### **CUSTOMER CARE REGISTRY**

# PROJECT REPORT

# **Submitted by:**

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# DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

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### 1. INTRODUCTION

### 1.1 Project Overview:

Customer Complaint is important information reflecting customers sound and is a primary measure of customer dissatisfaction. An Effective and Efficient response to these complaints is an essential index of organization's performance. The presented model for the Customer Care Registry will have the ability to minimize customers' dissatisfaction and on the other hand it can encourage customers to participate in controlling the quality of the service provided. It also reduces recurring complaints. It will Improve standards of service to the community. Eventually, it raises standards of administrative decision-making. In today's competitive environment, product and service innovations are re-defining accepted levels of performance.

# 1.2 Purpose:

While customer service and support teams interact with customers on an as-needed basis -- using various chat channels such as phone, website chat applications and social media messaging -- those moments of contact are critical to keeping an organization running successfully. If customer service teams provide a positive customer experience and customer support teams successfully assist customers with questions or problems, then those customers are likely to be happy and do business again with the organization. Satisfied customers may also choose to leave positive reviews or tell friends and family about an organization with good customer service and support, which can bring in more customers to an organization.

# **2.LITERATURE SURVERY**

# 2.1 Existing Problem:

### 1. Help Desk:

Help desk software is a tool that serves a wide range of customer support activities. You can organize messages, give assistance, and exchange information with customers at a single point of contact. The help desk uses tickets for communication that's why it's also known as a ticketing system.

### **Advantages:**

- Improves the security of your IT network.
- Improves the service desk as well as the products and services offered by the organization.
- Helps you ensure that the service quality is as defined in the SLA.

# **Disadvantage:**

- Focuses on improving customer service efficiency over excellence.
- Dishevels flow of communication.
- Does not focus on building long term customer relationships.

# 2.Fresh Desk:

Online cloud-based customer service software providing helpdesk support with all smart automations to get things done faster.

# Advantage:

- Modern and user-friendly design.
- A feature-rich customer service platform.
- Freshdesk marketplace with many integrations (Salesforce, Slack, etc.).
- The free plan available.

# **Disadvantage:**

- Limited automation and rules (plus, hard to configure).
- Poor dashboard (Note: Freshdesk Analytics is in the beta version. The current dashboard offers fundamental features only).
- The dark mode is native Sometimes it seems the support team of Freshdesk is not easily reachable.

### 2.2 References:

https://freshdesk.com/

https://www.helpdesk.com/

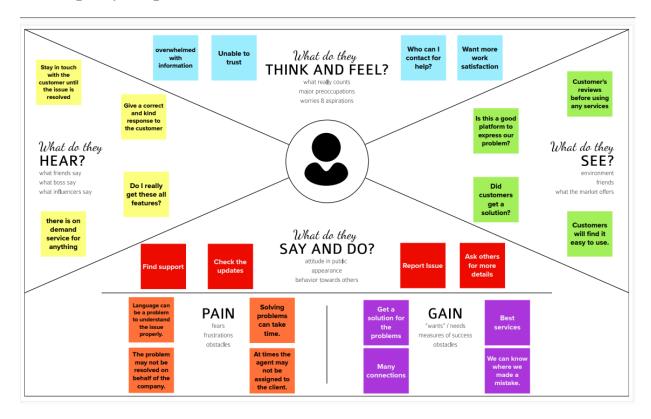
# 2.3 Problem Statement Definition:

A customer is a user who needs an intermediary agent to solve their problem while using online booking and e-commerce websites. So we developed customer care registration system to provide better services.

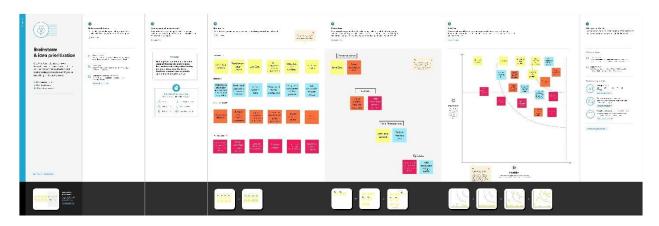
Who does the problem affect?	Frequent online users.
What are the boundaries of the problem?	IT sector, e-Commerce, Online Booking
	System.
What is the issue?	Stay in touch with the customer until the
	issue is resolved An Agent will be assigned
	to the Customer to solve the problem. Based
	on complaint type related authority take
	action and try to solve complaint as early as
	possible.
When does the issue occurs?	Not knowing answer to a questions, When
	the customer needs does not satisfied,
	Transferring customer calls, Not having
	right tools, Customer service workflows
	aren't aligned with customer journey.
Where is the issue occurring?	The issue occur in several department like
	IT sectors, e-Commerce etc.,
Why is it important that we fix the problem?	By solving this issue, Customer can get the
	solution for their raised complaints.

# **3.IDEATION & PROPOSED SOLUTION**

# 3.1 Empathy Map:



# 3.2 Ideation & Brainstorming:



# 3.3 Proposed Solution:

S. No.	Parameter	Description
1.	Problem Statement (Problem to be solved)	A customer is a user who needs an intermediary agent to solve their problem while using online booking and e-commerce websites.
2.	Idea / Solution description	When the user faces any problem during online transaction, online shopping, this application helps to find the solution to their problem at any time. When there is any update on user complaint, will be communicated to the user via email.
3.	Novelty / Uniqueness	The user can view their complaint status on the dashboard and an agent will be assigned to the Customer to solve the problem.
4.	Social Impact/ Customer Satisfaction	Can help the customer to track each step of their issue.
5.	Business Model(Revenue Model)	The details of the user's problem can be recorded in the database, which will help resolve their problem quickly.

6. Scalability of the Solution This application can maintain multiple users and assign a separate agent individually.

### 3.4 Problem Solution Fit:



# **4.REQUIREMENT ANALYSIS**

# **4.1 Functional & Non-Functional requirements:**

# **Functional Requirements:**

Following are the functional requirements of the proposed solution.

FR No.	Functional Requirement (Epic)	Sub Requirement (Story/ Sub-Task)
FR-1	User Registration	Registration through Form
FR-2	User Confirmation	Confirmation via Email
FR-3	User Login	Login through Form
FR-4	Admin Login	Login with Email and password
FR-5	Users Complaint	Enter the complaints in the complaint form
FR-6	Assign Agent	Assign individual agents for everyuser
FR-7	Complaint status	Status of the complaint send via e-mail

### **Non-functional Requirements:**

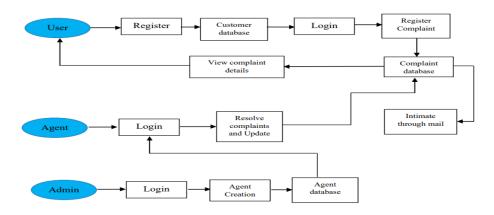
Following are the non-functional requirements of the proposed solution.

FR No.	Non-Functional Requirement	Description
NFR-1	Usability	User can easily interact with the website
NFR-2	Security	Theinformation given by the userwill be secure
NFR-3	Reliability	The system will allow the user to contact the agent ifthe userdidn't get the satisfied solution.
NFR-4	Performance	The user interface page will be loaded within fewseconds
NFR-5	Availability	New module deployment must not impact front pageand main page.
NFR-6	Scalability	Thewebsite traffic limitmust be scalable.

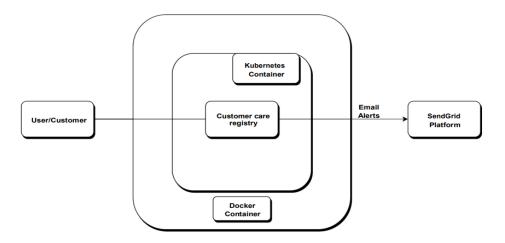
# **5.PROJECT DESIGN:**

### **5.1 Data Flow Diagram:**

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



# 5.2 Solution & Technical Architecture:



# **5.3 User Stories:**

Use the below template to listall the user stories for the product.

