comments <span>/</span>
                                       Blog Design <span>/</span>
                                       Read More
                                   </div>
                           </div>
                       </div>
                       <div class="col-md-6">
```

```
<div class="news-card">
                                <div class="image">
                                   <img src="https://model001.s3.jp-</pre>
tok.cloud-object-storage.appdomain.cloud/blog_04.jpg" alt="">
                               </div>
                               <div class="detail">
                                   <h3>How often can I donate plasma?</h3>
                                   To ensure your continued health and
safety during plasma donation, there are Have you decided to donate blood for
research? By donating blood for research purposes, you are contributing to the
medical and scientific breakthroughs... 
                                   14 Comments <span>/</span>
                                       Blog Design <span>/</span>
                                       Read More
                                   </div>
                           </div>
                       </div>
                   </div>
               </div>
            </div>
            <footer class="bg-dark text-center text-white">
                 </section>
                 <!-- Section: Social media -->
               </div>
               <!-- Grid container -->
               <!-- Copyright -->
               <div class="text-center p-3" style="background-color: rgba(0,</pre>
0, 0, 0.2);">
                 PROJECT DONE BY:
                 <a class="text-white" href="#"> <br>TL&nbsp;-&nbsp;KISHORE
KUMAR</a><br>
                 <a class="text-white" href="#">TEAM MEMBERS</a><br>
                 <a class="text-white" href="#">KOSALARAMAN &nbsp;
  MADHANKUMAR    BHARATH</a>
               </div>
               <!-- Copyright -->
              </footer>
              <script
src="https://cdnjs.cloudflare.com/ajax/libs/jquery/3.4.1/jquery.min.js"></scri</pre>
pt>
<script>
   setTimeout(function(){
```

```
$('.loader_bg').fadeToggle();
    }, 1600);
</script>
<script>
   window.watsonAssistantChatOptions = {
      integrationID: "6043dfe7-5b99-49ee-99ed-2d05537340f9", // The ID of this
integration.
      region: "au-syd", // The region your integration is hosted in.
      serviceInstanceID: "26b5b847-d411-43f0-af69-4cd200aed370", // The ID of
your service instance.
     onLoad: function(instance) { instance.render(); }
    };
    setTimeout(function(){
      const t=document.createElement('script');
      t.src="https://web-
chat.global.assistant.watson.appdomain.cloud/versions/" +
(window.watsonAssistantChatOptions.clientVersion | 'latest') +
'/WatsonAssistantChatEntry.js";
      document.head.appendChild(t);
 </script>
</body>
        <script src="../js/jquery-3.2.1.min.js"></script>
        <script src="../js/popper.min.js"></script>
        <script src="../js/bootstrap.min.js"></script>
        <script src="../js/grid-gallery.min.js"></script>
        <script src="../js/jquery-scrolltofixed-min.js"></script>
        <script src="../js/script.js"></script>
        <script src="../js/grid-gallery.js"></script>
</html>
```

#### Admin.html

```
<link rel="stylesheet" href="assets/css/fontawsom-all.min.css">
   <link rel="stylesheet" type="text/css" href="../static/donar.css">
   <link rel="stylesheet" href="assets/plugins/grid-gallery/css/grid-</pre>
gallery.min.css">
   k
href="https://cdn.jsdelivr.net/npm/bootstrap@5.2.1/dist/css/bootstrap.min.css"
rel="stylesheet" integrity="sha384-
iYQeCzEYFbKjA/T2uDLTpkwGzCiq6soy8tYaI1GyVh/UjpbCx/TYkiZhlZB6+fzT"
crossorigin="anonymous">
   <title>Admin Page</title><header class="p-3 text-bg-dark">
   <div class="container">
       <div class="d-flex flex-wrap align-items-center justify-content-center</pre>
justify-content-lg-start">
           <a href="/" class="d-flex align-items-center mb-2 mb-lg-0 text-</pre>
white text-decoration-none">
              <svg class="bi me-2" width="40" height="32" role="img" aria-</pre>
label="Bootstrap"><use xlink:href="#bootstrap"/></svg>
           center mb-md-0">
            <b><center>&nbsp;&nbsp; &nbsp;&nbsp; &nbsp;&nbsp;
</b> &nbsp;&nbsp;
             </div>
   </div>
   </header>
 </head>
 <body>
   <div class="loader bg">
     <div class="loader"></div>
   </div>
   <br><a href="/mail">
     <button style="margin-left: 1400px;" type="button" class="btn btn-</pre>
success">Mail</button></a>
   <div class="content-center">
           <button type="button" class="btn btn-warning btn-lg"><a</pre>
href="/plasmadon">Donation requests</a></button>
          <br><br><br>>
```

```
<button type="button" class="btn btn-danger btn-lg"><a</pre>
href="/plasmareq">Recipient requests</a></button>
        </center>
        <br><a href="/">
        <button style="margin-left: 20px;" type="button" class="btn btn-</pre>
success">Log out</button></a>
<script
src="https://cdnjs.cloudflare.com/ajax/libs/jquery/3.4.1/jquery.min.js"></scri</pre>
 </body>
  <style>
        body{
      background: rgb(2,0,36);
      background: linear-gradient(270deg, rgba(2,0,36,1) 0%, rgba(9,9,121,1)
0%, rgba(0,212,255,1) 100%);
    button a:link {
  text-decoration: none;
  color: #000000;
button a:visited { text-decoration: none; color:#ffffff;}
button a:hover { text-decoration: none; color:#ffffff; }
a:active { text-decoration: none; color: #ffffff;}
table, th, td {
  border: 1px solid black;
  </style>
<script>
 setTimeout(function(){
      $('.loader_bg').fadeToggle();
  }, 1600);
</script>
</html>
```

## Adminlogin.html

```
<!DOCTYPE html>
```

```
<html lang="en" >
  <meta charset="UTF-8">
  <title>Admin Login</title>
  <link href="https://fonts.googleapis.com/css?family=Open+Sans"</pre>
rel="stylesheet">
  <link href="https://maxcdn.bootstrapcdn.com/font-awesome/4.7.0/css/font-</pre>
awesome.min.css" rel="stylesheet" integrity="sha384-
wvfXpqpZZVQGK6TAh5PV1GOfQNHSoD2xbE+QkPxCAF1NEevoEH3S10sibVcOQVnN"
crossorigin="anonymous">
  <link rel="stylesheet" type="text/css" href="../static/adminlogin.css">
</head>
<div class="loader bg">
    <div class="loader"></div>
<!-- partial:index.partial.html -->
<div class="box-form">
    <div class="left">
        <div class="overlay">
        <h1>Wc Admin!</h1>
        Good governance depends on ability to take responsibility
             by both administration as well as people...
        <span>
            <h3>&nbsp; &nbsp;<u>login with social media</u></h3>
            <a href="https://www.facebook.com/login/"><i class="fa fa-</pre>
facebook" aria-hidden="true"></i></a>
href="https://accounts.google.com/ServiceLogin?rart=ANgoxccWMJUYH-
Qa3XU QXDV2zFIXhG7Wy7iJAIPJ8JsqryC6xHQj-SeDlstF-
bGjgZ0BZWyPE5U3qrh9MUAqzry3Wytg4n8Ig"><i class="fa fa-google" aria-
hidden="true"></i>&nbsp;Login with Gmail</a>
            <!-- <a href="#"><i class="bi bi-google" aria-
        </span>
        </div>
    </div>
        <div class="right">
        <h5>Admin!</h5> <!-- <p>Don't have an account? <a href="#">Creat</a>
        <div class="inputs">
            <input type="text" placeholder="user id">
            <input type="password" placeholder="password">
        </div>
```

```
<br><br><br>>
        <div class="remember-me--forget-password">
                <!-- Angular -->
    <!-- <label>
        <input type="checkbox" name="item" />
        <span class="text-checkbox">Remember me</span>
    </label> -->
    <br>
            <button><a href="/admin">Login</a></button>
            <!-- <p>forget password? -->
        </div>
            <br>
            Don't have an account? <a href="/adminreg">Create Your</a>
Account</a> it takes less than a minute
    </div>
</div>
<script
src="https://cdnjs.cloudflare.com/ajax/libs/jquery/3.4.1/jquery.min.js"></scri</pre>
pt>
<script>
    setTimeout(function(){
        $('.loader_bg').fadeToggle();
    }, 1600);
  </script>
</body>
</html>
```

# Adminreg.html

```
<form name="admin" action="adminlogin.html" onsubmit="return</pre>
validateForm()" method='post'>
      <fieldset>
        <label>Enter Your Hospital/ Institution Name: <input type="text"</pre>
name="hname" id="hiname" required /></label>
        <label>Enter Register-Id: <input type="text" name="regid" id="reg"</pre>
required /></label>
        <label>Enter Your Email: <input type="email" name="email" id="mail"</pre>
required /></label>
        <label>Enter User-id: <input type="text" name="Userid" id="user"</pre>
required /></label>
        <label>Create a New Password: <input type="password" name="password"</pre>
id="ipass" required pattern="[a-zA-Z0-9]+" /></label>
      </fieldset>
      <fieldset>
        <input type="radio" name="account-type" class="inline" /> Hospital
   <input type="radio" name="account-type" class="inline" /> Medical
Institution
        <label>
          <input type="checkbox" name="terms" class="inline" required /> I
accept the <a href="#">terms and conditions</a>
        </label>
      </fieldset>
      <center>
      <button class="btn btn-success btn-lg"><a</pre>
href="/adminlogin">Submit</a></button></center>
    </form>
  </body>
  <script>
    function validateForm(){
    var hname=document.admin.hname.value;
    if(hname.length==0 || hname==""){
        alert("Hospital name must be filled out");
        return false;
    var regid=document.admin.regid.value;
    if(reg.length==0 | regid.length < 6){</pre>
       alert("Register-Id required!");
        return false;
    var email=document.admin.email.value;
    if(email.length==0){
        alert("Email required!");
        return false;
```

```
var Userid=document.admin.Userid.value;
if(userid.length==0){
    alert("User-Id required!");
    return false;
}

var password=document.admin.password.value;
if(password.length < 8){
    alert("condition not satisfied");
    return false;
}

}
</html>
```

#### Donar.html

```
<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <meta http-equiv="X-UA-Compatible" content="IE=edge">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    link
href="https://fonts.googleapis.com/css?family=Merriweather&display=swap"
rel="stylesheet">
    <link rel="stylesheet" href="assets/css/bootstrap.min.css">
    <link rel="stylesheet" href="assets/css/fontawsom-all.min.css">
    <link rel="stylesheet" type="text/css" href="../static/donar.css">
    <link rel="stylesheet" href="assets/plugins/grid-gallery/css/grid-</pre>
gallery.min.css">
    link
href="https://cdn.jsdelivr.net/npm/bootstrap@5.2.1/dist/css/bootstrap.min.css"
rel="stylesheet" integrity="sha384-
iYQeCzEYFbKjA/T2uDLTpkwGzCiq6soy8tYaI1GyVh/UjpbCx/TYkiZhlZB6+fzT"
crossorigin="anonymous">
    <title>Donar Req</title>
<body>
   <header class="p-3 text-bg-dark">
```

```
<div class="container">
           <div class="d-flex flex-wrap align-items-center justify-content-</pre>
center justify-content-lg-start">
               <a href="/" class="d-flex align-items-center mb-2 mb-lg-0"
text-white text-decoration-none">
                   <svg class="bi me-2" width="40" height="32" role="img"</pre>
aria-label="Bootstrap"><use xlink:href="#bootstrap"/></svg>
               </a>
               content-center mb-md-0">
                   <a href="/" class="nav-link px-2 text-</a>
white"><b>Home</b></a> &nbsp;&nbsp;
                   <a href="#" class="nav-link px-2 text-</a>
white"><b>About</b></a> &nbsp;&nbsp;
                   <a href="#" class="nav-link px-2 text-</a>
white"><b>Blogs</b></a> &nbsp;&nbsp;
                   <a href="#" class="nav-link px-2 text-</a>
white"><b>Camps</b></a>
               <div class="text-end">
                 <button type="button" class="btn btn-outline-secondary"><a</pre>
href="/adminlogin">Admin Login</a></button>
                 <button type="button" class="btn btn-outline-info"><a</pre>
href="/recipientlogin">Looking for plasma?</a></button>
                 <button type="button" class="btn btn-outline-warning"><a</pre>
href="/donarlogin">Donate Now!</a></button>
               </div>
           </div>
       </div>
   </header>
    <div class="marquee">
    <marquee width="80%" direction="left" height="20px" scrolldelay="100">
       Welcome Donar ! You are the Saviour, Your donation □ can save the
lot of lifes ♥ Thanks for donating 💵
   </marquee>
   </div>
       <div class="foot">
           <center><h3>DONATION DETAILS</h3></center>
           <a href="/">
             <button style="margin-left: 20px;" type="button" class="btn btn-</pre>
success">Log out</button></a>
           <center>{{msg}}</center>
           <form action="{{ url_for('giveplasma') }}" method="POST">
```

```
Name
            <input type = "text" name="name" required/>
            Age
            <input type="number" name="age" required/>
            Gender
            <input type="radio" name="gender" value="Male"/>Male
 <input type="radio" name="gender" value="Female"/>Female
            Mobile No
            <input type="number" name="mnumb" maxlength="10"
required/>
            Email
            <input type="text" name="email" maxlength="50"
required/>
            City
            <input type = "text" name="city" required/>
            >
            Address
            <textarea name="address" required></textarea>
            Blood Group
            <select name="bloodgroup" id="blood" required>
               <option>A+ve</option>
               <option>A-ve</option>
               <option>B+ve</option>
               <option>B-ve</option>
               <option>AB+ve</option>
               <option>AB-ve</option>
```

```
<option>0+ve</option>
                  <option>0-ve</option>
              </select>
               Any Health Issues
              <input type="text" name="issue" maxlength="3"
required/> (type "Yes" or "No")
              Last blood donated date
              <input type="date" name="lastbd" required>
              Book Slot
              <input type="date" name="slot" required/>
            