User Type	Functional Requiremen t (Epic)	User Story Numbe r	User Story /Task	Acceptance criteria	Priorit y	Releas e
Customer (ClientUser)	Registration	USN-1	As a User, I will register for the application by enteringmy email, password, and confirming mypassword.	I will be redirected toEmail Verification	High	Sprint- 1
Customer(Automated User)	Registration	USN-2	As a User, I will Validate the CustomerCredentials once after the Email Verification.	I will receive confirmation Message from Administrato r	High	Sprint- 2
Customer(Client User)	Login	USN-3	As a User, I will Login into the Portal using Login CredentialsProvided	I will be Redirected to the Portal Dashboard Page	Mediu m	Sprint-2
Customer (ClientUser)	Dashboard	USN-4	As a User, I will book for a ticket from available sections along theApplication and Submitthe Ticket to the Portal	I will be Issuedwith a Ticket Applied Message from thePortal.	High	Sprint-3
Customer (AdminUser)	Validation	USN-5	As a User, I will issue with a Suitable Agentto the Customer.	I will send a mailabout the agent issued tothe website.	High	Sprint- 2
Customer(Agen tUser)	Agent	USN-6	As a User, I will satisfyall the queries to the Customer for all the repetitive responses from the Customers.	I will communicat ewith a Query.	Mediu m	Sprint-3
Customer(Serve rUser)	Feedback	USN-7	As a User, I will fill up the Feedback form provided to improve or service provided from the website.	I will accept theFeedback and issue with a message for queries	High	Sprint-4

Customer(Websit Log out e User)	USN-8	As a User, I will Log out of the website when my Queries are over or else will beginagain from the Beginning.	I will Estimate the User Response and React to end the Process.	Low	Sprint- 1
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# **6. PROJECT PLANNING & SCHEDULING:**

# **6.1 Sprint Planning & Estimation:**

**Product Backlog, Sprint Schedule, and Estimation (4 Marks)** 

Sprint	User Type	Functio nal Require ment (Epic)	User Story Numbe r	User Story/ Task	Story Point s	Priorit y	Team M	lembers
Sprint-1	Custom er (WebUse r)	Registration	USN-1	As a customer, I can register for the application by entering myemail, password, andconfirming my password.	2	High	Manikam, Anan n	hakrishna
Sprint-1		Login	USN-2	As a customer, I can loginto the application by entering correct email and password	1	High	Mah	nraja
Sprint-1		Dashboard	USN-3	As a customer, I can seeall the ticket s raised by me andlot more	3	High	Maris	elvam
Sprint-2		Complaint raise	USN-4	As a customer, I can createa new complaint with the detailed description of my query	2	High	Maris	elvam

Sprint-3		Address Column	l I	USN-5	As a customer, I can have conversations with the assigned agent and get myqueries clarified	3	High	Manikam, Anan n	hakrishna
Sprint-4		Forgot passwor		USN-6	As a customer, I can reset my password by this option in caseI forgotmy old password	2	Medium	Mahar Marisel	•
Sprint-4		Complain details		USN-7	As a customer, I can see the current status of my complaint	2	Medium	Manikam, Anan n	hakrishna
Sprint	User Type	Functi onal Requir ement (Epic)	User Story Num ber		User Story/ Task		Priority	Team N	Iembers
Sprint-3	Agen t (Web user)	Login	USN-1	As an a	As an agent, I can login to the application by entering correct email and password		High	Maris	elvam
Sprint-3		Dashboard	USN-2		As an agent, I can see all the complaints assigned to me by the admin		High	Mah	araja
Sprint-3		Address Column	USN-3	As an	As an agent,I get to have conversations with the customerand clear his/her queries		High	Maha Maris	
Sprint-4		Forgot password	USN-4	As an	agent, I can reset my password by this option in caseIforgot my old password	2	Medium	Maha Maris	
			•	•					

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Sprint-1	Adm in (Web user)	Login	USN-1	As an admin,I can login to the application by entering correct email and password	1	High	Manikam Ana nan	nthakrish
Sprint-1		Dashboard	USN-2	As an admin, I can see all the complaints raised in the entiresystem and lot more	3	High	Maris	elvam
Sprint-2		Agent creation	USN-3	As an admin, I can createan agent for clarifying thecustomer's queries	2	High	Man	ikam
Sprint-2		Assigning agent	USN-4	As an admin, I can assign an agent for each complaint created by the customer	3	High	Marise Anantha	
Sprint-4		Forgot password	USN-4	As an admin, I can resetmy password by thisoption in case Iforgot my old password	2	Medium	Manikam	Maharaja

### **Velocity:**

Imagine we have a 10-day sprint duration, and the velocity of the team is 20 (points per sprint). Let's calculate the team's average velocity (AV) per iteration unit(story points per day)

### **Burndown Chart:**

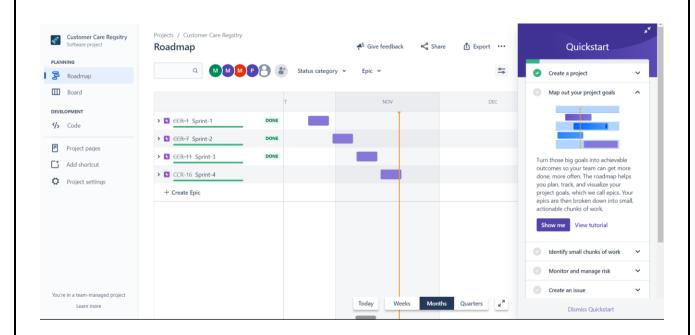
A burn down chart is a graphical representation of work left to do versus time. It is often used in agile software development methodologies such as Scrum. However, burn down charts can be applied to any project containing measurable progress over time.

# **6.2 Sprint Delivery Schedule:**

### Project Tracker, Velocity & Burndown Chart: (4 Marks)

Sprint	Total Story Points	Duration	Sprint Start Date	Sprint End Date(Pla nned)	Story Points Completed (as on Planned End Date)	Sprint Release Date (Actual)
Sprint-1	10	6 Days	24 Oct 2022	29 Oct 2022	1 0	29 Oct 2022
Sprint-2	7	6 Days	31 Oct 2022	05 Nov 2022	7	05 Nov 2022
Sprint-3	11	6 Days	07 Nov 2022	12 Nov 2022	1 1	12 Nov 2022
Sprint-4	8	6 Days	14 Nov 2022	19 Nov 2022	8	19 Nov 2022

# 6.3 Reports from JIRA:



# 7. CODING & SOLUTIONING:

#### **7.1 Feature 1:**

### User register and login:

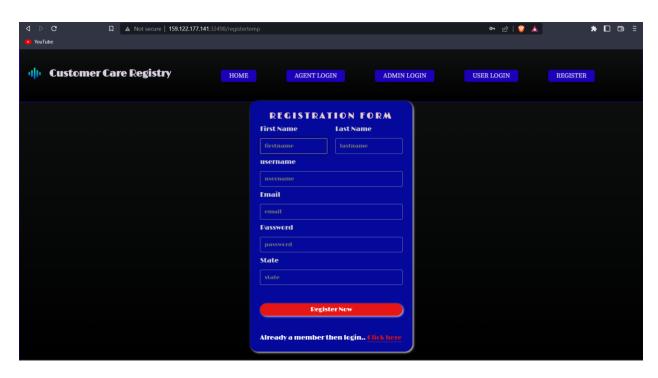
User register and login through this web application.

### **Source code:**

```
register.html:
```

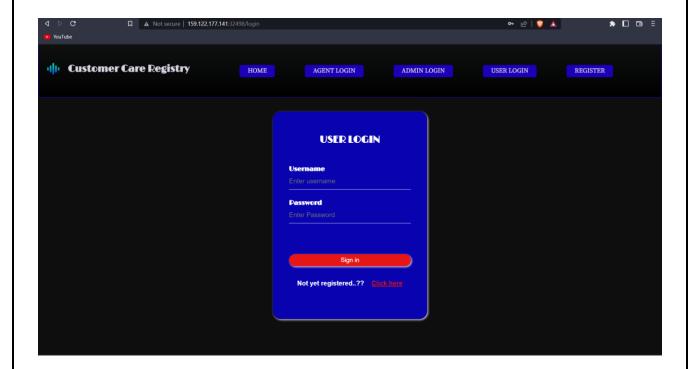
```
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta http-equiv="X-UA-Compatible" content="IE=edge">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Registration</title>
  link rel="shortcut icon" type="image/jpg" href="../static/img3.jpg">
  k rel="stylesheet" href="../static/register.css">
</head>
<body>
  <div class="wrapper">
    <img src= "{{url_for('static',filename='img6.jpg')}}" alt="" class="hello" width="100%"</pre>
height="100%" style="filter: blur(2px);">
    <div class="registration_form">
       <div class="title">
         Registration Form
       </div>
       <form action="/uploaddata" method="POST">
         <div class="form_wrap">
           <div class="input grp">
              <div class="input_wrap">
                <label for="firstname">First Name</label>
                <input type="text" id="firstname" name="firstname">
              </div>
              <div class="input_wrap">
                <label for="lastname">Last Name</label>
                <input type="text" id="lastname" name="lastname">
              </div>
           </div>
           <div class="input_wrap">
              <label for="username">username</label>
              <input type="text" id="username" name="username">
           </div>
           <div class="input_wrap">
              <label for="email">Email</label>
              <input type="email" id="email" name="email">
```

```
</div>
           <div class="input_wrap">
             <label for="password">Password</label>
             <input type="password" id="password" name="password">
           </div>
           <div class="input_wrap">
             <label for="address">Address</label>
             <input type="text" id="address" name="address">
           </div>
           <div class="input_wrap">
             <input type="submit" value="Register Now" class="submit_btn">
        </div>
      </form>
      <span class="alert {{indicator}}">{{a}}</span>
      <div class="links" style="margin-top: 10px;">
         Already a member then login.. <a href="/login"</pre>
style="text-decoration: none; color: white; border-bottom: 1px solid white;border-radius:
0px;">Click here</a>
      </div>
    </div>
  </div>
</body>
</html>
```



```
login.html:
```

```
<!DOCTYPE html>
<html lang="en">
<head>
       <meta charset="UTF-8">
       <title>user login</title>
       link rel="shortcut icon" type="image/jpg" href="../static/img3.jpg">
       <link href="../static/login.css" rel="stylesheet">
</head>
<body>
              <img src= "{{url_for('static',filename='img5.jpg')}}" alt="" class="hello"</pre>
width="100%" height="100%" style="filter: blur(2px);">
       <div class="contact-form">
             <img src="{{url_for('static',filename='a1.jpg')}}" alt="" class="avatar">
              <h2> User login</h2>
              <form action="/logindata" method="POST">
                     Username<input placeholder="Enter username" type="text"</p>
name="username">
                     Password<input placeholder="Enter Password" type="password"</p>
name="password">
              <span class="alert {{indicator}}">{{b}}</span>
                     <input type="submit" value="Sign in">
              </form>
    <div class="links">
      Not yet registered..?? <a href="/registertemp"> Click here</a>
    </div>
       </div>
</body>
</html>
```



### **7.2 Feature 2:**

# User lodge complaints and admin create agent.

In this application the user lodge complaints and admin create the agent.

### **Source Code:**

# **Userlodgecomp.html:**

```
<!DOCTYPE html>
<html>
<head>

<meta charset="utf-8">

<title>lodgecomplaint</title>

<meta name="viewport" content="width=device-width, initial-scale=1, maximum-scale=1">

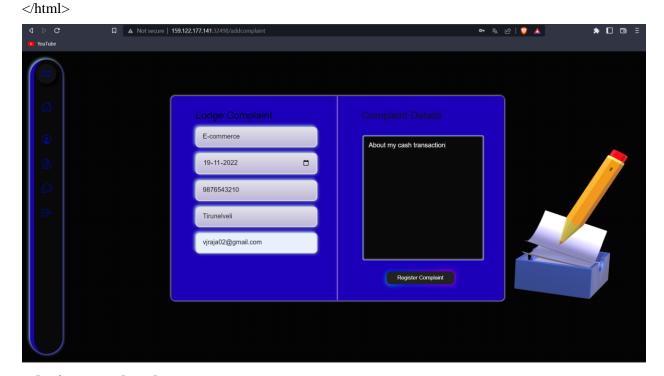
link rel="stylesheet" type="text/css" href="css/montserrat-font.css">
```

```
<link rel="stylesheet" type="text/css" href="fonts/material-design-iconic-font/css/material-</pre>
design-iconic-font.min.css">
  <link rel="stylesheet" href="/static/complaint.css"/>
</head>
<body class="form-v10">
  <link rel="stylesheet" href="/static/userd.css">
  <div class="navigation">
    <div class="toggle"></div>
     ul>
        <a href="/home">
         <span class="icon"><ion-icon name="home-outline"></ion-icon></span>
          <span class="title">Dashboard</span>
         </a>
        <a href="/profile">
         <span class="icon"><ion-icon name="person-circle-outline"></ion-icon></span>
          <span class="title">Profile</span>
        </a>
        <a href="/addcomplaint">
         <span class="icon"><ion-icon name="document-text-outline"></ion-icon></span>
          <span class="title">Lodge Complaint</span>
         </a>
        <a href="/comphistory">
         <span class="icon"><ion-icon name="chatbubbles-outline"></ion-icon></span>
         <span class="title">Complaint History</span>
         </a>
        <a href="/logout">
         <span class="icon"><ion-icon name="log-out-outline"></ion-icon></span>
          <span class="title">logout</span>
        </a>
     </div>
   <script type="module"</pre>
src="https://unpkg.com/ionicons@5.5.2/dist/ionicons/ionicons.esm.js"></script>
    <script nomodule src="https://unpkg.com/ionicons@5.5.2/dist/ionicons/ionicons.js"></script>
```

```
<script>
let navigation = document.querySelector('.navigation');
let toggle = document.querySelector('.toggle');
toggle.onclick = function(){
  navigation.classList.toggle('active')
</script>
<div class="vj2">
<img src="/static/img1.png" alt="">
</div>
<div class="vj1">
<img src="/static/img2.png" alt="">
</div>
  <div class="page-content">
                  <form class="form-detail" action="#" method="post" id="myform">
                          <div class="form-left">
                                  <h2 style="color: black;">Lodge Complaint</h2>
                                  <div class="form-row-3">
         <div class="form-row name">
          <select name="selectcategory" required id="selectcategory">
              <option class="option" value="selectcategory">Select Category</option>
              <option class="option" value="E-commerce">E-commerce</option>
              <option class="option" value="General">General</option>
              <option class="option" value="Other">Other</option>
           </select>
         </div>
         <div class="form-row name">
           <input type="date" name="dt" id="dt">
         </div>
           <div class="form-row name">
```

```
<input type="text" name="phone" class="phone" id="phone" placeholder="Phone
Number" required>
                </div>
                <div class="form-row name">
                  <select name="state" id="state">
                    <option value="state">District</option>
                    <option value="Tirunelveli">Tirunelveli</option>
                    <option value="Chennai">Chennai
                    <option value="Madurai">Madurai
                    <option value="Coimbatore">Coimbatore</option>
                    <option value="Other">Other</option>
                  </select>
                </div>
                <div class="form-row name">
                  <input type="text" name="email" id="email" class="input-text" required</pre>
pattern="[^@]+@[^@]+.[a-zA-Z]{2,6}" placeholder="email">
                </div>
                                     </div>
                              </div>
                              <div class="form-right">
                                     <h2>Complaint Details</h2>
                                     <div class="wrapper">
                                             <textarea rows="15" cols="60" placeholder="Enter the
complaint details" name="complaint" required id="complaint"></textarea>
                                     </div>
     <span class="text"style="color: black;font-weight:bold;">{{a}}</span>
                                     <div class="form-row-last">
             <button class="button-85" role="button">Register Complaint</button>
                                     </div>
```

```
</div>
</div>
</div>
</div>
</body>
```