              <center>
              <input type="submit" value="Submit">
              <!-- <button type="button" class="btn btn-success"><a
              <!-- <button type="button" class="w3-button w3-green"
value="Submit"><a href="#">Register</a></button> -->
              </center>
            </form>
           </center>
           </div>
           <footer class="bg-dark text-center text-white">
              <!-- Grid container -->
              <div class="container p-4 pb-0">
                <!-- Section: Social media -->
                <section class="mb-4">
                  <!-- Facebook -->
                  <!-- <a class="btn btn-outline-light btn-floating m-1"
href="#!" role="button"
                  <a class="btn btn-outline-light btn-floating m-1"</pre>
href="#!" role="button"
```

```
><i class="fab fa-twitter"></i</pre>
                      ></a>
                      <!-- Google -->
                      <a class="btn btn-outline-light btn-floating m-1"</pre>
href="#!" role="button"
                        ><i class="fab fa-google"></i</pre>
                      ></a>
                      <!-- Instagram -->
                      <a class="btn btn-outline-light btn-floating m-1"</pre>
href="#!" role="button"
                        ><i class="fab fa-instagram"></i</pre>
                      ></a>
                      <!-- Linkedin -->
                      <a class="btn btn-outline-light btn-floating m-1"</pre>
href="#!" role="button"
                        ><i class="fab fa-linkedin-in"></i</pre>
                      ></a>
                      <!-- Github -->
                      <a class="btn btn-outline-light btn-floating m-1"</pre>
href="#!" role="button"
                        ><i class="fab fa-github"></i</pre>
                      ></a>
                    </section>
                  </div>
                 <!-- Grid container -->
                 <!-- Copyright -->
                 <div class="text-center p-3" style="background-color: rgba(0,</pre>
0, 0, 0.2);">
                   © 2020 Copyright:
                    <a class="text-white"</pre>
href="#">kishorekumar1409@gmail.com</a>
                 </div>
                 <!-- Copyright -->
               </footer>
</body>
</html>
```

## **Donlogin.html**

```
<!DOCTYPE html>
<html lang="en" >
  <meta charset="UTF-8">
 <title>Donar Login</title>
  <link rel="stylesheet"</pre>
href="https://cdnjs.cloudflare.com/ajax/libs/normalize/5.0.0/normalize.min.css
<link rel="stylesheet" href="../static/logincss.css">
</head>
<center><h4>{{msg}}</h4></center>
<body>
 <div class="loader bg">
    <div class="loader"></div>
    </div>
<!-- partial:index.partial.html -->
<div id="login-form-wrap">
  <h2>Donar Login</h2>
  <form id="login-form">
    <input type="text" id="email" name="email" placeholder="Email" required><i</pre>
class="validation"><span></span></span></i>
    <input type="password" id="password" name="password"</pre>
placeholder="password" required><i
class="validation"><span></span></span></i>
    <a href="/donar">
        <button type="button" class="btn btn-success">Log in</button>
        </a>
    </form>
  <div id="create-account-wrap">
    Are you New ? <a href="/donregistration">Create Account</a>
  </div><!--create-account-wrap-->
</div><!--login-form-wrap-->
<!-- partial -->
src="https://cdnjs.cloudflare.com/ajax/libs/jquery/3.4.1/jquery.min.js"></scri</pre>
pt>
<script>
 setTimeout(function(){
```

```
$('.loader_bg').fadeToggle();
}, 1600);
</script>
</body>
</html>
```

#### **Donregistration.html**

```
<!DOCTYPE html>
<html lang="en" >
<head>
 <meta charset="UTF-8">
 <title>Donar sign-up</title>
 <link rel="stylesheet" type="text/css" href="../static/reciptreg.css">
</head>
<body>
<!-- partial:index.partial.html -->
<body>
 <div class="loader_bg">
   <div class="loader"></div>
 </div>
   <h3>DONAR SIGN-UP</h3>
<form action="{{ url_for('donrec') }}" method="POST">
FIRST NAME
<input type="text" name="fname" id="finame" maxlength="30" required/>
(max 30 characters a-z and A-Z)
```

```
LAST NAME
<input type="text" name="lname" id="liname" maxlength="30" required/>
(max 30 characters a-z and A-Z)
DATE OF BIRTH
<input type="date" name="dob" id="day" required/>
</select>
<!---- Email Id _____
EMAIL ID
<input type="text" name="email" id="mail" maxlength="100" required/>
<!---- Mobile Number -------
MOBILE NUMBER
<input type="text" name="mnumb" id="numb" maxlength="10" required/>
(10 digit number)
GENDER
<input type="radio" name="gender" value="Male" />Male
<input type="radio" name="gender" value="Female" />Female
<!---- Address —
ADDRESS <br /><br /><br />
```

```
<textarea name="address" rows="4" cols="30"></textarea>
<!---- City ------
CITY
<input type="text" name="City" maxlength="30" />
(max 30 characters a-z and A-Z)
 -->
<!---- Pin Code ----
PIN CODE
<input type="text" name="pin" id="ipin" maxlength="6" />
(6 digit number)
<!---- State ———
PASSWORD
<input type="password" name="password" id="pass" maxlength="20" required/>
<!---- Country ———
CONFIRM PASSWORD
<input type="password" name="cpassword" id="cpass" required>
<!-- <button type="button -->
 <!-- <button type="button" class="w3-button w3-green" value="button"><a
href="/donarlogin">Submit</a></button> -->
 <input type="submit" value="Submit">
<!-- <button type="button" class="w3-button w3-green"
value="Submit">Submit</button>
```

```
<button type="button" class="w3-button w3-light-green"</pre>
value="Reset">Reset</button> -->
</form>
</center>
</body>
<script>
  function validateForm(){
    var returnval=true;
    clearErrors();
    var finame=document.forms['donar']["fname"].value;
    if(finame.length==0){
        alert("first name must be filled out");
        return false;
    var liname=document.forms['donar']["lname"].value;
    if(liname.length==0){
        alert("last name must be filled out");
        return false;
    var mail=document.forms['donar']["email"].value;
    if(mail.length==0){
        alert("Email required!");
        return false;
    var numb=document.forms['donar']["mnumb"].value;
    if(numb.length<10){</pre>
        alert("Mobile number Invalid!");
        return false;
    // var pass = document.getElementById("password");
    // var cpass = document.getElementById("cpassword");
    var pass = document.forms['donar']["password"].value;
    var cpass = document.forms['donar']["cpassword"].value;
    if(pass != cpass)
      alert("Passwords did not match");
    } else {
      alert("Password created successfully");
  }
</script>
```

#### Mail.html

```
<!DOCTYPE html>
<html lang="en">
    <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>Mail Port</title>
</head>
<body>
    <center>
    <div class="email" >
        <form name="mail">
            From : <input type="text" value="510919205019@smartinternz.com">
            To : <input type="text" value="">
            <br>
            Message : <br>
            <textarea name="msg" rows="6" cols="20" ></textarea><br>
                <!-- <input type="send" value=" &nbsp; &nbsp; &nbsp;
                <button type="button" class="btn btn-</pre>
primary">Send</button></center>
        </form>
    </div>
</center>
<a href="/admin">
```

```
<button style="margin-left: 20px;" type="button" class="btn btn-</pre>
success">Go Back</button></a>
</body>
<style>
    body{
        background-image: url('https://model001.s3.jp-tok.cloud-object-
storage.appdomain.cloud/101304060-72ff5b00-380d-11eb-8c58-a3172d791c9c.jpeg');
        background-repeat: no-repeat;
        background-size: cover;
    input[type=button], input[type=send], input[type=reset] {
    background-color: #04AA6D;
    border: none;
    color: white;
    padding: 12px 20px;
    text-decoration: none;
    margin: 4px 2px;
    cursor: pointer;
    form{
        margin-top: 150px;
        width: 35rem;
        height: 22rem;
        display: flex;
        flex-direction: column;
        background: rgba(255,255,255,0.06);
        box-shadow: 0 8px 32px 0 rgba(31,38,135,.40);
        border-radius: 35px;
        border: 1px solid rgba(255,255,255,0.3);
        font-family: Calibri;
  /* color:white; */
        font-size: 11pt;
        font-style: normal;
        font-weight: bold;
  /* text-align:; */
        background-color: none;
        border-collapse: collapse;
        border: none;
        border-radius: 15px;
    form .input{
        margin-left: 10px;
    input[type=text] {
    width: 100%;
```

```
padding: 12px 20px;
margin: 8px 0;
box-sizing: border-box;
}

input[type=text]:focus {
  border: 3px solid #555;
  }
</style>
</html>
```

#### Plasmadon.html

```
<body>
 <br>
<center><h4>PLASMA DONATION REQUESTS</h4></center>
<center>{{msg}}</center>
  Name
  Age
  Gender
  Mobile No
  Email
  City
  Address
  Bloodgroup
  Any Issue
  Last Blood Donated Date
  Book Slot
  Delete
</thead>
{% for row in donar %}
  {{row["NAME"]}}
    {{row["AGE"]}}
    {{row["GENDER"]}}
    {{row['MNUMB']}}
    {{row['EMAIL']}}
    {{row['CITY']}}
    {{row['ADDRESS']}}
    {{row['BLOODGROUP']}}
```

```
{{row['ISSUE']}}
      {{row['LASTBD']}}
      {{row['SLOT']}}
      <a href="/delete/{{row['NAME']}}">Delete</a>
    {% endfor %}
</center>
<a href="/admin" class="previous">&laquo; Go Back</a>
</body>
<style>
  body{
     background-image: url('https://model001.s3.jp-tok.cloud-object-
storage.appdomain.cloud/Love%20and%20Liberty%20(1).jpg');
   table{
     color:rgb(255, 255, 255);
     border-color: goldenrod;
     border-radius: 12px;
     border-width: 2px;
  h4{
     color:goldenrod;
     font-size: larger;
     -webkit-text-stroke: 0.5px;
      -webkit-text-stroke-color: rgb(255, 255, 255);
     font-family: system-ui, -apple-system, BlinkMacSystemFont, 'Segoe UI',
Roboto, Oxygen, Ubuntu, Cantarell, 'Open Sans', 'Helvetica Neue', sans-serif;
   a {
     margin-left: 15px;
     text-decoration: none;
     display:inline-block;
     padding: 8px 16px;
  a:hover {
  background-color: rgb(87, 255, 2);
  color:black;
   .previous {
  background-color: rgb(255, 255, 255);
  color: black;
</style>
```

### Plasmareq.html

```
<body>
  <br>
  <center><h4>PLASMA RECIPIENT REQUESTS</h4></center>
  <center>{{msg}}</center>
<br>
   Name
        Age
        Gender
        Mobile No
        ID Proof
        Address
        Plasma Volume
        Delete
      </thead>
      {% for row in recipient %}
        {{row["NAME"]}}
           {{row["AGE"]}}
           {{row["GENDER"]}}
           {{row['MNUMB']}}
           {{row['PROOF']}}
           {{row['ADDRESS']}}
           {{row['PLASMA']}}
           <a href="/delete/{{row['NAME']}}">Delete</a>
        {% endfor %}
   <a href="/admin" class="previous">&laquo; Go Back</a>
</body>
<style>
  body{
    background-image: url('https://model001.s3.jp-tok.cloud-object-
storage.appdomain.cloud/Auepal.jpg');
  table{
    color:rgb(0, 0, 0);
    border-color: aquamarine;
    border-radius: 12px;
    border-width: 2px;
```

```
font-weight: bold;
  h4{
     color:brown;
     font-size: large;
      -webkit-text-stroke: 1px;
      -webkit-text-stroke-color: black;
      font-family: system-ui, -apple-system, BlinkMacSystemFont, 'Segoe UI',
Roboto, Oxygen, Ubuntu, Cantarell, 'Open Sans', 'Helvetica Neue', sans-serif;
   a {
     margin-left: 15px;
     text-decoration: none;
     display:inline-block;
     padding: 8px 16px;
  a:hover {
  background-color: rgb(17, 173, 212);
  color:black;
   .previous {
 background-color: rgb(255, 255, 255);
  color: black;
</style>
```

# Recipient.html

```
<link rel="stylesheet" type="text/css" href="../static/recipient.css">
    <link rel="stylesheet" href="assets/plugins/grid-gallery/css/grid-</pre>
gallery.min.css">
   link
href="https://cdn.jsdelivr.net/npm/bootstrap@5.2.1/dist/css/bootstrap.min.css"
rel="stylesheet" integrity="sha384-
iYQeCzEYFbKjA/T2uDLTpkwGzCiq6soy8tYaI1GyVh/UjpbCx/TYkiZhlZB6+fzT"
crossorigin="anonymous">
    <title>Recipient Req</title>
</head>
<body>
    <header class="p-3 text-bg-dark">
        <div class="container">
            <div class="d-flex flex-wrap align-items-center justify-content-</pre>
center justify-content-lg-start">
               <a href="/" class="d-flex align-items-center mb-2 mb-lg-0</pre>
text-white text-decoration-none">
                   <svg class="bi me-2" width="40" height="32" role="img"</pre>
aria-label="Bootstrap"><use xlink:href="#bootstrap"/></svg>
               </a>
                content-center mb-md-0">
                   <a href="/" class="nav-link px-2 text-</a>
white"><b>Home</b></a> &nbsp;&nbsp;
                   <a href="#" class="nav-link px-2 text-</a>
white"><b>About</b></a> &nbsp;&nbsp;
                   <a href="#" class="nav-link px-2 text-</a>
white"><b>Blogs</b></a> &nbsp;&nbsp;
                   <a href="#" class="nav-link px-2 text-</a>
white"><b>Camps</b></a>
               <div class="text-end">
                 <button type="button" class="btn btn-outline-secondary"><a</pre>
href="/adminlogin">Admin Login</a></button>
                 <button type="button" class="btn btn-outline-info"><a</pre>
href="/recipientlogin">Looking for plasma?</a></button>
                 <button type="button" class="btn btn-outline-warning"><a</pre>
href="/donarlogin">Donate Now!</a></button>
               </div>
            </div>
       </div>
    </header>
    <div class="marquee">
    <marquee width="80%" direction="left" height="20px" scrolldelay="100">
        Welcome ! Your contribution □ can save the lot of lifes ♥ Thanks
for choosing our site 🕊
```