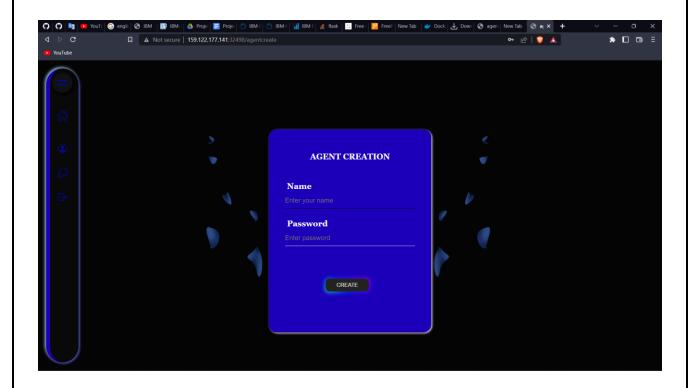


# adminagent.html:

<!DOCTYPE html>

```
<body>
  <div class="navigation">
    <div class="toggle"></div>
    ul>
     <a href="/adminpage">
      <span class="icon"><ion-icon name="home-outline"></ion-icon></span>
        <span class="title">Dashboard</span>
      </a>
     <a href="/agentcreate">
      <span class="icon"><ion-icon name="person-circle-outline"></ion-icon></span>
        <span class="title">Agent Creation</span>
     </a>
      <a href="/adcomplainthist">
      <span class="icon"><ion-icon name="chatbubbles-outline"></ion-icon></span>
       <span class="title">Complaint History</span>
      </a>
     <a href="/loggout">
      <span class="icon"><ion-icon name="log-out-outline"></ion-icon></span>
        <span class="title">logout</span>
     </a>
   </div>
   <script type="module"</pre>
src="https://unpkg.com/ionicons@5.5.2/dist/ionicons/ionicons.esm.js"></script>
    <script nomodule src="https://unpkg.com/ionicons@5.5.2/dist/ionicons/ionicons.js"></script>
    <script>
     let navigation = document.querySelector('.navigation');
     let toggle = document.querySelector('.toggle');
     toggle.onclick = function(){
      navigation.classList.toggle('active')
    </script>
    <div class="vj">
     <img src="/static/img8.png" alt="">
```

```
</div>
 <div class="wrapper">
  <div class="form">
    <h2> Agent Creation</h2>
    <form action="/agentdata" method="POST">
      Name
      <div class="name">
      <input placeholder="Enter your name" type="text" name="username" required>
      </div>
      Password
      <div class="name">
      <input placeholder="Enter password" type="password" name="password" required>
      <span class="alert {{indicator}}">{{a}}</span>
       </div>
       <button class="button-85" role="button">CREATE</button>
    </form>
  </div>
  </div>
 </div>
 </div>
</body>
</html>
```



# agent.html:

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

<meta charset="UTF-8">

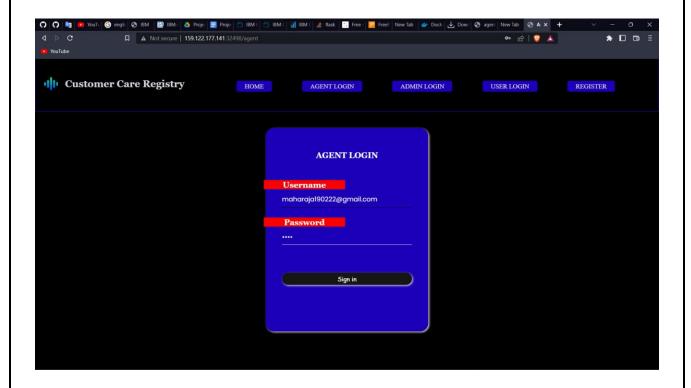
<title>Agent login</title>

link
<href="https://fonts.googleapis.com/css2?family=Poppins:wght@400;600;700;900&display=swap" rel="stylesheet">

link href="../static/agent.css" rel="stylesheet">
```

```
</head>
<body>
      <header>
            <div class="rj">
                  <div class="img">
                        <img src="/static/logo.png" alt="Global">
                        24px;">Customer Care Registry
                  </div>
                  <a href="/">Home</a>
                        <a href="/admin">Admin Login</a>
                        <a href="/login">User Login</a>
                        <a href="/registertemp">Register</a>
                        <a href="/agent">Agent Login</a>
                  </div>
            <div class="form">
                  <h2> Agent login</h2>
                  <form action="/agentdata" method="POST">
                        Username<input placeholder="Enter your name" type="text"</p>
name='username'>
                        Password<input placeholder="Enter password"
type="password" name='password'>
                        <input type="submit" value="Sign in">
                  </form>
                  <!-- <div class="links">
                  click here for dashboard <a href="/adminpage"> Click here</a>
            </div>
                  {{a}}
            </div> -->
      </header>
</body>
```

</html>



### app.py:

```
from flask import Flask, render_template, request, redirect, url_for, session import ibm_db import re from flask_mail import Mail, Message 

app = Flask(__name__) 
mail = Mail(app)

app.config['MAIL_SERVER']='smtp.gmail.com' 
app.config['MAIL_PORT'] = 465 
app.config['MAIL_PORT'] = 'customercare.in2022@gmail.com' 
app.config['MAIL_PASSWORD'] = 'dutxqvejaxonmmew'
```

```
app.config['MAIL_USE_TLS'] = False
app.config['MAIL\_USE\_SSL'] = True
mail = Mail(app)
app.secret_key='a'
conn = ibm_db.connect("DATABASE=bludb;HOSTNAME=54a2f15b-5c0f-46df-8954-
7e38e612c2bd.c1ogj3sd0tgtu0lqde00.databases.appdomain.cloud;PORT=32733;Security=SSL;SSLServe
rCertificate=DigiCertGlobalRootCA.crt;UID=fqt70379;PWD=KdUUJ3RnMlMqAimg;",",")
@app.route('/')
def home():
  return render_template('/home.html')
@app.route('/registertemp',methods=["POST","GET"])
def registertemp():
  return render_template("register.html")
@app.route('/uploaddata',methods =['GET','POST'])
def register():
  msg = "
  if request.method == 'POST':
    firstname = request.form['firstname']
    lastname = request.form['lastname']
    username = request.form['username']
    email = request.form['email']
    password = request.form['password']
    address = request.form['address']
    stmt = ibm_db.prepare(conn, 'SELECT * FROM users WHERE username = ?')
    ibm_db.bind_param(stmt, 1, username)
    ibm_db.execute(stmt)
    account = ibm_db.fetch_assoc(stmt)
    if account:
      msg = 'Account already exists!'
```

```
elif not re.match(r'[^@]+@[^@]+\.[^@]+', email):
       msg = 'Invalid email address!'
    elif not re.match(r'^[A-Za-z0-9_.-]*$', username):
       msg = 'name must contain only characters and numbers!'
    else:
       prep_stmt = ibm_db.prepare(conn,'INSERT INTO users(firstname, lastname, username, email,
password, address) VALUES(?, ?, ?, ?, ?, ?)')
       ibm_db.bind_param(prep_stmt, 1, firstname)
       ibm_db.bind_param(prep_stmt, 2, lastname)
       ibm_db.bind_param(prep_stmt, 3, username)
       ibm_db.bind_param(prep_stmt, 4, email)
       ibm_db.bind_param(prep_stmt, 5, password)
       ibm_db.bind_param(prep_stmt, 6, address)
       ibm_db.execute(prep_stmt)
       msg = 'Dear % s You have successfully registered!'%(username)
       msg1 = Message('Hello', sender = 'customercare.in2022@gmail.com', recipients = [email])
       msg1.body = 'Hello'+ username +'",
              Account creation in customer care registry was successful.
              For raising Complaints, login with your username and password.
              Thank You)"
       mail.send(msg1)
    return render_template('register.html',a = msg,indicator="success")
  else:
    msg = 'Please fill the form!'
  return render template('register.html',a = msg, indicator='failure')
@app.route('/login',methods=["POST","GET"])
def login():
  return render_template("login.html")
@app.route('/logindata',methods=["POST","GET"])
def logindata():
  global userid
  msg = "
```

```
if request.method == 'POST' and 'username' in request.form and 'password' in request.form:
    username = request.form['username']
    password = request.form['password']
    stmt = ibm_db.prepare(conn, 'SELECT * FROM users WHERE username = ? AND password = ?')
    ibm db.bind param(stmt,1,username)
    ibm_db.bind_param(stmt,2,password)
    ibm_db.execute(stmt)
    account = ibm_db.fetch_tuple(stmt)
    if account:
       session['id'] = account[0]
       userid = account[0]
       session['username'] = account[1]
       return redirect(url_for('dashboard'))
    else:
       msg = 'Incorrect username / password !'
       return render_template('login.html', b = msg, indicator="failure")
@app.route('/home')
def dashboard():
  if 'id' in session:
    uid = session['id']
    stmt = ibm_db.prepare(conn, 'SELECT * FROM users WHERE id = ?')
    ibm_db.bind_param(stmt, 1, uid)
    ibm_db.execute(stmt)
    ibm_db.fetch_tuple(stmt)
    username = session['username']
    return render_template('user dashboard.html', name = username)
  return render_template('user dashboard.html')
@app.route('/profile',methods=["POST","GET"])
def profile():
  if 'id' in session:
    uid = session['id']
    stmt = ibm_db.prepare(conn, 'SELECT * FROM users WHERE id = ?')
```

```
ibm_db.bind_param(stmt, 1, uid)
    ibm_db.execute(stmt)
    acc = ibm_db.fetch_tuple(stmt)
    return
render template('userprofile.html',fullname=acc[1]+acc[2],username=acc[3],email=acc[4],address=acc[6]
  return render_template('userprofile.html')
@app.route('/edit')
def edit():
  return render_template('editprofile.html')
@app.route('/editprofile', methods=["POST","GET"])
def editprofile():
  if request.method == 'POST':
    msg = "
    if 'id' in session:
       uid = session['id']
       firstname = request.form['firstname']
       lastname = request.form['lastname']
       username = request.form['username']
       email = request.form['email']
       address = request.form['address']
       stmt = ibm_db.prepare(conn,"UPDATE users SET firstname = ?, lastname = ?, username = ?,
email = ?, address = ? WHERE id = ?")
       ibm_db.bind_param(stmt, 1, firstname)
       ibm_db.bind_param(stmt, 2, lastname)
       ibm_db.bind_param(stmt, 3, username)
       ibm_db.bind_param(stmt, 4, email)
       ibm_db.bind_param(stmt, 5, address)
       ibm_db.bind_param(stmt, 6, uid)
       ibm_db.execute(stmt)
       msg = 'Profile Updated Successfully!'
       return render_template('editprofile.html',a = msg)
```

```
return render template('editprofile.html')
@app.route('/addcomplaint',methods=["POST","GET"])
def addcomplaint():
  if request.method == "POST":
    if 'id' in session:
       msg = "
       uid=session['id']
       selectcategory = request.form['selectcategory']
       date = request.form['dt']
       phone = request.form['phone']
       state = request.form['state']
       email = request.form['email']
       complaint = request.form.get('complaint')
       stmt = ibm_db.prepare(conn, "SELECT * FROM users WHERE id = ?")
       ibm_db.bind_param(stmt, 1, uid)
       ibm_db.execute(stmt)
       acc = ibm_db.fetch_tuple(stmt)
       email = acc[4]
       prep_stmt = ibm_db.prepare(conn,'INSERT INTO complaintdetails(uid, selectcategory, dt,
phone, state, email, complaint, status) VALUES (?, ?, ?, ?, ?, ?, ?, ?)')
       ibm_db.bind_param(prep_stmt, 1, uid)
       ibm_db.bind_param(prep_stmt, 2, selectcategory)
       ibm_db.bind_param(prep_stmt, 3, date)
       ibm_db.bind_param(prep_stmt, 4, phone)
       ibm_db.bind_param(prep_stmt, 5, state)
       ibm_db.bind_param(prep_stmt, 6, email)
       ibm_db.bind_param(prep_stmt, 7, complaint)
       ibm_db.bind_param(prep_stmt, 8, 'pending')
       ibm_db.execute(prep_stmt)
       msg = 'You have successfully registered your complaint'
       TEXT1 = Message('Hello', sender = 'customercare.in2022@gmail.com', recipients = [email])
       TEXT1.body = """ Dear """ + acc[1] + "" + acc[2] + """
```

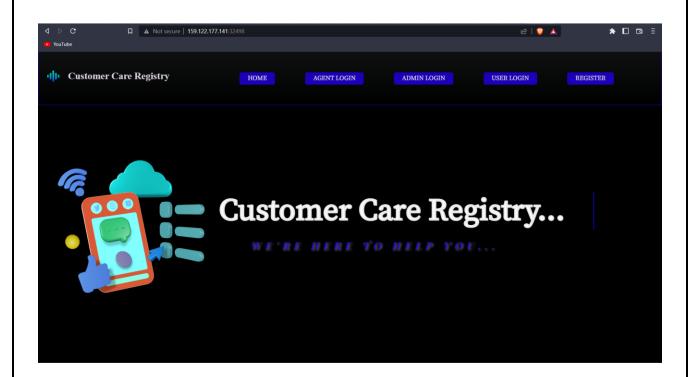
```
Your complaint has been succesfully registered...!!
              One of our agent is assigned, will surely resolve your complaint as soon as possible
              Please check the complaint details in dashboard for status of complaint."""
       mail.send(TEXT1)
       se = ibm_db.exec_immediate(conn, 'SELECT * FROM agentinfo ORDER BY RAND() LIMIT
1')
       agmail = ibm_db.fetch_tuple(se)
       agentemail = agmail[1]
       TEXT = Message('Hello', sender = 'customercare.in2022@gmail.com', recipients = [agentemail])
       TEXT.body = """New Complaint from """+acc[1]+" "+acc[2]+"""
           Complaint Description:
           """+complaint+"""""
       mail.send(TEXT)
       return render_template('userlodgecomp.html',a = msg)
  return render_template('userlodgecomp.html')
@app.route('/view',methods=["POST","GET"])
def view():
  if 'id' in session:
    return render_template('usercomphist.html')
@app.route('/comphistory',methods=['POST','GET'])
def compview():
  if 'id' in session:
    uid=session['id']
    stmt = ibm_db.prepare(conn, 'SELECT * FROM users WHERE id = ? ')
    ibm_db.bind_param(stmt, 1, uid)
    ibm_db.execute(stmt)
    stmt1 = ibm_db.prepare(conn, 'SELECT id, selectcategory, dt, phone, state, email, complaint, status
FROM complaintdetails WHERE uid = ?')
    ibm_db.bind_param(stmt1, 1, uid)
    ibm db.execute(stmt1)
```