```
</marquee>
   </div>
      <div class="foot">
        <center><h3>RECIPIENT DETAILS</h3></center>
        <a href="/">
          <button style="margin-left: 20px;" type="button" class="btn btn-</pre>
success">Log out</button></a>
        <center>{{msg}}</center>
        <center>
        <form action="{{ url_for('takeplasma') }}" method="POST">
           Name
           <input type = "text" name="name" value="" required/>
           Age
           <input type="number" name="age" required/>
           Gender
           <input type="radio" name="gender" value="Male"/>Male
Mobile No
           <input type="number" name="mnumb" value="Mnumb"
maxlength="10" required/>
           Email
           <input type="email" name="email" required/>
           Id proof
           <input type="text" name="proof" placeholder="Adhaar
no,voter id no" maxlength="12" required/>
```

```
Permanent Address
              <textarea name="address" required></textarea>
              Volume
              <select name="plasma" id="iplasma" required>
                  <option>1 Unit (200 - 250 mL)
                  <option>2 Unit (400 - 500 mL)</option>
                  <option>3 Unit (600 - 750 mL)
                  <option>4 Unit (800 - 1000 mL)</option>
              </select>
              <input type="checkbox" checked/> &nbsp; I Accept all the
Terms and conditions*
               
              <center>
              <input type="submit" value="Submit">
              <!-- <button type="button" class="w3-button w3-green"
            </form>
           </center>
           <br>
           <footer class="bg-dark text-center text-white">
              <!-- Grid container -->
              <div class="container p-4 pb-0">
                <!-- Section: Social media -->
                <section class="mb-4">
                  <!-- Facebook -->
                  <!-- <a class="btn btn-outline-light btn-floating m-1"
href="#!" role="button"
                    ><i class="fab fa-facebook-f"></i><b</pre>
                    >f</b></a> -->
                  <!-- Twitter -->
                  <a class="btn btn-outline-light btn-floating m-1"</pre>
href="#!" role="button"
                   ><i class="fab fa-twitter"></i</pre>
```

```
></a>
                      <!-- Google -->
                      <a class="btn btn-outline-light btn-floating m-1"</pre>
href="#!" role="button"
                        ><i class="fab fa-google"></i</pre>
                      ></a>
                      <!-- Instagram -->
                      <a class="btn btn-outline-light btn-floating m-1"</pre>
href="#!" role="button"
                        ><i class="fab fa-instagram"></i</pre>
                      ></a>
                      <!-- Linkedin -->
                      <a class="btn btn-outline-light btn-floating m-1"</pre>
href="#!" role="button"
                        ><i class="fab fa-linkedin-in"></i</pre>
                      ></a>
                      <a class="btn btn-outline-light btn-floating m-1"</pre>
href="#!" role="button"
                        ><i class="fab fa-github"></i</pre>
                      ></a>
                    </section>
                 </div>
                 <!-- Grid container -->
                 <!-- Copyright -->
                 <div class="text-center p-3" style="background-color: rgba(0,</pre>
0, 0, 0.2);">
                   © 2020 Copyright:
                   <a class="text-white"</pre>
href="#">kishorekumar1409@gmail.com</a>
                 </div>
                  <!-- Copyright -->
               </footer>
</body>
</html>
```

#### **Recipregistration.html**

```
<!DOCTYPE html>
<html lang="en" >
 <meta charset="UTF-8">
 <title>Recipient sign-up</title>
 <link rel="stylesheet" type="text/css" href="../static/reciptreg.css">
</head>
<body>
<!-- partial:index.partial.html -->
<html>
</head>
<body>
 <div class="loader bg">
   <div class="loader"></div>
 </div>
 <center>
   <h3>RECIPIENT SIGN-UP</h3>
   <center>{{msg}}</center>
    <form action="{{ url_for('recipientrec') }}" method="POST">
<!---- First Name ----
FIRST NAME
<input type="text" name="fname" id="finame" maxlength="30" required/>
(max 30 characters a-z and A-Z)
LAST NAME
<input type="text" name="lname" id="liname" maxlength="30" required/>
(max 30 characters a-z and A-Z)
```

```
<!---- Date Of Birth -----
DATE OF BIRTH
<input type="date" name="dob" id="day" required/>
</select>
<!---- Email Id —
EMAIL ID
<input type="text" name="email" id="mail" maxlength="100" required/>
<!---- Mobile Number ------
MOBILE NUMBER
<input type="text" name="mnumb" id="numb" maxlength="10" required/>
(10 digit number)
GENDER
<input type="radio" name="gender" value="Male" />Male
<input type="radio" name="gender" value="Female" />Female
<!---- Address —
ADDRESS <br /><br />
<textarea name="address" rows="4" cols="30"></textarea>
<!---- City ------>
CITY
<input type="text" name="City" maxlength="30" />
(max 30 characters a-z and A-Z)
```

```
 -->
<!---- Pin Code ————
PIN CODE
<input type="text" name="pin" id="ipin" maxlength="6" />
(6 digit number)
<!---- State —
PASSWORD
<input type="password" name="password" id="pass" maxlength="12" required/>
<!-- (max 30 characters a-z and A-Z) -->
<!---- Country ———
CONFIRM PASSWORD
<input type="password" name="cpassword" id="cpass" required>
<!---- Submit and Reset ------
<!-- <button type="button" class="btn btn-outline-success"><a
href="/recipientlogin">Submit</a></button> -->
 <input type="submit" value="Submit">
<!-- <button type="button" class="w3-button w3-green"
<button type="button" class="w3-button w3-light-green"</pre>
value="Reset">Reset</putton> -->
</form>
</center>
</body>
<script>
 function validateForm(){
   var returnval=true;
  clearErrors();
```

```
var finame=document.forms['recipt']["fname"].value;
    if(finame.length==0){
        alert("first name must be filled out");
        return false;
    var liname=document.forms['recipt']["lname"].value;
    if(liname.length==0){
        alert("last name must be filled out");
        return false;
    var mail=document.forms['recipt']["email"].value;
    if(mail.length==0){
        alert("Email required!");
        return false;
    var numb=document.forms['recipt']["mnumb"].value;
    if(numb.length<10){</pre>
        alert("Mobile number Invalid!");
        return false;
    // var pass = document.getElementById("password");
    // var cpass = document.getElementById("cpassword");
    var pass = document.forms['recipt']["password"].value;
    var cpass = document.forms['recipt']["cpassword"].value;
    if(pass != cpass)
      alert("Passwords did not match");
    } else {
      alert("Password created successfully");
  }
</script>
<script
src="https://cdnjs.cloudflare.com/ajax/libs/jquery/3.4.1/jquery.min.js"></scri</pre>
pt>
<script>
 setTimeout(function(){
    $('.loader_bg').fadeToggle();
  }, 1600);
  </script>
</html>
```

```
<!-- partial -->
</body>
</html>
```

## Reclogin.html

```
<!DOCTYPE html>
<html lang="en" >
  <meta charset="UTF-8">
  <title>Recipient Login</title>
 <link rel="stylesheet"</pre>
href="https://cdnjs.cloudflare.com/ajax/libs/normalize/5.0.0/normalize.min.css
<link rel="stylesheet" href="../static/logincss.css">
</head>
<center><h4>{{msg}}</h4></center>
<body>
  <div class="loader bg">
    <div class="loader"></div>
    </div>
<!-- partial:index.partial.html -->
<div id="login-form-wrap">
  <h2>Recipient Login</h2>
  <form id="login-form">
    <input type="text" id="email" name="email" placeholder="email" required><i</pre>
class="validation"><span></span></span></i>
    <input type="password" id="password" name="password"</pre>
placeholder="password" required><i
class="validation"><span></span></span></i>
    <!-- <button type="submit" id="login" class="btn btn-primary"
value="Login">LOGIN</button> -->
    <a href="/recipient">
      <button type="button" class="btn btn-success">Log in</button>
      </a>
    </form>
  <div id="create-account-wrap">
   Are you New ? <a href="/recipregistration">Create Account</a>
```

```
</div><!--create-account-wrap-->
</div><!--login-form-wrap-->
<!-- partial -->
<script
src="https://cdnjs.cloudflare.com/ajax/libs/jquery/3.4.1/jquery.min.js"></script>
<script>
    setTimeout(function(){
        $('.loader_bg').fadeToggle();
    }, 1600);
</script>
</body>
</html>
```

### Mail.py

```
from flask import Flask
import sendgrid
import os
from sendgrid import SendGridAPIClient
from sendgrid.helpers.mail import Mail
from flask_mail import Mail, Message
app = Flask( name )
mail = Mail(app) # instantiate the mail class
# configuration of mail
app.config['MAIL SERVER']='smtp.gmail.com'
app.config['MAIL_PORT'] = 465
app.config['MAIL_USERNAME'] = '510919205023@smartinternz.com'
app.config['MAIL_PASSWORD'] = '*****'
app.config['MAIL_USE_TLS'] = False
app.config['MAIL_USE_SSL'] = True
mail = Mail(app)
# message object mapped to a particular URL '/'
@app.route("/Email")
def index():
   send = msg
   msg = Message(
                sender ='510919205023@smartinternz.com',
                recipients = ['']
   msg.body = 'Integrating done with Sendgrid and python code!'
  mail.send(msg)
```

```
send = (msg)
return 'send'

if_name_== '_main_':
    app.run(debug = True)
```

#### STATIC >

# Adminlogin.css

```
.loader_bg{
  position: fixed;
  z-index: 999999;
  background: rgb(183, 182, 182);
 width: 100%;
  height: 100%;
.loader{
  border: 0 soild transparent;
  border-radius: 50%;
 width: 150px;
 height: 150px;
  position: absolute;
  top: calc(50vh - 75px);
  left: calc(50vw - 75px);
.loader:before, .loader:after{
  content: '';
 /* border: 1em solid #ff5733; */
 border: 1em solid #e03c33;
  border-radius: 50%;
  width: inherit;
  height: inherit;
  position: absolute;
  top: 0;
  left: 0;
  animation: loader 2s linear infinite;
  opacity: 0;
.loader:before{
  animation-delay: .5s;
@keyframes loader{
 0%{
```

```
transform: scale(0);
      opacity: 0;
  50%{
      opacity: 1;
  100%{
      transform: scale(1);
      opacity: 0;
body {
  background-image: linear-gradient(135deg, #FAB2FF 10%, #1904E5 100%);
  background-size: cover;
  background-repeat: no-repeat;
  background-attachment: fixed;
  font-family: "Open Sans", sans-serif;
  color: #333333;
.box-form {
  margin: 0 auto;
 width: 80%;
  background: #FFFFFF;
  border-radius: 10px;
  overflow: hidden;
  display: flex;
  flex: 1 1 100%;
  align-items: stretch;
  justify-content: space-between;
  box-shadow: 0 0 20px 6px #090b6f85;
@media (max-width: 980px) {
  .box-form {
    flex-flow: wrap;
    text-align: center;
    align-content: center;
    align-items: center;
.box-form div {
  height: auto;
.box-form .left {
  color: #FFFFFF;
  background-size: cover;
  background-repeat: no-repeat;
```

```
background-image: url('https://model001.s3.jp-tok.cloud-object-
storage.appdomain.cloud/admimg.jpg');
  /* background-image:
url("https://i.pinimg.com/736x/5d/73/ea/5d73eaabb25e3805de1f8cdea7df4a42--
tumblr-backgrounds-iphone-phone-wallpapers-iphone-wallaper-tumblr.jpg"); */
  overflow: hidden;
.box-form .left .overlay {
  padding: 30px;
 width: 100%;
  height: 100%;
  background: #5961f9ad;
  overflow: hidden;
  box-sizing: border-box;
.box-form .left .overlay h1 {
  font-size: 10vmax;
  line-height: 1;
  font-weight: 900;
  margin-top: 40px;
  margin-bottom: 20px;
.box-form .left .overlay span p {
  margin-top: 30px;
  font-weight: 900;
.box-form .left .overlay span a {
  background: #3b5998;
  color: #FFFFFF;
  margin-top: 10px;
  padding: 14px 50px;
  border-radius: 100px;
  display: inline-block;
  box-shadow: 0 3px 6px 1px #042d4657;
.box-form .left .overlay span a:last-child {
  background: #1dcaff;
  margin-left: 30px;
.box-form .right {
  padding: 40px;
  overflow: hidden;
@media (max-width: 980px) {
  .box-form .right {
    width: 100%;
```

```
.box-form .right h5 {
  font-size: 6vmax;
  line-height: 0;
.box-form .right p {
  font-size: 14px;
  color: #B0B3B9;
.box-form .right .inputs {
  overflow: hidden;
.box-form .right input {
 width: 100%;
 padding: 10px;
 margin-top: 25px;
  font-size: 16px;
  border: none;
  outline: none;
  border-bottom: 2px solid #B0B3B9;
.box-form .right .remember-me--forget-password {
  display: flex;
  justify-content: space-between;
  align-items: center;
.box-form .right .remember-me--forget-password input {
  margin: 0;
 margin-right: 7px;
 width: auto;
.box-form .right button {
  float: right;
  color: #fff;
  font-size: 16px;
  padding: 12px 35px;
  border-radius: 50px;
  display: inline-block;
  border: 0;
  outline: 0;
  box-shadow: 0px 4px 20px 0px #49c628a6;
  background-image: linear-gradient(135deg, #70F570 10%, #49C628 100%);
label {
  display: block;
  position: relative;
  margin-left: 30px;
```

```
label::before {
  content: ' \f00c';
  position: absolute;
  font-family: FontAwesome;
  background: transparent;
  border: 3px solid #70F570;
  border-radius: 4px;
  color: transparent;
  left: -30px;
  transition: all 0.2s linear;
label:hover::before {
  font-family: FontAwesome;
  content: ' \f00c';
  color: #fff;
  cursor: pointer;
  background: #70F570;
label:hover::before .text-checkbox {
  background: #70F570;
label span.text-checkbox {
  display: inline-block;
 height: auto;
 position: relative;
 cursor: pointer;
  transition: all linear;
label input[type="checkbox"] {
  display:contents;
button a:link {
  text-decoration: none;
button a:visited { text-decoration: none; color:#ffffff;}
button a:hover { text-decoration: none; color:#ffffff; }
a:active { text-decoration: none; }
```

#### adminreg.css