```
comp = ibm_db.fetch_assoc(stmt1)
    data = []
    while comp != False:
       data.append(comp)
       comp = ibm_db.fetch_assoc(stmt1)
    return render_template('usercomphist.html', complaints = data)
  return render_template('usercomphist.html')
@app.route('/admin')
def admin():
  return render_template('admin.html')
@app.route('/adminpage')
def adminpage():
  return render_template('admin dashboard.html')
@app.route('/adminlog',methods=["POST","GET"])
def adminlog():
  msg = "
  email = request.form['email']
  password = request.form['password']
  stmt = ibm_db.prepare(conn, 'SELECT * FROM admininfo WHERE email = ? and password = ?')
  ibm_db.bind_param(stmt,1, email)
  ibm_db.bind_param(stmt,2, password)
  ibm_db.execute(stmt)
  logged = ibm_db.fetch_assoc(stmt)
  if(logged):
    msg = 'successfully loggedin'
    return render_template("admin dashboard.html",a=msg)
  else:
    return render_template("admin.html",a="Incorrect email/password")
@app.route('/adcomplainthist',methods=['POST','GET'])
def adcomplainthist():
```

```
stmt1 = ibm_db.prepare(conn, 'SELECT * FROM complaintdetails')
    ibm_db.execute(stmt1)
    comp = ibm_db.fetch_assoc(stmt1)
    data = []
    while comp != False:
       data.append(comp)
       comp = ibm_db.fetch_assoc(stmt1)
    return render_template('admincomphist.html', complaints = data)
@app.route('/agcomplainthist',methods=['POST','GET'])
def agcomplainthist():
    stmt1 = ibm_db.prepare(conn, 'SELECT * FROM complaintdetails')
    ibm_db.execute(stmt1)
    comp = ibm_db.fetch_assoc(stmt1)
    data = []
    while comp != False:
       data.append(comp)
       comp = ibm_db.fetch_assoc(stmt1)
    return render_template('admincomphist.html', complaints = data)
@app.route('/agentcreate',methods=["POST","GET"])
def agentcreate():
  return render_template('adminagent.html')
@app.route('/agentdata',methods=["POST","GET"])
def agentdata():
  msg = "
  username = request.form['username']
  password = request.form['password']
  stmt = ibm_db.prepare(conn, 'INSERT INTO agentinfo(username, password) VALUES (?, ?)')
  ibm_db.bind_param(stmt, 1, username)
  ibm_db.bind_param(stmt, 2, password)
  ibm_db.execute(stmt)
  msg = 'Agent has been created successfully'
```

```
return render_template('adminagent.html',a = msg)
@app.route('/agent',methods=["POST","GET"])
def agent():
  return render_template('agent.html')
@app.route('/agentlogin',methods=["POST","GET"])
def agentlogin():
  msg = "
  email = request.form['username']
  password = request.form['password']
  stmt = ibm_db.prepare(conn, 'SELECT * FROM agentinfo WHERE username = ? and password = ?')
  ibm_db.bind_param(stmt,1, email)
  ibm_db.bind_param(stmt,2, password)
  ibm_db.execute(stmt)
  logged = ibm_db.fetch_assoc(stmt)
  if(logged):
    msg = 'successfully loggedin'
    return render_template("agentdashboard.html",a=msg)
  else:
    return render_template("agent.html",a="Incorrect email/password")
@app.route('/agentpage')
def agentpage():
  return render_template('agentdashboard.html')
@app.route('/loggout')
def loggout():
  if 'id' in session:
    session.pop('id',None)
    session.pop('email',None)
    session.pop('password',None)
  return redirect(url_for('home'))
```

```
@app.route('/logout')
def logout():
  session.pop('loggedin', None)
  session.pop('id', None)
  session.pop('username', None)
  return redirect(url_for('login'))
@app.route('/solved/<no>')
def solved(no):
  i = no
  stmt = ibm_db.prepare(conn, "UPDATE complaintdetails SET status = ? WHERE id = ?")
  ibm_db.bind_param(stmt, 1, 'solved')
  ibm_db.bind_param(stmt, 2, i)
  ibm_db.execute(stmt)
  se = ibm_db.prepare(conn, 'SELECT * FROM complaintdetails where id = ?')
  ibm_db.bind_param(se, 1, i)
  ibm_db.execute(se)
  em = ibm_db.fetch_tuple(se)
  email = em[6]
  print(email)
  TEXT = Message('Hello', sender = 'customercare.in2022@gmail.com', recipients = [email])
  TEXT.body = """Your Complaint has been solved."""
  mail.send(TEXT)
  return render_template('solve.html', a ="Complaint Resolved")
if __name__ == '__main__':
  app.debug=True
  app.run(host='0.0.0.0',port=8080)
```



# **8.Testing**

## **8.1 Test case**

_	^	U		U			U			,		
1				_	Date	17-Nov-22						
1 2 3 4					Team ID	PNT2022TMID49581						
3					Project Name	Project - Customer care registry	1					
4					Maximum Marks	4 marks	1					
5	Test case ID	Feature Type	Component	Test Scenario	Pre-Requisite	Steps To Execute	Test Data	Expected Result	Actual Result	Status		
6	IndexPage_TC_001	Functional	Index Page	Check whether the user can view the required field.		Enter URL and click go     Verify Login/Register is displayed or not	http://159.122.177.141:3249 8/	Login/Register page of both agent and customer should display	Working as expected	Pass		
	LoginPage_TC_002	UI	Home page	Verify the UI elements in Home/login/register buttons		1.Enter URL and click go 2.Verify login with below UI elements: a.email text box b.password text box c.Login button d.Don't have already an account? Or Signup	http://159.122.177.141:3249 8/	Application should show below UI elements: a.email text box b.password text box c.Login button with orange colour d.Don't have already an account? Or Signup	Working as expected	Pass		
7												
8	LoginPage_TC_OO3	Functional	Home page	Verify user is able to log into application with valid credentials		1.Enter URL and click go     2.Enter Valid username in text box     3.Enter valid password in password text box     4.Click on login button	password:12345	User should get verification upon successful login of donor.	Working as expected	Pass		
	LoginPage_TC_OO4	UI	Login page	Verify user is able to log into application with Valid credentials		1.Enter URL and click go     2.Enter Valid username in text box     3.Enter valid password in password text box	password:12346	Application should show 'Incorrect email or password ' validation message.	Working as expected	Pass		
0	LoginPage_TC_OO5	Functional	Dashboard	Verified user can access user profile, register complaints, Complaint history		1.Enter URL and click go 2.Enter Valid username in text box 3.Enter valid password in password text box 4.Click on login button	password:12345	User should get verification upon successful login of recipient.	Working as expected	Pass		
						1.Enter URL and click go	1.Enter URL and click go	Application should show				
	Sheet1	+				. 1						Þ
es	dy ( Accessibility: Investig	gate						<b>=</b>			-	+ 10

A	В	C	D	E	F	G	H	1	J	K	
ProfilePage_TC_006	UI	Profile page	Verify user is able to register into application with Valid credentials		1.Enter URL and click go 2. Verify register with below UI elements: a.fullname text box b. username text box c.email text box d.password text box d.password text box e.phone number text box f.State text box	1.Enter URL and click go 2.Verify register with below UI elements: a.fullname: Maharaja b.username:Raja@123 c.email :maharaja190222@gmail.co m d.password: 12345 e.phone number:9677599152 f.State:Tamilnadu	Application should show below UI elements: 1.Enter URL and click go 2.Verify register with below UI elements: a.fullname text box b.username text box c.email text box d.password text box e.phone number text box f.State text box	Working as expected	Pass		
Admin_LoginPage_TC_ OO7	Functional	Login page	Verified admin can access user profile , register complaints, Complaint history		1.Enter URL and click go     2.Enter Valid email in Email text box     3.Enter valid password in password text box     4.Click on login button	email:customercare.in2002@ gmail.com password:customercare	Admin should get verification upon successful login of recipient.	Working as expected	Pass		
Agent_LoginPage_TC_ OO7	Functional	Login page	Verified agent can access user profile , register complaints, Complaint history		Enter URL and click go     Enter Valid email in Email text box     Enter valid password in password text box     Click on login button	email:customercare.in2002@ gmail.com password:customercare2002	verification upon	Working as expected	Pass		
					-						
						_					
Sheet1	( <del>+</del> )				E (4)						

### **8.2 User Acceptance Testing**

Resolution	Severity 1	Severity 2	Severity 3	Severity 4	Subtotal
By design	10	4	2	3	18
Duplicate	1	0	3	0	4
External	2	3	0	1	6
Fixed	9	2	4	18	35
Not	0	0	1	0	1
reproduced					
Skipped	0	0	1	1	2
Won't Fix	0	5	0	1	8
Totals	22	14	11	24	74

## 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.

# **8.3 Test case analysis**

Section	Total cases	Not tested	Fail	Pass
Home page	5	0	0	5
Login	10	0	0	10
Register	3	0	0	3
Email verification	5	0	0	5
Agent creation	5	0	0	5
User details	5	0	0	5
Complaint registered	10	0	0	10

# **9.RESULTS**

## **9.1 Performance Metrics:**

Project Name	Scope/feature	Changes	Hardware Changes	Software Changes	Impact of Downtime	Load/Volume Changes	Risk Score	Justification
Customer Care Registry Application	New	Low	No Changes	Moderate	Yes, 2hrs	>10 to 30%	GREEN	Added some additional features , s there is a software change and hav no risk
		S.No	Project Overview	NFT Test approach	Assumptions/Dependencies/Risks	Approvals/SignOff		
		1		Open the Customer Care Registry Application     Register with user Credentials	No Risks	N/A		
		2		Open the Customer Care Registry Application     Login with the user credentials	No Risks	N/A		
		3		Log in to Customer Care Registry Application     The user register their complaints.	No Risks	N/A		
		4	Assign Agent	The admin create the agent and send the email notification to the agent.     Then individual agent are assigned to individual user.	No Risks	N/A		
		5		Log in to Customer Care Registry Application     The user view the status of their complaints.	No Risks	N/A		
				End Of Test Repo	ort			
Project Overview	NFT Test approach	NFR - Met	Test Outcome	GO/NO-GO decision	Recommendations	Identified Defects (Detected/Closed/Open)	Approvals/SignOff	
Customer Care	Log in to Customer Care Registry Application     Test for all test cases.     Log out the Customer Care Registry							

### 10. ADVANTAGES & DISADVANTAGES

### **Advantages:**

- 1. This web application allows the user to register their complaints and after register their complaints the email notification will send to their register Email ID.
- 1. The problems of the user are understand clearly and the appropriate solutions are given to them.
- 1. Builds customer trust and loyalty.
- 1. The customers are able to track their problems.
- 1. The agents makes the customers very comfortable by solving their problems.
- 1. Every individual customers has individual agent.

#### **Disadvantages:**

- 1. Sometimes this application leads to inconvenient communication.
- 2. In some cases hard to find information about the problem.

### 11. CONCLUSION

The proposed web application is an customer care registry. In this application, the user can register into the application and then login into the application. If the user is already a member then they login directly into the application. In this application the user can see their profile and they able to register the complaints. After registering there complaints the Email notifications will be send to the user registered Email ID. Then the admin create the individual agent for the individual user. After creating the agent, the message will send to agent through email. The user track their problem to know the completion status of their problems.

#### 12. FUTURE SCOPE

As part of our future enhancements, we aim to user directly contact the agent. Also we aim to provide the livechat in this application and solve the problems of all resources.

#### 13. APPENDIX

#### **Source Code:**