```
body {
   width: 100%;
   height: 100vh;
   margin: 0;
    /* background-color: #1b1b32; */
   background-image: url('https://model001.s3.jp-tok.cloud-object-
storage.appdomain.cloud/pngtree.jpg');
    color: #f3f3f3;
   font-family: Tahoma;
     font-size: 16px;
     background-size: cover;
 h1, p {
   margin: 1em auto;
   text-align: center;
  form {
   width: 60vw;
     max-width: 500px;
     min-width: 300px;
     margin: 0 auto;
   padding-bottom: 2em;
  fieldset {
   border: none;
      padding: 2rem 0;
  fieldset:not(:last-of-type) {
   border-bottom: 3px solid #3b3b4f;
 label {
   display: block;
     margin: 0.5rem 0;
  input,
  textarea,
  select {
   margin: 10px 0 0 0;
     width: 100%;
   min-height: 2em;
```

```
}
  input, textarea {
    background-color: none;
    border: 1px solid #0a0a23;
    border-radius: 5px;
    color: #111010;
  .inline {
    width: unset;
    margin: 0 0.5em 0 0;
    vertical-align: middle;
  input[type="submit"] {
    display: block;
    width: 60%;
    margin: 1em auto;
    height: 2em;
    font-size: 1.1rem;
    background-color: #ffffff;
    border-color: rgb(11, 11, 11);
    min-width: 300px;
  input[type="file"] {
    padding: 1px 2px;
  a {
    color: #dfdfe2;
  button a:link {
    text-decoration: none;
button a:visited { text-decoration: none; color:#ffffff;}
button a:hover { text-decoration: none; color:#ffffff; }
a:active { text-decoration: none; }
button{
  background-color: rgb(21, 142, 21);
 border-color: rgb(21, 142, 21);
  size: 5px;
```

#### Donar.css

```
.loader_bg{
    position: fixed;
    z-index: 999999;
    background: rgb(51, 50, 50);
    width: 100%;
    height: 100%;
.loader{
    border: 0 soild transparent;
    border-radius: 50%;
    width: 150px;
    height: 150px;
    position: absolute;
    top: calc(50vh - 75px);
    left: calc(50vw - 75px);
.loader:before, .loader:after{
    content: '';
    /* border: 1em solid #ff5733; */
    border: 1em solid #1e80f0;
    border-radius: 50%;
    width: inherit;
    height: inherit;
    position: absolute;
    top: 0;
    left: 0;
    animation: loader 2s linear infinite;
    opacity: 0;
.loader:before{
    animation-delay: .5s;
@keyframes loader{
    0%{
        transform: scale(0);
        opacity: 0;
    50%{
        opacity: 1;
    100%{
        transform: scale(1);
        opacity: 0;
```

```
.marquee{
    background-size: 100% 100%;
    background-repeat: no-repeat;
    background-color: black;
    background-color:brown;
    font-family: 'Franklin Gothic Medium', 'Arial Narrow', Arial, sans-serif;
    color:yellow;
.foot{
    /* background-color: tan; */
    background-image: url('https://numarketing.co.uk/wp-
content/uploads/2014/06/Website-Design-Background.png');
    /* background-image: url(' https://www.burchcom.com/wp-
content/uploads/2019/01/images1997-5c2f99436aa28-1024x683.jpg'); */
    background-size: cover;
    background-repeat: no-repeat;
h3{
    color: aliceblue;
table{
    font-family: Calibri;
    color:rgb(255, 255, 255);
    font-size: 11pt;
    font-style: normal;
    font-weight: bold;
    /* text-align:; */
    background-color: none;
    border-collapse; collapse;
   border: none;
    border-radius: 15px;
  table.inner{
    border: 0px
  form{
      margin-top :25px;
      width: 35rem;
      height: 35rem;
      display: flex;
      flex-direction: column;
      background: rgba(255,255,255,0.06);
```

```
box-shadow: 0 8px 32px 0 rgba(31,38,135,.40);
border-radius: 35px;
border: 1px solid rgba(255,255,255,0.3);

}
button a:link {
   text-decoration: none;
   color: white;
}
button a:visited { text-decoration: none; color:#ffffff;}
button a:hover { text-decoration: none; color:#ffffff; }
a:active { text-decoration: none; }

P{
   color: #ffffff;
}
```

## **Grid-gallery.css**

```
body{
  font-family: -apple-system,BlinkMacSystemFont,"Segoe
UI",Helvetica,Arial,sans-serif;
  background: #f9f9f9;
.gg-box{
 display: grid;
  grid-template-columns: repeat(auto-fit,minmax(220px,1fr));
  grid-auto-rows: 200px;
  grid-gap: 8px;
.gg-element img{
  object-fit: cover;
  cursor: pointer;
 width: 100%;
  height: 100%;
  background: rgba(255,255,255,0.02);
  border-radius: 10px;
.gg-element img:hover{
  opacity: 0.98;
#gg-screen{
 position: fixed;
```

```
width: 100%;
  height: 100%;
  z-index: 1;
  top:0;
  left: 0;
  display: none;
  background: rgba(255,255,255,0.85);
  z-index: 9999;
  text-align: center;
#gg-screen .gg-image{
  height: 100%;
 display: inline-flex;
 justify-content: center;
 align-items: center;
#gg-screen .gg-image img{
 max-width: 100%;
 max-height: 100%;
 margin: 0 auto;
.gg-bt{
 width: 38px;
  height: 38px;
  background: rgba(255,255,255,0.6);
  color: #222;
  border-radius: 50%;
  text-align: center;
  line-height: 32px;
  vertical-align: middle;
  display: inline-block;
  cursor: pointer;
  -moz-transition: all .4s ease;
  -o-transition: all .4s ease;
  -webkit-transition: all .4s ease;
  transition: all .4s ease;
  font-size: 25px;
  border: 1px solid rgba(0,0,0,0.05);
  box-sizing: border-box;
  padding-left: 2px;
.gg-bt:hover{
  background: rgba(255,255,255,0.8);
  border: 1px solid rgba(0,0,0,0.5);
.gg-close{
  position: fixed;
 top:0.5em;
```

```
.gg-close,.gg-nxt{
  right: 0.5em;
.gg-prev{
  left: 0.5em;
.gg-prev,.gg-nxt{
  position: fixed;
  bottom: 50%;
@media (min-width:478px){
  .gg-element:nth-child(3n+0){
    grid-row-end: span 2;
@media(max-width:768px){
    .gg-box{
        grid-template-columns: repeat(auto-fit,minmax(150px,1fr));
        grid-auto-rows: 150px;
        grid-gap: 6px;
@media(max-width: 450px){
    .gg-box{
        grid-template-columns: repeat(auto-fit,minmax(100px,1fr));
        grid-auto-rows: 100px;
        grid-gap: 4px;
    }
```

#### **Grid-gallery-min.css**

```
body{font-family:-apple-system,BlinkMacSystemFont, "Segoe
UI",Helvetica,Arial,sans-serif;background:#f9f9f9}.gg-box{display:grid;grid-template-columns:repeat(auto-fit,minmax(220px,1fr));grid-auto-rows:200px;grid-gap:8px}.gg-element img{object-fit:cover;cursor:pointer;width:100%;height:100%;background:rgba(255,255,255,0.02);border-radius:10px}.gg-element img:hover{opacity:.98}#gg-screen{position:fixed;width:100%;height:100%;z-index:1;top:0;left:0;display:none;background:rgba(255,255,255,0.85);z-index:9999;text-align:center}#gg-screen .gg-image{height:100%;display:inline-flex;justify-content:center;align-items:center}#gg-screen .gg-image img{max-width:100%;max-height:100%;margin:0 auto}.gg-bt{width:38px;height:38px;background:rgba(255,255,0.6);color:#222;border-radius:50%;text-align:center;line-height:32px;vertical-
```

```
align:middle;display:inline-block;cursor:pointer;-moz-transition:all .4s
ease;-o-transition:all .4s ease;-webkit-transition:all .4s ease;transition:all
.4s ease;font-size:25px;border:1px solid rgba(0,0,0,0.05);box-sizing:border-
box;padding-left:2px}.gg-bt:hover{background:rgba(255,255,255,0.8);border:1px
solid rgba(0,0,0,0.5)}.gg-close{position:fixed;top:.5em}.gg-close,.gg-
nxt{right:.5em}.gg-prev{left:.5em}.gg-prev,.gg-
nxt{position:fixed;bottom:50%}@media(min-width:478px){.gg-element:nth-
child(3n+0){grid-row-end:span 2}}@media(max-width:768px){.gg-box{grid-
template-columns:repeat(auto-fit,minmax(150px,1fr));grid-auto-rows:150px;grid-
gap:6px}}@media(max-width:450px){.gg-box{grid-template-columns:repeat(auto-
fit,minmax(100px,1fr));grid-auto-rows:100px;grid-gap:4px}}
```

### logincss.css

```
.loader_bg{
 position: fixed;
 z-index: 999999;
 background: rgb(183, 182, 182);
 width: 100%;
 height: 100%;
loader{
 border: 0 soild transparent;
 border-radius: 50%;
 width: 150px;
 height: 150px;
 position: absolute;
 top: calc(50vh - 75px);
 left: calc(50vw - 75px);
.loader:before, .loader:after{
 content: '';
 /* border: 1em solid #ff5733; */
 border: 1em solid #e03c33;
 border-radius: 50%;
 width: inherit;
 height: inherit;
 position: absolute;
 top: 0;
 left: 0;
 animation: loader 2s linear infinite;
 opacity: 0;
.loader:before{
 animation-delay: .5s;
```

```
@keyframes loader{
  0%{
      transform: scale(0);
      opacity: 0;
  50%{
      opacity: 1;
  100%{
      transform: scale(1);
      opacity: 0;
body {
  background-color: #9f9da7;
 font-size: 1.6rem;
 font-family: "Open Sans", sans-serif;
 color: #2b3e51;
 margin-top: 5%;
h2 {
 font-weight: 300;
  text-align: center;
p {
 position: relative;
а,
a:link,
a:visited,
a:active {
 color: #3ca9e2;
  -webkit-transition: all 0.2s ease;
 transition: all 0.2s ease;
a:focus, a:hover,
a:link:focus,
a:link:hover,
a:visited:focus,
a:visited:hover,
a:active:focus,
a:active:hover {
 color: #329dd5;
```

```
-webkit-transition: all 0.2s ease;
  transition: all 0.2s ease;
#login-form-wrap {
  background-color: #fff;
 width: 35%;
  margin: 30px auto;
  text-align: center;
  padding: 20px 0 0 0;
  border-radius: 4px;
  box-shadow: 0px 30px 50px 0px rgba(0, 0, 0, 0.2);
#login-form {
  padding: 0 60px;
input {
  display: block;
  box-sizing: border-box;
 width: 100%;
  outline: none;
  height: 60px;
  line-height: 60px;
  border-radius: 4px;
input[type="text"],
input[type="email"] {
 width: 100%;
  padding: 0 0 0 10px;
  margin: 0;
  color: #8a8b8e;
  border: 1px solid #c2c0ca;
  font-style: normal;
  font-size: 16px;
  -webkit-appearance: none;
     -moz-appearance: none;
          appearance: none;
  position: relative;
  display: inline-block;
  background: none;
input[type="text"]:focus,
input[type="email"]:focus {
  border-color: #3ca9e2;
```

```
input[type="text"]:focus:invalid,
input[type="email"]:focus:invalid {
  color: #cc1e2b;
  border-color: #cc1e2b;
input[type="text"]:valid ~ .validation,
input[type="email"]:valid ~ .validation {
  display: block;
  border-color: #0C0;
input[type="text"]:valid ~ .validation span,
input[type="email"]:valid ~ .validation span {
 background: #0C0;
 position: absolute;
 border-radius: 6px;
input[type="text"]:valid ~ .validation span:first-child,
input[type="email"]:valid ~ .validation span:first-child {
  top: 30px;
 left: 14px;
 width: 20px;
 height: 3px;
  -webkit-transform: rotate(-45deg);
          transform: rotate(-45deg);
input[type="text"]:valid ~ .validation span:last-child,
input[type="email"]:valid ~ .validation span:last-child {
  top: 35px;
 left: 8px;
 width: 11px;
 height: 3px;
  -webkit-transform: rotate(45deg);
          transform: rotate(45deg);
.validation {
 display: none;
  position: absolute;
  content: " ";
  height: 60px;
 width: 30px;
  right: 15px;
  top: 0px;
input[type="submit"] {
  border: none;
 display: block;
```

```
background-color: #3ca9e2;
  color: #fff;
  font-weight: bold;
  text-transform: uppercase;
  cursor: pointer;
  -webkit-transition: all 0.2s ease;
  transition: all 0.2s ease;
  font-size: 18px;
  position: relative;
  display: inline-block;
  cursor: pointer;
  text-align: center;
input[type="submit"]:hover {
  background-color: #329dd5;
  -webkit-transition: all 0.2s ease;
  transition: all 0.2s ease;
#create-account-wrap {
  background-color: #eeedf1;
 color: #8a8b8e;
  font-size: 14px;
 width: 100%;
 padding: 10px 0;
  border-radius: 0 0 4px 4px;
button a:link {
  text-decoration: none;
button a:visited { text-decoration: none; color:#ffffff;}
button a:hover { text-decoration: none; color:#ffffff; }
a:active { text-decoration: none; }
button{
 background-color: #3ca9e2;
 border-color: #3ca9e2;
 border-radius: 5px;
  color: white;
h4{
  color: white;
```

# **Recipient.css**

```
.marquee{
    background-size: 100% 100%;
    background-repeat: no-repeat;
    background-color: black;
    background-color:brown;
    font-family: 'Franklin Gothic Medium', 'Arial Narrow', Arial, sans-serif;
    color:yellow;
.foot{
    /* background-color: tan; */
    background-image: url(' https://wallpaperaccess.com/full/4760769.jpg');
    /* background-image: url(' https://www.burchcom.com/wp-
content/uploads/2019/01/images1997-5c2f99436aa28-1024x683.jpg'); */
    background-size: cover;
    background-repeat: no-repeat;
h3{
    color: aliceblue;
table{
    font-family: Calibri;
    color:rgb(255, 255, 255);
    font-size: 11pt;
    font-style: normal;
    font-weight: bold;
    /* text-align:; */
    background-color: none;
    border-collapse: collapse;
    border: none;
    border-radius: 15px;
  table.inner{
    border: 0px
  form{
      margin-top :50px;
      width: 35rem;
      height: 28rem;
      display: flex;
      flex-direction: column;
```