```
register.html:
```

```
<html lang="en">
<head>
 <meta charset="UTF-8">
 <meta http-equiv="X-UA-Compatible" content="IE=edge">
 <meta name="viewport" content="width=device-width, initial-scale=1.0">
 <title>Registration</title>
 link rel="shortcut icon" type="image/jpg" href="../static/img3.jpg">
 <link rel="stylesheet" href="../static/register.css">
 <link rel="stylesheet" href="../static/home.css">
</head>
<body>
 <header>
    <div class="wrapper">
     <div class="rj">
       <div class="img">
         <img src="/static/logo.png" alt="Global">
         Customer Care
Registry
       </div>
       <a href="/">Home</a>
         <a href="/admin">Admin Login</a>
         <a href="/login">User Login</a>
         <a href="/registertemp">Register</a>
         <a href="/agent">Agent Login</a>
       </div>
     <div class="registration_form">
       <div class="title">
```

```
Registration Form
</div>
<form action="/uploaddata" method="POST">
  <div class="form_wrap">
    <div class="input_grp">
      <div class="input_wrap">
         <label for="firstname">First Name</label>
         <input type="text" id="firstname" name="firstname" placeholder="firstname">
      </div>
      <div class="input_wrap">
         <label for="lastname">Last Name</label>
         <input type="text" id="lastname" name="lastname" placeholder="lastname">
      </div>
    </div>
    <div class="input_wrap">
      <label for="username">username</label>
      <input type="text" id="username" name="username" placeholder="username">
    </div>
    <div class="input_wrap">
      <label for="email">Email</label>
      <input type="email" id="email" name="email" placeholder="email">
    </div>
    <div class="input_wrap">
      <label for="password">Password</label>
      <input type="password" id="password" name="password" placeholder="password">
    </div>
    <div class="input_wrap">
      <label for="address">State</label>
      <input type="text" id="address" name="address" placeholder="state">
    </div>
```

<div class="input\_wrap">

### login.html:

```
<!DOCTYPE html>
<html lang="en">
<head>
<meta charset="UTF-8">
<title>user login</title>
link rel="shortcut icon" type="image/jpg" href="../static/img3.jpg">
link href="../static/login.css" rel="stylesheet">
link rel="stylesheet" href="../static/home.css">
</head>
<body>
<header>

<div class="img">
<div class="img">
<img src="/static/logo.png" alt="Global">
```

```
24px;">Customer Care Registry
            </div>
            <a href="/">Home</a>
                  <a href="/admin">Admin Login</a>
                  <a href="/login">User Login</a>
                  <a href="/registertemp">Register</a>
                  <a href="/agent">Agent Login</a>
            </div>
      <div class="contact-form">
            <h2> User login</h2>
            <form action="/logindata" method="POST">
                  Username<input placeholder="Enter username" type="text"</p>
name="username">
                  Password<input placeholder="Enter Password" type="password"</p>
name="password">
                  <span class="alert {{indicator}}">{{b}}</span>
                  <input type="submit" value="Sign in">
            </form>
            <div class="links">
            Not yet registered..?? <a href="/project/templates/register.html"> Click here</a>
            </div>
      </div>
 </header>
</body>
</html>
```

#### **Userdashboard.html:**

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