```
background: rgba(255,255,255,0.06);
box-shadow: 0 8px 32px 0 rgba(31,38,135,.40);
border-radius: 35px;
border: 1px solid rgba(255,255,255,0.3);

}
button a:link {
   text-decoration: none;
   color: white;
}
button a:visited { text-decoration: none; color:#ffffff;}

button a:hover { text-decoration: none; color:#ffffff; }

a:active { text-decoration: none; color:#ffffff; }

a:hover { text-decoration: none; color:#ffffff; }

a:visited { text-decoration: none; color:#ffffff; }

p{
   color: #ffffff;
}
```

# Reciptreg.css

```
.loader_bg{
 position: fixed;
 z-index: 999999;
 background: rgb(183, 182, 182);
 width: 100%;
 height: 100%;
.loader{
 border: 0 soild transparent;
 border-radius: 50%;
 width: 150px;
 height: 150px;
 position: absolute;
 top: calc(50vh - 75px);
 left: calc(50vw - 75px);
.loader:before, .loader:after{
 content: '';
 /* border: 1em solid #ff5733; */
 border: 1em solid #e03c33;
```

```
border-radius: 50%;
  width: inherit;
  height: inherit;
  position: absolute;
  top: 0;
  left: 0;
  animation: loader 1s linear infinite;
  opacity: 0;
.loader:before{
  animation-delay: .5s;
@keyframes loader{
  0%{
      transform: scale(0);
      opacity: 0;
  50%{
      opacity: 1;
  100%{
      transform: scale(1);
      opacity: 0;
body{
  background-image: url('https://model001.s3.jp-tok.cloud-object-
storage.appdomain.cloud/background.jpg');
  background-size: 100% 100%;
h3{
  font-family: Calibri;
  font-size: 25pt;
  font-style: normal;
  font-weight: bold;
  color:rgb(255, 255, 255);
  text-align: center;
  text-decoration: none;
table{
  font-family: Calibri;
  color:white;
  font-size: 11pt;
  font-style: normal;
  font-weight: bold;
  /* text-align:; */
```

```
background-color: none;
  border-collapse: collapse;
  border: none;
  border-radius: 15px;
table.inner{
  border: 0px
form{
 margin-top :30px;
 width: 35rem;
 height: 35rem;
 display: flex;
 flex-direction: column;
  background: rgba(255,255,255,0.06);
  box-shadow: 0 8px 32px 0 rgba(31,38,135,.40);
  border-radius: 35px;
  border: 1px solid rgba(255,255,255,0.3);
button a:visited { text-decoration: none; color:#000000;}
button a:hover { text-decoration: none; color:#000000; }
a:active { text-decoration: none; }
a:link { text-decoration: none;}
a:visited { text-decoration: none; color:#000000;}
a:hover { text-decoration: none; color:#000000; }
p{
  color: white;
```

# **Style.css**

```
.loader_bg{
  position: fixed;
  z-index: 999999;
  background: rgb(183, 182, 182);
  width: 100%;
  height: 100%;
```

```
.loader{
  border: 0 soild transparent;
  border-radius: 50%;
  width: 150px;
  height: 150px;
  position: absolute;
  top: calc(50vh - 75px);
  left: calc(50vw - 75px);
.loader:before, .loader:after{
 content: '';
  /* border: 1em solid #ff5733; */
  border: 1em solid #e03c33;
  border-radius: 50%;
  width: inherit;
  height: inherit;
  position: absolute;
  top: 0;
  left: 0;
  animation: loader 2s linear infinite;
  opacity: 0;
.loader:before{
  animation-delay: .5s;
@keyframes loader{
  0%{
      transform: scale(0);
     opacity: 0;
  50%{
      opacity: 1;
  100%{
      transform: scale(1);
      opacity: 0;
 margin: 0px;
 padding: 0px;
  list-style: none; }
img {
 max-width: 100%; }
```

```
text-decoration: none;
  outline: none;
  color: rgb(255, 255, 255); }
a:hover {
  color: rgb(255, 255, 255); }
ul {
 margin-bottom: 0;
  padding-left: 0; }
a:hover,
a:focus,
input,
textarea {
  text-decoration: none;
  outline: none; }
.center {
 text-align: center; }
.left {
 text-align: left; }
.right {
 text-align: right; }
.cp {
 cursor: pointer; }
html, body {
  height: 100%; }
p {
  margin-bottom: 0px;
  width: 100%; }
.no-padding {
 padding: 0px; }
.no-margin {
 margin: 0px; }
.hid {
 display: none; }
.top-mar {
 margin-top: 15px; }
```

```
.h-100 {
 height: 100%; }
::placeholder {
  color: #747f8a !important;
 font-size: 13px;
  opacity: .5 !important; }
.container-fluid {
 padding: 0px; }
h1, h2, h3, h4, h5, h6 {
 font-family: montserrat; }
strong {
 font-family: montserrat; }
body {
 background-color: #f1f1f145 !important;
  font-family: 'Merriweather', serif;
  color: #6A6A6A;
  overflow-x: hidden; }
.session-title {
 padding: 30px;
 margin: 0px; }
  .session-title h2 {
   width: 100%;
   text-align: center;
   font-family: 'Merriweather', serif;
   font-weight: 400; }
  .session-title p {
   max-width: 850px;
   text-align: center;
   float: none;
   margin: auto; }
  .session-title span {
    float: right;
    font-style: italic; }
.inner-title {
  padding: 20px;
 padding-left: 0px;
 margin: 0px;
 margin-bottom: 10px;
  padding-bottom: 0px;
  border-bottom: 1px solid #cccccc4;
```

```
display: block;
  padding-right: 0px; }
  .inner-title h2 {
   width: 100%;
   text-align: center;
   font-size: 1rem;
   font-weight: 600;
    text-align: left;
   border-bottom: 1px solid #863dd9;
    padding-bottom: 10px;
   margin-bottom: 0px;
   width: 300px; }
  .inner-title p {
   width: 100%;
   text-align: center; }
  .inner-title .btn {
   float: right;
   margin-top: -38px;
   font-weight: 600;
   font-size: .8rem; }
.page-nav {
 padding: 40px;
 text-align: center;
 padding-top: 160px; }
 .page-nav ul {
   float: none;
   margin: auto; }
 @media screen and (max-width: 576px) {
    .page-nav {
      padding-top: 186px; } }
 @media screen and (max-width: 356px) {
    .page-nav {
      padding-top: 206px; } }
  .page-nav h2 {
    font-size: 36px;
   width: 100%;
   color: #444; }
   @media screen and (max-width: 600px) {
      .page-nav h2 {
       font-size: 26px; } }
  .page-nav ul li {
   float: left;
   margin-right: 10px;
   margin-top: 10px;
   font-size: 16px; }
    .page-nav ul li i {
     width: 30px;
```

```
text-align: center;
      color: #444; }
    .page-nav ul li a {
      color: #444; }
.btn-success {
 background-color: #de1f26;
 border-color: #de1f26; }
  .btn-success:hover {
    background-color: #de1f26 !important;
    border-color: #de1f26 !important; }
  .btn-success:active {
    background-color: #de1f26 !important;
    border-color: #de1f26 !important; }
  .btn-success:focus {
    background-color: #de1f26 !important;
   border-color: #de1f26 !important;
   box-shadow: none !important; }
.btn-primary {
  background-color: #de1f26;
 border-color: #de1f26; }
  .btn-primary:hover {
    background-color: #de1f26 !important;
    border-color: #de1f26 !important; }
  .btn-primary:active {
    background-color: #de1f26 !important;
    border-color: #de1f26 !important; }
  .btn-primary:focus {
    background-color: #de1f26 !important;
   border-color: #de1f26 !important;
    box-shadow: none !important; }
.btn {
 box-shadow: 0 3px 1px -2px rgba(0, 0, 0, 0.2), 0 2px 2px 0 rgba(0, 0, 0,
0.14), 0 1px 5px 0 rgba(0, 0, 0, 0.12);
 border-radius: 2px; }
.form-control:focus {
 box-shadow: none !important;
 border: 2px solid #863dd9; }
.btn-light {
 background-color: #FFF;
 color: #3F3F3F; }
.collapse.show {
 display: block !important; }
```

```
.form-control:focus {
  box-shadow: none;
  border: 2px solid #863dd9 !important; }
.form-control {
  background-color: #F8F8F8;
  margin-bottom: 20px; }
  .form-control:focus {
    background-color: #FFF;
    border-color: #CCC; }
.container {
 max-width: 1170px; }
 @media screen and (max-width: 575px) {
    .container {
      padding: 10px 15px; } }
html {
 scroll-behavior: smooth; }
  box-shadow: 0 2px 5px 0 rgba(0, 0, 0, 0.16), 0 2px 10px 0 rgba(0, 0, 0,
0.12); }
  header .header-top {
    background-color: #de1f26; }
    header .header-top .col-det .ulleft li {
      float: left;
      padding: 11px;
      color: #FFF;
      font-size: 1rem;
      font-weight: 400; }
      header .header-top .col-det .ulleft li i {
        margin-right: 5px; }
      header .header-top .col-det .ulleft li span {
        margin-left: 15px; }
    header .header-top .col-det .ulright {
      float: right; }
      header .header-top .col-det .ulright li {
        float: left;
        padding: 11px;
        color: #FFF;
        font-size: 1rem; }
        header .header-top .col-det .ulright li i {
          margin-right: 5px; }
        header .header-top .col-det .ulright li span {
          margin-left: 15px; }
  header .header-bottom {
```

```
background-color: #FFF; }
   header .header-bottom .navbar {
     float: right; }
     @media screen and (max-width: 991px) {
       header .header-bottom .navbar {
         width: 100%; } }
   header .header-bottom img {
     margin-top: 15px; }
     @media screen and (max-width: 991px) {
       header .header-bottom img {
         padding: 5px;
         margin-top: 0px;
         max-width: 230px; } }
  header .nav-col .navbar-nav li {
    padding: 14px 20px;
    font-weight: 600; }
@media screen and (max-width: 767px) {
  .navbar {
   padding: 0px; } }
.navbar-toggler {
  position: absolute;
  right: 0px;
  top: 19px; }
 @media screen and (max-width: 767px) {
    .navbar-toggler {
     top: -50px; } }
.scroll-to-fixed-fixed {
 background-color: #FFF;
  box-shadow: 0 2px 5px 0 rgba(0, 0, 0, 0.16), 0 2px 10px 0 rgba(0, 0, 0,
0.12); }
.slider-detail .carousel-caption {
 text-align: left;
 bottom: 90px;
  bottom: 105px; }
  .slider-detail .carousel-caption h5 {
   font-size: 44px;
   margin-left: -40px;
   font-weight: 600;
   text-align: center; }
  .slider-detail .carousel-caption p {
   margin-left: -40px;
   margin-top: 40px;
```

```
font-size: 19px;
    text-align: center; }
.slider-detail .vbh {
 margin-left: -40px;
  text-align: center; }
  .slider-detail .vbh .btn {
    padding: 10px;
   margin-top: 40px;
   width: 200px;
    margin-left: 10px;
    font-weight: 600;
    font-size: 18px; }
.slider-detail .vdg-cur {
  color: #FFF;
  padding-top: 70px; }
@media screen and (max-width: 1180px) {
  .slider-detail .carousel-caption {
    bottom: 30px; } }
@media screen and (max-width: 1057px) {
  .slider-detail .carousel-caption {
    bottom: 10px; } }
@media screen and (max-width: 1057px) {
  .slider-detail .carousel-caption h5 {
    font-size: 32px; } }
@media screen and (max-width: 927px) {
  .slider-detail .carousel-caption h5 {
    font-size: 22px; } }
@media screen and (max-width: 1057px) {
  .slider-detail .carousel-caption p {
    font-size: 16px; } }
@media screen and (max-width: 927px) {
  .slider-detail .carousel-caption p {
    font-size: 13px; } }
 * ======= Donation Process CSS
.donation-care {
 padding: 50px;
 background-color: #FFF; }
 @media screen and (max-width: 940px) {
    .donation-care {
      padding: 30px 10px; } }
  .donation-care h4 {
    padding: 10px;
   margin-bottom: 0px;
    font-size: 1rem;
    font-weight: 600; }
  .donation-care p {
```

```
padding: 10px;
    padding-top: 0px;
    text-align: justify;
    font-size: .85rem; }
  .donation-care i {
    font-size: 13px;
   margin-left: 10px; }
  .donation-care .vd {
   margin-bottom: 20px; }
  .donation-care .bkjiu {
    background-color: #F8F9FA;
   padding: 5px; }
    .donation-care .bkjiu .btn {
     margin-bottom: 6px;
     margin-left: 6px; }
@media screen and (max-width: 940px) {
  .health-care {
    padding: 50px 10px; } }
/* ======= About US CSS
.about-us {
 padding: 50px;
 background-color: #FFF; }
 @media screen and (max-width: 940px) {
    .about-us {
     padding: 30px 10px; } }
  .about-us .text p {
    font-weight: 300;
   font-size: .85rem;
   color: #000;
   margin-bottom: 10px;
   text-align: justify; }
  .about-us .image img {
   margin-top: 30px; }
/* ======= About US CSS
footer {
  background: #000000;
  padding: 50px !important;
  padding: 50px;
  padding-bottom: 32px !important; }
 @media screen and (max-width: 940px) {
   footer {
     padding: 30px 10px; } }
  @media screen and (max-width: 600px) {
   footer {
```

```
padding-bottom: Opx !important;
      padding-left: 15px !important;
      padding-right: 15px !important; } }
 @media screen and (max-width: 991px) {
    footer {
      padding-bottom: 50px !important; } }
 footer .content-ro {
    color: #FFF;
   margin-top: 20px; }
    footer .content-ro h2 {
      font-size: 1.3rem;
      font-weight: 600; }
    footer .content-ro .footer-contact .address-row {
      display: flex;
     margin-top: 10px; }
      footer .content-ro .footer-contact .address-row .icon {
        padding: 15px; }
      footer .content-ro .footer-contact .address-row .detail p {
        font-weight: 300; }
    footer .content-ro .footer-links ul {
     margin-bottom: 15px; }
      footer .content-ro .footer-links ul li {
        float: left;
        width: 50%;
        font-weight: 300; }
    footer .content-ro .form-card {
      margin-top: -138px;
      box-shadow: 0 2px 5px 0 rgba(0, 0, 0, 0.16), 0 2px 10px 0 rgba(0, 0, 0,
0.12);
      background-color: #fff; }
     @media screen and (max-width: 600px) {
        footer .content-ro .form-card {
          margin-top: 10px; } }
      footer .content-ro .form-card .form-title {
        padding: 20px;
        background-color: #f9f9f9; }
        footer .content-ro .form-card .form-title h4 {
          margin-bottom: 0px;
          font-weight: 600;
          color: #444;
          text-align: center; }
      footer .content-ro .form-card .form-body {
        padding: 20px;
        border-top: 1px solid #cccccc; }
        footer .content-ro .form-card .form-body input {
          border-radius: 0px;
          height: 47px; }
  footer .footer-copy {
```

```
padding: 30px 0px;
   color: #FFF;
   margin-top: 35px;
   border-top: 1px solid #fd8c90;
   padding-bottom: 0px; }
   footer .footer-copy a {
     color: #ccc; }
   @media screen and (max-width: 991px) {
     footer .footer-copy .socila-link {
       margin-top: 20px; } }
   footer .footer-copy .socila-link ul {
     float: right; }
     footer .footer-copy .socila-link ul li {
       float: left;
       padding: 0px 20px; }
       footer .footer-copy .socila-link ul li a {
         color: #fff; }
.footer-bot-image img {
 position: absolute;
 margin-top: -112px; }
/* ======= Gallery CSS
.gallery {
 padding: 50px;
 background-color: #f1f1f152; }
 @media screen and (max-width: 940px) {
   .gallery {
     padding: 30px 10px; } }
 @media (min-width: 478px) {
   .gallery .gg-element:nth-child(3n+0) {
     grid-row-end: span 1; } }
/* ======= Our Blog CSS
.blog-container {
 background-color: #ccccc2e;
 padding: 50px;
 padding-bottom: 100px; }
 @media screen and (max-width: 940px) {
   .blog-container {
     padding: 30px 10px; } }
 .blog-container .news-row {
   margin-top: 20px; }
   .blog-container .news-row .news-card {
     display: flex;
     background-color: #FFF;
```

```
box-shadow: 0 2px 3px 0 rgba(218, 218, 253, 0.35), 0 0px 3px 0 rgba(206,
206, 238, 0.35);
      margin-bottom: 20px; }
      .blog-container .news-row .news-card .detail {
        padding: 10px;
        margin: auto; }
        .blog-container .news-row .news-card .detail h3 {
          font-size: 1.1rem;
          margin-bottom: 0px; }
        .blog-container .news-row .news-card .detail p {
          font-size: .85rem;
          text-indent: 20px;
          text-align: justify; }
        .blog-container .news-row .news-card .detail .footp {
          text-indent: 0px;
          background-color: #f2f6f7a1;
          margin-top: 5px;
          font-size: .8rem; }
          .blog-container .news-row .news-card .detail .footp span {
            padding: 0px 5px; }
      .blog-container .news-row .news-card:hover {
        box-shadow: 0 2px 5px 0 rgba(0, 0, 0, 0.16), 0 2px 10px 0 rgba(0, 0,
0, 0.12); }
/*# sourceMappingURL=style.css.map */
button a:link {
  text-decoration: none;
button a:visited { text-decoration: none; color:#ffffff;}
button a:hover { text-decoration: none; color:#ffffff; }
a:active { text-decoration: none; }
```

# Grid-gallery.js

```
$(document).on('click','.gg-element',function(){
  var selected=$(this);
  var prev=$(this).prev().find('img');
  var next=$(this).next().find('img');
  $('#gg-screen').show();
  var l=$(".gg-element").length-1;
  var p=$(".gg-element").index(selected);
  function buttons(){
    if (1 > 1) {
      if (p == 0){
        return '<div class="gg-close gg-bt">&times</div><div class="gg-nxt gg-
bt">→</div>';
      else if (p == 1) {
        return '<div class="gg-close gg-bt">&times</div><div class="gg-prev"</pre>
gg-bt">←</div>';
      else{
        return '<div class="gg-close gg-bt">&times</div><div class="gg-nxt gg-
bt">→</div><div class="gg-prev gg-bt">&larr;</div>';
    else{
      return '<div class="gg-close gg-bt">&times</div>';
  buttons();
  var content=buttons();
  $("#gg-screen").html('<div class="gg-image"></div>' + content);
  $(".gg-image").html('<img src="'+ $('img', this).attr('src') +'">');
  $("body").css('overflow','hidden');
  $(document).on('click','.gg-close',function(){
    $("#gg-screen").hide();
   $("body").css('overflow', 'auto');
  });
  $("#gg-screen").on('click', function(e) {
    if (e.target == this){
      $("#gg-screen").hide();
      $("body").css('overflow','auto');
  });
  $(document).on('click','.gg-prev',function(){
    selected=selected.prev();
    prev=selected.find('img');
```

```
var previmg='<img src="'+ prev.attr('src') +'">';
    $(".gg-image").html(previmg);
    p=$(".gg-element").index(selected);
    buttons();
    content=buttons();
    $("#gg-screen").html('<div class="gg-image">'+ previmg + '</div>' +
content);
  });
  $(document).on('click','.gg-nxt',function(){
    selected=selected.next();
    next=selected.find('img');
    var nxtimg='<img src="'+ next.attr('src') +'">';
    $(".gg-image").html(nxtimg);
    p=$(".gg-element").index(selected);
    buttons();
    content=buttons();
    $("#gg-screen").html('<div class="gg-image">'+ nxtimg + '</div>' +
content);
  });
  $(document).on('keydown',function(e) {
    if(e.keyCode == 37 \&\& p>0) {
      selected=selected.prev();
      prev=selected.find('img');
      var previmg='<img src="'+ prev.attr('src') +'">';
      $(".gg-image").html(previmg);
      p=$(".gg-element").index(selected);
      buttons();
      content=buttons();
      $("#gg-screen").html('<div class="gg-image">'+ previmg + '</div>' +
content);
    else if(e.keyCode == 39 \&\& p < 1) {
      selected=selected.next();
      next=selected.find('img');
      var nxtimg='<img src="'+ next.attr('src') +'">';
      $(".gg-image").html(nxtimg);
      p=$(".gg-element").index(selected);
      buttons();
      content=buttons();
      $("#gg-screen").html('<div class="gg-image">'+ nxtimg + '</div>' +
content);
  });
});
```

# Grid-gallery-min.js

```
$(document).on("click",".gg-element",function(){var c=$(this);var
f=$(this).prev().find("img"); var b=$(this).next().find("img"); $("#gg-
screen").show();var a=$(".gg-element").length-1;var g=$(".gg-
element").index(c); function e()(if(a>1)(if(g==0)(return'< div class="gg-close"))
gg-bt">&times</div><div class="gg-nxt gg-
bt">→</div>'}else{if(g==a){return'<div class="gg-close gg-
bt">&times</div><div class="gg-prev gg-bt">&larr;</div>'}else{return'<div
class="gg-close gg-bt">&times</div><div class="gg-nxt gg-bt">&rarr;</div><div
class="gg-prev gg-bt">←</div>'}}}else{return'<div class="gg-close gg-</pre>
bt">&times</div>'}}e();var d=e();$("#gg-screen").html('<div class="gg-
image"></div>'+d);$(".gg-image").html('<img</pre>
src="'+$("img",this).attr("src")+'">');$("body").css("overflow","hidden");$(do
cument).on("click",".gg-close",function(){$("#gg-
screen").hide();$("body").css("overflow","auto")});$("#gg-
screen").on("click",function(h){if(h.target==this){$("#gg-
screen").hide();$("body").css("overflow","auto")}});$(document).on("click",
g-prev",function(){c=c.prev();f=c.find("img");var h='<img</pre>
src="'+f.attr("src")+'">';$(".gg-image").html(h);g=$(".gg-
element").index(c);e();d=e();$("#gg-screen").html('<div class="gg-</pre>
image">'+h+"</div>"+d)});$(document).on("click",".gg-
nxt",function(){c=c.next();b=c.find("img");var h='<img</pre>
src="'+b.attr("src")+'">';$(".gg-image").html(h);g=$(".gg-
element").index(c);e();d=e();$("#gg-screen").html('<div class="gg-</pre>
image">'+h+"</div>"+d)});$(document).on("keydown",function(j){if(j.keyCode==37
&&g>0){c=c.prev();f=c.find("img");var i='<img
src="'+f.attr("src")+'">';$(".gg-image").html(i);g=$(".gg-image").html
element").index(c);e();d=e();$("#gg-screen").html('<div class="gg-</pre>
image">'+i+"</div>"+d)}else{if(j.keyCode==39&&g<a){c=c.next();b=c.find("img");</pre>
var h='<img src="'+b.attr("src")+'">';$(".gg-image").html(h);g=$(".gg-
element").index(c);e();d=e();$("#gg-screen").html('<div class="gg-</pre>
image">'+h+"</div>"+d)}}));
```

# Script.js

```
$( document ).ready(function() {
    var w = window.innerWidth;

    if(w > 767){
        $('#menu-jk').scrollToFixed();
    }else{
        $('#menu-jk').scrollToFixed();
    }
}
```

# GitHub and Project demo link

# **GitHub link:**

https://github.com/IBM-EPBL/IBM-Project-16927-1659624974

# Project demo link:

https://drive.google.com/file/d/1OBcyXXBA1xXeW8o6lVpS7oB--rnphGYK/view?usp=drivesdk

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# LIST OF ABBRIVIATIONS

AI	Artificial Intelligence
ML	Machine Learning
CNN	Conventional Neural Network
DCNN	Deep Convolutional Neural Network
ANN	Artificial Neural Network
UAV	Unmanned Aerial Vehicle
NN	Neural Network
SVM	Support Vector Machine
VFD	Video Based Fire Detection

#### **CHAPTER 1**

#### INTRODUCTION

# 1.1 Why is Image Classification important?

We live in the era of data. With Artificial Intelligence (AI) becoming ubiquitous technologies, we now have huge volumes of data being generated. Differing in form, data could be speech, text, image, or a mix of any of these. In the form of photos or videos, images make up for a significant share of global data creation. AI, the combination of AI, enables the development of highly scalable systems that leverage machine learning for distributed data analysis[2].

## 1.2. The need for AI to understand image data

Since the vast amount of image data we obtain from cameras and sensors is unstructured, we depend on advanced techniques such as machine learning algorithms to analyze the images efficiently. Image classification is probably the most important part of digital image analysis. It uses AI-based deep learning models to analyze images with results that for specific tasks already surpass human-level accuracy (for example, in face recognition).

Since AI is computationally very intensive and involves the transmission of huge amounts of potentially sensitive visual information, processing image data in the cloud comes with severe limitations. Therefore, there is a big emerging trend called Edge AI that aims to move machine learning (ML) tasks from the cloud to the edge. This allows moving ML computing close to the source of data, specifically to edge devices (computers) that are connected to cameras. Performing machine learning for image recognition at the edge makes it possible to overcome the limitations of the cloud in terms of privacy, real-time performance, efficacy, robustness, and more. Hence, the use of Edge AI for computer vision makes it possible to scale image recognition applications in real-world scenarios[7].

## 1.3. Image Classification is the Basis of Computer Vision

The field of computer vision includes a set of main problems such as image classification, localization, image segmentation, and object detection. Among those, image classification can be considered the fundamental problem. It forms the basis for other computer vision problems. Image classification applications are used in many areas, such as medical imaging, object identification in satellite images, traffic control systems, brake light detection, machine vision,

and more. To find more real-world applications of image classification, check out our extensive list of AI vision applications.

# 1.4. Image Classification

Image classification is the task of categorizing and assigning labels to groups of pixels or vectors within an image dependent on particular rules. The categorization law can be applied through one or multiple spectral or textural characterizations. Image classification techniques are mainly divided into two categories: Supervised and unsupervised image classification techniques.

# 1.5. Unsupervised classification

Unsupervised classification technique is a fully automated method that does not leverage training data. This means machine learning algorithms are used to analyze and cluster unlabeled datasets by discovering hidden patterns or data groups without the need for human intervention. With the help of a suitable algorithm, the particular characterizations of an image are recognized systematically during the image processing stage. Pattern recognition and image clustering are two of the most common image classification methods used here. Two popular algorithms used for unsupervised image classification are 'K-mean' and 'ISODATA.'

K-means is an unsupervised classification algorithm that groups objects into k groups based on their characteristics. It is also called "clusterization." K-means clustering is one of the simplest and very popular unsupervised machine learning algorithms.

ISODATA stands for "Iterative Self-Organizing Data Analysis Technique," it is an unsupervised method used for image classification. The ISODATA approach includes iterative methods that use Euclidean distance as the similarity measure to cluster data elements into different classes. While the k-means assumes that the number of clusters is known a priori (in advance), the ISODATA algorithm allows for a different number of clusters.

## 1.6. Supervised classification

Supervised image classification methods use previously classified reference samples (the ground truth) in order to train the classifier and subsequently classify new, unknown data. Therefore, the supervised classification technique is the process of visually choosing samples of training data within the image and allocating them to pre-chosen categories, including vegetation, roads, water resources, and buildings. This is done to create statistical measures to be applied to the overall image.

## 1.7. Image classification methods

Two of the most common methods to classify the overall image through training data are 'maximum likelihood' and 'minimum distance.' For instance, 'maximum likelihood' classification uses the statistical traits of the data where the standard deviation and mean values of each textural and spectral indices of the picture are analyzed first. Later, the likelihood of each pixel to separate classes is calculated by means of a normal distribution for the pixels in

each class. Moreover, a few classical statistics and probabilistic relationships are also used. Eventually, the pixels are marked to a class of features that show the highest likelihood.

# 1.8. How Does Image Classification Work?

A computer analyzes an image in the form of pixels. It does it by considering the image as an array of matrices with the size of the matrix reliant on the image resolution. Put simply, image classification in a computer's view is the analysis of this statistical data using algorithms. In digital image processing, image classification is done by automatically grouping pixels into specified categories, so-called "classes."

The algorithms segregate the image into a series of its most prominent features, lowering the workload on the final classifier. These characteristics give the classifier an idea of what the image represents and what class it might be considered into. The characteristic extraction process makes up the most important step in categorizing an image as the rest of the steps depend on it.

Image classification, particularly supervised classification, is also reliant hugely on the data fed to the algorithm. A well-optimized classification dataset works great in comparison to a bad dataset with data imbalance based on class and poor quality of images and image annotations.

# 1.9. Image Classification Using Machine Learning

Image recognition with machine learning leverages the potential of algorithms to learn hidden knowledge from a dataset of organized and unorganized samples (Supervised Learning). The most popular machine learning technique is deep learning, where a lot of hidden layers are used in a model.

# 1.10. Recent Advances in Image Classification

With the advent of deep learning, in combination with robust AI hardware and GPUs, outstanding performance can be achieved on image classification tasks. Hence, deep learning brought great successes in the entire field of image recognition, face recognition, and image classification algorithms achieve above human-level performance and real-time object detection. Additionally, there's been a huge jump in algorithm inference performance over the last few years.

- For example, in 2017, the Mask R-CNN algorithm was the fastest real-time object detector on the MS COCO benchmark, with an inference time of 330 ms per frame.
- In comparison, the YOLOR algorithm released in 2021 achieves inference times of 12 ms on the same benchmark, thereby overtaking the popular YOLOv3 and YOLOv4 deep learning algorithms.

• In July 2022, the release of YOLOv7 marked a new state-of-the-art that surpasses all previously known models, including YOLOR, in terms of speed and accuracy[9].

# 1.11. Advantages of Deep Learning vs. traditional Image Processing

In comparison to the conventional computer vision approach in early image processing around two decades ago, deep learning requires only the knowledge of engineering of a machine learning tool. It doesn't need expertise in particular machine vision areas to create handcrafted features.

In any case, deep learning requires manual data labeling to interpret good and bad samples, which is known as image annotation. The process of gaining knowledge or extracting insights from data labeled by humans is called supervised learning.

The process of creating such labeled data to train AI models needs tedious human work — for instance, to annotate regular traffic situations in autonomous driving. However, nowadays, we have large datasets with millions of high-resolution labeled data of thousands of categories such as ImageNet, LabelMe, Google OID, or MS COCO.

# 1.12. CNN Image Classification

Image classification can be defined as the task of categorizing images into one or multiple predefined classes. Although the task of categorizing an image is instinctive and habitual to humans, it is much more challenging for an automated system to recognize and classify images[10].

#### 1.13. The Success of Neural Networks

Among deep neural networks (DNN), the convolutional neural network (CNN) has demonstrated excellent results in computer vision tasks, especially in image classification. Convolutional Neural Network (CNN, or ConvNet) is a special type of multi-layer neural network inspired by the mechanism of the optical and neural systems of humans.

In 2012, a large deep convolutional neural network called AlexNet showed excellent performance on the ImageNet Large Scale Visual Recognition Challenge (ILSVRC), this marked the start of the broad use and development of convolutional neural network models (CNN) such as VGGNet, GoogleNet, ResNet, DenseNet, and many more.

## 1.14. Convolutional Neural Network (CNN)

A CNN is a framework developed using machine learning concepts. CNNs are able to learn and train from data on their own without the need for human intervention. In fact, there is only some pre-processing needed when using CNNs. They develop and adapt their own image filters, which have to be carefully coded for most algorithms and models. CNN frameworks

have a set of layers that perform particular functions to enable the CNN to perform these functions[10].

## 1.15. CNN Architecture and Layers

The basic unit of a CNN framework is known as a neuron. The concept of neurons is based on human neurons. These are statistical functions that calculate the weighted average of inputs and apply an activation function to the result generated. Layers are a cluster of neurons, with each layer having a particular function

A CNN system may have somewhere between 3 to 150 or even more layers: The "deep" of Deep neural networks refers to the number of layers. One layer's output acts as another layer's input. Deep multi-layer neural networks include Resnet50 (50 layers) or ResNet101 (101 layers).

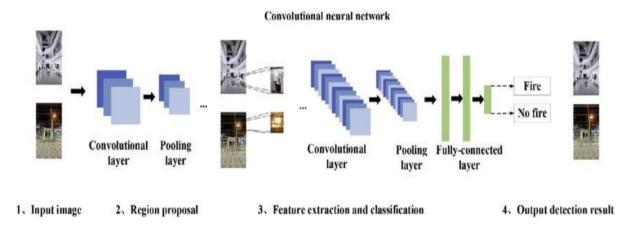


Fig.1.1 Convolutional Neural Network Architecture

CNN layers can be of four main types: Convolution Layer, ReLu Layer, Pooling Layer, and Fully-Connected Layer.

• Convolution Layer: A convolution is the simple application of a filter to an input that results in an activation. The convolution layer has a set of trainable filters that have a small receptive range but can be used to the full-dept of data provided. Convolution layers are the major building blocks used in convolutional neural networks.

- ReLu Layer: ReLu layers, also known as Rectified linear unit layers, are activation functions applied to lower overfitting and build the accuracy and effectiveness of the CNN. Models that have these layers are easier to train and produce more accurate results.
- Pooling Layer: This layer collects the result of all neurons in the layer preceding it and processes this data. The primary task of a pooling layer is to lower the number of factors being considered and give streamlined output.
- Fully-Connected Layer: This layer is the final output layer for CNN models that flattens the input received from layers before it and gives the result.

# 1.16Applications of Image Classification

Some years ago, the primary use cases of image classification could be mainly found in security applications. But today, applications of image classification are becoming important across a wide range of industries, use cases are popular in health care, industrial manufacturing, smart city, insurance, and even space exploration. One reason for the surge of applications is the evergrowing amount of visual data available and the rapid advances in advanced computing technology. Image classification is a method of extracting value from this data. Used as a strategic asset, visual data has equity as the cost of storing and managing it is exceeded by the value realized through applications throughout the business. There are many applications for image classification; popular use cases include:

Application #1: Input image

Application #2: Region proposal

Application #3: Feature extraction and classification

Application #4: Output detection result

### 1.17. OBJECTIVES

Forests are the savior of earth's ecological balance. Forest fires usually occur in areas remote from populated places, in order to that their detection at an early stage and timely reports to the competent services are of utmost importance. Forest fires are one among the foremost important and prevalent sort of disasters and that they can create great environmental problems for Nature. it's known that they're detectable and simply preventable. One and possibly the foremost important method for shielding forests from wildfires is their early detection. The earliest possible detection enables a rapid response to attenuate the spread. Moreover, information regarding the seat of the hearth is invaluable for the rapid deployment of fire-fighters. Therefore, early detection, containment at the primary stages and extinguishment of a fireplace before it spreads are crucial for wildfire management. To reduce the risk and prevent the forest fire they are big offerings to fight it like planes, fire brigade trucks, also extinguishers to small areas which depends upon the severity of the fire and leads to large investment by concerned agencies. The best way out is early detection of forest fire and prevention.

Forest fires as of late have been annihilating both for normal biological system, biodiversity and woodland economy. With expanding populace weight and change in worldwide atmosphere situation, there is an expansion in level of fires that are a significant reason for declining Indian woodlands. As indicated by woodland study report of India, 50 % of backwoods regions in nation are fire inclined (going from 50 to 90 % in certain conditions of nation). It is about the sensors and dynamic checking framework to dodge a significant fire and genuine harm to woods.

#### **CHAPTER 2**

### LITERATURE REVIEW

# 2.1 An intelligent system for false alarm reduction in infrared forest-fire detection

### **AUTHOR NAME: B.C.Arrue**

Forest fires cause many environmental disasters, creating economical and ecological damage as well as endangering people's lives. Heightened interest in automatic surveillance and early forest-fire detection has taken precedence over traditional human surveillance because the latter's subjectivity affects detection reliability, which is the main issue for forest-fire detection systems. Our approach, the False Alarm Reduction system, proposes an alternative real-time infrared-visual system that overcomes this problem. The FAR system consists of applying new infrared-image processing techniques and artificial neural networks (ANNs), using additional information from meteorological sensors and from a geographical information database, taking advantage of the information redundancy from visual and infrared cameras through a matching process, and designing a fuzzy expert rule base to develop a decision function. Furthermore, the system provides the human operator with new software tools to verify alarms.

## 2.2 Detection Using Image Processing Technique

#### **AUTHOR NAME: Chi Yuan**

Early forest fire alarm systems are critical in making prompt response in the event of unexpected hazards. Cost-effective cameras, improvements in memory, and enhanced computation power have all enabled the design and real-time application of fire detecting algorithms using light and small-size embedded surveillance systems. This is vital in situations where the performance of traditional forest fire monitoring and detection techniques are unsatisfactory. This paper presents a forest fire monitoring and detection method with visual sensors onboard unmanned aerial vehicle (UAV). Both color and motion features of fire are adopted for the design of the studied forest fire detection strategies. This is for the purpose of improving fire detection performance, while reducing false alarm rates. Indoor experiments are conducted to demonstrate the effectiveness of the studied forest fire detection methodologies.

#### 2.3 UAV Based Forest Fire Surveillance

**AUTHOR NAME: R Jijitha** 

Forest are considered as one of the most important and indispensable resources. The common hazards in forest are forest fire. It causes great harm to the forest and result a very serious economic loss. In order to prevent the natural resources and human safety and property. Early detection in forest fire can be significant impact on the control of forest fire. There are so many techniques to detect the occurrence of forest fire. A fire detection method for the application of UAV-based forest fire surveillance using IR camera. This approach improves the accuracy and reliability of forest fire detection. This paper presents a literature study on forest fire detection.

# 2.4 Geospatial Artificial Intelligence for Early Detection of Forest and Land Fires

# **AUTHOR NAME: Alya Faryanti Purbahapsari**

Over the years, early detection of forest and land fires has been conducted using hotspot data provided by the National Institute of Aeronautics and Space (LAPAN), based on its interpretation of satellite images. However, the system has several shortcomings, especially due to its inability to distinguish forest and land fires from other hot surfaces or fires caused by common human activities. Recently, the DG of Law Enforcement of the Ministry of Environment and Forestry (DGLE MoEF) has been piloting a new approach through advancement in artificial intelligence, called Geospatial Artificial Intelligence (GeoAI). By utilizing recorded satellite image data from 2017 - 2019, the machine has been trained to recognize the pattern and tone of the image in burnt areas so that it can validate the presence of the burnt area based on the history of Sentinel-2 imagery for the past week at each cluster. DGLE MoEF found that the burnt area data processed by GeoAI has better accuracy than the hotspot count for forest and land fire identification. Moreover, GeoAI may ease forest and land fire analysis and verification by automatically overlaying forest area and company concessions at the burnt area. GeoAI's innovation in forest and land fire monitoring can produce more accurate and complete early detection data of forest and land fires than currently available hotspot data. The results of hotspot clustering that detect fires may assist firefighters in rapidly extinguishing the fire, and support law enforcement officers in determining the appropriate target location. Therefore, GeoAI technology may increase the effectiveness and efficiency of resources allocated by law enforcement officers in providing better and more responsive public services.

# 2.5 Forest Fire Detection System

# **AUTHOR NAME: D.Sathya**

The forest is one of the most important wealth of every country. The forest fires destroys the wildlife habitat, damages the environment, affects the climate, spoils the biological properties of the soil, etc. So the forest fire detection is a major issue in the present decade. At the same time the forest fire have to be detected as fast as possible. In the proposed method, a color spatial segmentation, temporal segmentation, global motion compensation, Support Vector

Machine (SVM) classifications are used to detect the fire and to segment the fire from the video sequence. The method is implemented over the two real time data sets. The proposed method is most suitable for segmenting fire events over unconstrained videos in real time.

#### 2.6 Detection of Forest Fire using Convolutional Neural Networks

# **AUTHOR NAME: A.Sheryl Oliver**

Forest fire is a dangerous condition when an uncontrolled, unexpected fire occurs in forests. It is extremely spontaneous and very difficult to control that damages millions of hectares of land and poses serious dangers not only to the ecosystem but also to humans. Hundreds of fires occur every year due to different reasons: seasonal dry spells, thunderstorms and volcanic ignition. Forest fires pose significant environmental issues, causing economic and environmental destruction and endangering human lives. For several nations a big issue is the occurrence of forest fires coupled with the inability of fire services to contain them effectively. These countries are also developing new strategies for controlling. Timely identification is one essential element to control such a phenomenon. Several classification approaches have been proposed, but there are disadvantages in the proposed models that lead to inefficiency and inability to produce accurate results. A novel Convolution Neural Network algorithm if and when used provides high efficiency, accuracy, and comparatively less data-training stress when compared to the supervised machine learning algorithms that require manual data-training. The results obtained using this technique have been studied and an accuracy of 94.3 percent has been reported.

# 2.7 Image Processing Based Forest Fire Detection

# **AUTHOR NAME: Vipin V**

A novel approach for forest fire detection using image processing technique is proposed. A rule based color model for fire pixel classification is used. The proposed algorithm uses RGB and YCbCr color space. The advantage of using YCbCr color space is that it can separate the luminance from the chrominance more effectively than RGB color space. The performance of the proposed algorithm is tested on two sets of images, one of which contains fire; the other contains fire-like regions. Standard methods are used for calculating the performance of the algorithm. The proposed method has both higher detection rate and lower false alarm rate. Since, the algorithm is cheap in computation it can be used for real time forest fire detection.

#### 2.8 Video Fire Detection

# **AUTHOR NAME: A. Enis Çetin**

This is a review article describing the recent developments in Video based Fire Detection (VFD). Video surveillance cameras and computer vision methods are widely used in many security applications. It is also possible to use security cameras and special purpose infrared surveillance cameras for fire detection. This requires intelligent video processing techniques for detection and analysis of uncontrolled fire behavior. VFD may help reduce the detection time

compared to the currently available sensors in both indoors and outdoors. It is possible to cover an area of 100 km2 using a single pan-tilt-zoom camera placed on a hilltop for wildfire detection. Another benefit of the VFD systems is that they can provide crucial information about the size and growth of the fire, direction of smoke propagation.

# 2.9 Forest Fire Detection Using a Rule-Based Image Processing Algorithm and Temporal Variation

#### **AUTHOR NAME: A. Mubarak**

Forest fires represent a real threat to human lives, ecological systems, and infrastructure. Many commercial free detection sensor systems exist, but all of them are difcult to apply at large open spaces like forests because of their response delay, necessary maintenance needed, high cost, and other problems. In this paper a forest fire detection algorithm is proposed, and it consists of the following stages. Firstly, background subtraction is applied to movement containing region detection. Secondly, converting the segmented moving regions from RGB to YCbCr color space and applying five free detection rules for separating candidate free pixels were undertaken. Finally, temporal variation is then employed to differentiate between fire and fire-color objects. The final results show that the proposed method achieves up to 96.63% of true detection rates. These results indicate that the proposed method is accurate and can be used in automatic forest fire-alarm systems.

# 2.10 Notification System Using Fuzzy Logic and Convolutional Neural Networks (CNNs)

# **AUTHOR NAME: Kwaku Apeadu**

This is paper presents the design and development of a fuzzy logic-based multisensor fire detection and a web-based notification system with trained convolutional neural networks for both proximity and wide-area fire detection. To solve this problem, we use convolutional neural network (CNN) fire detection. Convolutional Neural Networks are mainstream methods of deep learning due to their ability to perform feature extraction and classification in the same architecture. The system is designed to enable early detection of fire in residential, commercial, and industrial environments by using multiple fire signatures such as flames, smoke, and heat. With access granted to the web-based system, the fire and rescue crew gets notified in real-time with location information. The final experimental and performance evaluation results showed that the accuracy rate of CNN was 94% and that of the fuzzy logic unit is 90%.

## **SYSTEM ANALYSIS**

#### 3.1. EXISTING SYSTEM

#### **SENORS**

Nowadays almost all the fire detection system uses sensors. The accuracy, reliability and positional distributions of the sensor determine the betterment of the system. For high accuracy fire detection systems, large numbers of sensors are require in the case of open-air applications. Sensors also need a recurrent battery charge which is not possible in a large open space. Sensors are detected fire if it is close to fire. This will lead to damaging of sensor. These days, two different types of sensor networks are offered for fire detection, camera surveillance and wireless sensor network. The development of sensors, digital camera, image processing, and industrial computers resulted in the development of the modern technology system for optical, automated early recognition and warning of forest fires.

#### 3.2 PROPOSED SYSTEM

The presences of fire in video streams are indicated by semantic events. Most of the existing systems can only be used for the videos obtained from stationary cameras and videos obtained from the controlled lightening conditions. These existing automatic fire detection systems cannot be used for video streams obtained from mobile phones or any hand held devices. The KILLFIRE method is proposed to overcome these limitations.

The KILLFIRE method works on three sections:

- i) To improve the accuracy, the Fire-like pixel detector color model is used.
- ii) To avoid the problem occurring in stationary videos, the new technique of motion compensation is used.
- iii) To identify and segment the fire in video streams, the segmentation method is used.

#### **Purpose**

Forest fires as of late have been annihilating both for normal biological system, biodiversity and woodland economy. With expanding populace weight and change in worldwide atmosphere situation, there is an expansion in level of fires that are a significant reason for declining Indian woodlands. As indicated by woodland study report of India, 50 % of backwoods regions in nation are fire inclined (going from 50 to 90 % in certain conditions of

nation). Around 6 % of the woods are inclined to extreme fire harms. The reason for this planned framework is to manufacture a dependable fire location framework so as to know dynamic status of backwoods temperature in specific conditions. It is about the sensors and dynamic checking framework to dodge a significant fire and genuine harm to woods.

#### 3.3 ADVANTAGES OF PROPOSED SYSTEM

- The proposed method is fast in the detection process and can maintain performance accuracy.
- Thus, the proposed method is suitable and reliable for integrating into the early warning system.

# REQUIREMENT SPECIFICATIONS

# **4.1 HARDWARE REQUIREMENTS:**

Operating system - Windows(>7),Mac OS X(>10.6),Ubantu(Red Hat)

Web browser - Mozilla Firefox(>3.6), Safari Apple(>5.0), Google Chrome(>4.0)

Mobile device - Operating System Android(>2.3)

# **4.2 SOFTWARE REQUIREMENTS:**

Visual Studio Code Editor ,Jupyter Note

Programming language - Python,Flask

#### **MODULE DESCRIPTION:**

#### 1. Data Collection

For better accuracy train on more images

# 2. Image Pre Processing

In this milestone, we will be improving the image data that suppresses unwilling distortions or enhances some image features important for further processing, although performing some geometric transformations of images like rotation, scaling, translation, etc.

#### 3. The ImageDataGenerator Library

Image data augmentation is a technique that can be used to artificially expand the size of a training dataset by creating modified versions of images in the dataset.

The Keras deep learning neural network library provides the capability to fit models using image data augmentation via the ImageDataGenerator class.

Import the ImageDataGenerator class from TensorFlow Keras.

# 4. Configure ImageDataGenerator Class

ImageDataGenerator class is instantiated and the configuration for the types of data augmentation

There are five main types of data augmentation techniques for image data; specifically:

- Image shifts via the width\_shift\_range and height\_shift\_range arguments.
- The image flips via the horizontal\_flip and vertical\_flip arguments.
- Image rotations via the rotation\_range argument
- Image brightness via the brightness\_range argument.
- Image zoom via the zoom range argument.

An instance of the ImageDataGenerator class can be constructed for train and test.

# 5. Apply ImageDataGenerator Functionality To Trainset And Testset

Apply ImageDataGenerator functionality to Trainset and Testset by using the following code.For Training set using flow\_from\_directory function.

This function will return batches of images from the subdirectories

#### **Arguments:**

The ImageDataGenerator class has three methods flow ( ), flow\_from\_directory ( ), and flow\_from\_dataframe ( ) to read the images from a big numpy array and folders containing images.

**flow\_from\_directory** ( ) expects at least one directory under the given directory path.

- The directory must be set to the path where your training folders are present.
- The target\_size is the size of your input images, every image will be resized to this size.
- batch\_size: No. of images to be yielded from the generator per batch.
  - "batch\_size" in both train and test generators is to some number that divides your total number of images in your train set and train
- set respectively.
- class\_mode: Set "binary" if you have only two classes to predict, if not set to "categorical".

# 6. Model Building

The neural network model is to be built by adding different network layers like convolution, pooling, flattening, dropout and neural layers.

In this milestone, we start building our model by:

- 1.Initializing the mode
- 2. Adding Convolution layers
- 3. Adding Pooling layers
- 4.Flatten layer
- 5. Full connection layers which include hidden layers

At last, we compile the model with layers we added to complete the neural network structure

## 7. Video Analysis

Video analysis is used to get the prediction for the input frames. OpenCV is an open-source library that provides us with the tools to perform almost any kind of image and video processing [8].

#### 8. Train The Model

- Train our model on IBM
- Store our Model on IBM
- Download the Stored model to Local system

# 9. Build Python Code

Using Jupyter NoteBook build the application.

# **Advantages of Jupyter NoteBook**

- Prototyping.
- Data ingestion.
- Exploratory data analysis.
- Feature engineering.
- Model comparison.
- Final model.

# CHAPTER 6 SYSTEM DESIGN

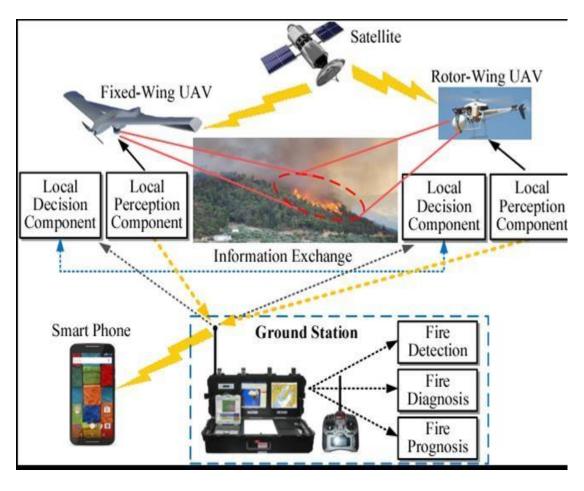


Fig 1.2 Video Analysis

#### **SYSTEM IMPLEMENTATION**

#### 7.1 PROGRAM:

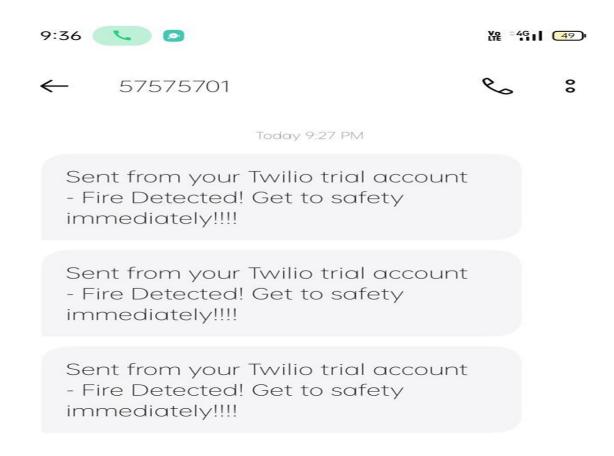
```
import keras
from keras.preprocessing.image import ImageDataGenerator
from keras.models import load_model
from keras.layers import Lambda
import tensorflow as tf
tf.keras.preprocessing.image_
directory="C:\\Users\\Akash\\,
labels="inferred",
label mode="int",
class_names=None,
color_mode="rgb",
batch_size=32,
image_size=(256, 256),
shuffle=True,
seed=None,
validation_split=None,
subset=None,
interpolation="bilinear",
follow_links=False,
crop_to_aspect_ratio=False,
tf.keras.preprocessing.image.
path="C:\\Users\\Akash\\
)
from numpy import *
image = tf.keras.preprocessing.image."C:\\Users\\Akash\\
input_arr = tf.keras.preprocessing.image.
input_arr = np.array([input_arr]) # Convert single image to a batch.
predictions = image.predict(input_arr)
train_datagen=ImageDataGenerat=1./255,shear_range=,rotation_range=
test_datagen=ImageDataGenerato=1./255)
#: Applying ImageDataGenerator functionality to trainset.
```

```
x_train = train_datagen.flow_from_r'C:\Users\Akash\
target\_size = (128, 128),
batch\_size = 32,
class_mode= 'binary')
x_test = test_datagen.flow_from_r'C:\Users\Akash\
target\_size = (128, 128),
batch_size = 32,
class_mode= 'binary')
from keras.models import Sequential
from keras.layers import Convolution2D, MaxPooling2D,
import warnings
warnings.filterwarnings(')
model = Sequential()
model.add(Convolution2D(32,(3,),input_shape=(128,128,3),='relu'))
model.add(MaxPooling2D(pool_=(2,2)))
model.add(Flatten())
model.add(Dense(units=256,='relu'))
model.add(Dense(units=1,='sigmoid'))
model.summary()
model.compile(optimizer='adam'
loss='binary crossentropy',
metrics=['accuracy','mse'])
model.save("forest1.h5")
#import load_model from keras.model
import matplotlib.pyplot as plt
from keras.models import load model
#import image class from keras
from keras.preprocessing import image
#import numpy
import numpy as np
from PIL import Image
#import cv2
import cv2
from PIL import Image
from keras.utils import img_to_array
model = load_model("forest1.h5")
def prediction(img_path):
  i = cv2.imread(img path)
```

```
i = cv2.cvtColor(i, cv2.COLOR_BGR2RGB)
  img = Image.open(img_path)
  img = img.resize((128,128))
  x = img\_to\_array(img)
  x = np.expand\_dims(x,axis=0)
  pred = model.predict(x)
  plt.imshow(i)
  print("%s"%("FOREST FIRE DETECTED! SMS SENT!" if pred==[[1.]] else "NO
FOREST FIRE DETECTED"))
prediction(r'C:\Users\Akash\
import cv2
import os
import numpy as np
from tensorflow.keras.utils import load_img,img_to_array
from tensorflow.keras.models import load_model
from twilio.rest import Client
import getpass
from playsound import playsound
msg\_sent = False
model = load_model(r'forest1.h5')
#define video
video = cv2.VideoCapture("C:\\Users\\
#define the featues
name = ['forest', 'with fire']
while(1):
success, frame = video.read()
cv2.imwrite("C:\\Users\\Akash\
img = image.load_img("C:\\Users\\
x = image.img\_to\_array(img)
x = np.expand\_dims(x,axis=0)
pred = model.predict_classes(x)
p = pred[0]
print(pred)
cv2.putText(frame, "predicted class = "+str(name[p]), (100,100),
cv2.FONT_HERSHEY_SIMPLEX, 1, (0,0,0), 1)
pred = model.predict_classes(x)
if pred[0]==1:
#twilio account ssid
account sid = '
#twilio account authentication token
auth token='
```

```
client = Client (account_sid, auth_token)
message = client.messages \
.create(
body='Forest Fire is detected, stay alert',
#use twilio free number
from_=' +16802196438',
to='+919025764607')
print(message.sid)
print('Fire Detected')
print ('SMS sent!')
playsound(I'C:\Users\Akash\
else:
print("No Danger") #break
cv2.imshow("C:\\Users\\Akash\\
if cv2.waitKey(1) & 0xFF== ord('a'):
break
video.release()
cv2.destroyAllWindows()
```

# 7.2 Output



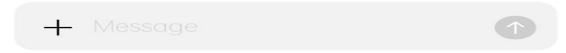


Fig 1.3 Output

# **CONCLUSION**

This project will help in early detection of forest fire and the prevention. It also involves the risk factor of analyzing the drone images of affected areas using machine learning algorithm which overcomes the existing project. This system detects the fire conditions in a short time before any fire accidents spreads over the forest area.

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