```
<head>
  <meta charset="utf-8">
  <title>Dashboard</title>
  <link rel="stylesheet" href="../static/userd.css">
  link rel="shortcut icon" type="image/jpg" href="../static/img3.jpg">
  k rel="stylesheet" href="https://cdnjs.cloudflare.com/ajax/libs/font-
awesome/5.15.3/css/all.min.css"/>
 </head>
  <body>
    <input type="checkbox" id="check">
    <label for="check">
    <i class="fas fa-bars" id="btn"></i>
    <i class="fas fa-times" id="cancel"></i>
    <div class="top"></div>
    </label>
    <div class="sidebar">
       <header>Dashboard</header>
      \langle ul \rangle
         <a href="/home"><i class="fas fa-qrcode"></i>Dashboard</a>
         <a href="/profile"><i class="fas fa-link"></i>Profile</a>
         <a href="/addcomplaint"><i class="fas fa-stream"></i>Lodge complaint</a>
         <a href="/comphistory"><i class="fas fa-calendar-week"></i>Complaint
history</a>
         <a href="/logout "><i></i>Logout</a>
      </div>
    <section>
     <div class="dash">
      <h1>Dear {{ name }}</h1>
      welcome to our portal...
    </div>
    </section>
  </body>
```

</html>

### **Userprofile.html:**

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <title>Profile Card </title>
  <link rel="stylesheet" href="/static/profilestyle.css">
  k rel="stylesheet" href="https://cdnjs.cloudflare.com/ajax/libs/font-
awesome/5.15.3/css/all.min.css"/>
</head>
<body>
  <link rel="stylesheet" href="/static/userd.css">
  <div class="navigation">
    <div class="toggle"></div>
     \langle ul \rangle
        <a href="/home">
         <span class="icon"><ion-icon name="home-outline"></ion-icon></span>
          <span class="title">Dashboard</span>
         </a>
        <a href="/profile">
         <span class="icon"><ion-icon name="person-circle-outline"></ion-icon></span>
          <span class="title">Profile</span>
        </a>
        <a href="/addcomplaint">
         <span class="icon"><ion-icon name="document-text-outline"></ion-icon></span>
          <span class="title">Lodge Complaint
         </a>
        <a href="/comphistory">
         <span class="icon"><ion-icon name="chatbubbles-outline"></ion-icon></span>
         <span class="title">Complaint History</span>
         </a>
```

```
<a href="/logout">
         <span class="icon"><ion-icon name="log-out-outline"></ion-icon></span>
          <span class="title">logout</span>
        </a>
     </div>
   <script type="module"</pre>
src="https://unpkg.com/ionicons@5.5.2/dist/ionicons/ionicons.esm.js"></script>
    <script nomodule src="https://unpkg.com/ionicons@5.5.2/dist/ionicons/ionicons.js"></script>
    <script>
     let navigation = document.querySelector('.navigation');
     let toggle = document.querySelector('.toggle');
     toggle.onclick = function(){
      navigation.classList.toggle('active')
    </script>
  <div class="cls">
    <h1>PROFILE</h1>
  </div>
  <div class="vj">
   <img src="/static/img8.png" alt="">
  </div>
 <div class="wrapper">
  <div class="buttons"><br>
    Name :<div class="name">{{ fullname }}</div><br>
    Username :<div class="name">{{ username }}</div><br>
    Email : <div class="name">{{ email }}</div><br>
    State :<div class="name">{{ address }}</div><br>
    <div class="links">
     <a href="/editprofile">Edit profile</a>
    </div>
  </div>
 </div>
 </div>
```

```
</body>
```

#### **Userlodgecomplaints.html:**

```
<!DOCTYPE html>
<html>
<head>
       <meta charset="utf-8">
       <title>lodgecomplaint</title>
       <meta name="viewport" content="width=device-width, initial-scale=1, maximum-scale=1">
       k rel="stylesheet" type="text/css" href="css/montserrat-font.css">
       link rel="stylesheet" type="text/css" href="fonts/material-design-iconic-font/css/material-
design-iconic-font.min.css">
  <link rel="stylesheet" href="/static/complaint.css"/>
</head>
<body class="form-v10">
  <link rel="stylesheet" href="/static/userd.css">
  <div class="navigation">
    <div class="toggle"></div>
     ul>
        <a href="/home">
         <span class="icon"><ion-icon name="home-outline"></ion-icon></span>
          <span class="title">Dashboard</span>
         </a>
        <a href="/profile">
         <span class="icon"><ion-icon name="person-circle-outline"></ion-icon></span>
          <span class="title">Profile</span>
        </a>
        <a href="/addcomplaint">
         <span class="icon"><ion-icon name="document-text-outline"></ion-icon></span>
          <span class="title">Lodge Complaint
         </a>
```

```
<a href="/comphistory">
         <span class="icon"><ion-icon name="chatbubbles-outline"></ion-icon></span>
          <span class="title">Complaint History</span>
         </a>
        <a href="/logout">
         <span class="icon"><ion-icon name="log-out-outline"></ion-icon></span>
          <span class="title">logout</span>
        </a>
     </div>
   <script
                                                                                     type="module"
src="https://unpkg.com/ionicons@5.5.2/dist/ionicons/ionicons.esm.js"></script>
    <script nomodule src="https://unpkg.com/ionicons@5.5.2/dist/ionicons/ionicons.js"></script>
    <script>
     let navigation = document.querySelector('.navigation');
     let toggle = document.querySelector('.toggle');
     toggle.onclick = function(){
       navigation.classList.toggle('active')
     }
    </script>
     <div class="vj2">
     <img src="/static/img1.png" alt="">
    </div>
    <div class="vj1">
     <img src="/static/img2.png" alt="">
    </div>
       <div class="page-content">
                       <form class="form-detail" action="#" method="post" id="myform">
                              <div class="form-left">
                                      <h2 style="color: black;">Lodge Complaint</h2>
                                      <div class="form-row-3">
              <div class="form-row name">
               <select name="selectcategory" required id="selectcategory">
```

```
<option class="option" value="selectcategory">Select Category</option>
                 <option class="option" value="E-commerce">E-commerce</option>
                  <option class="option" value="General">General</option>
                  <option class="option" value="Other">Other</option>
               </select>
             </div>
             <div class="form-row name">
               <input type="date" name="dt" id="dt">
             </div>
               <div class="form-row name">
                 <input type="text" name="phone" class="phone" id="phone" placeholder="Phone
Number" required>
               </div>
               <div class="form-row name">
                  <select name="state" id="state">
                    <option value="state">District</option>
                    <option value="Tirunelveli">Tirunelveli</option>
                    <option value="Chennai">Chennai
                    <option value="Madurai">Madurai
                    <option value="Coimbatore">Coimbatore</option>
                    <option value="Other">Other</option>
                 </select>
               </div>
               <div class="form-row name">
                         type="text"
                                       name="email" id="email"
                                                                    class="input-text"
                  <input
                                                                                       required
pattern="[^@]+@[^@]+.[a-zA-Z]{2,6}" placeholder="email">
               </div>
```

```
</div>
                               <div class="form-right">
                                      <h2>Complaint Details</h2>
                                      <div class="wrapper">
                                              <textarea rows="15" cols="60" placeholder="Enter the
complaint details" name="complaint" required id="complaint"></textarea>
                                      </div>
      <span class="text"style="color: black;font-weight:bold;">{{a}}</span>
                                      <div class="form-row-last">
              <button class="button-85" role="button">Register Complaint/button>
                                      </div>
                               </div>
                       </form>
               </div>
       </div>
</body>
</html>
usercomphist.html:
<!DOCTYPE html>
<html lang="en" dir="ltr">
 <head>
  <meta charset="utf-8">
  <title>complaint history</title>
  <link rel="stylesheet" href="/static/userd.css">
  <link rel="stylesheet" href="/static/admind.css">
  link
                       rel="stylesheet"
                                                      href="https://cdnjs.cloudflare.com/ajax/libs/font-
awesome/5.15.3/css/all.min.css"/>
 </head>
```

```
<body>
 <div class="navigation">
  <div class="toggle"></div>
   <u1>
     <a href="/home">
      <span class="icon"><ion-icon name="home-outline"></ion-icon></span>
       <span class="title">Dashboard</span>
      </a>
     <a href="/profile">
      <span class="icon"><ion-icon name="person-circle-outline"></ion-icon></span>
       <span class="title">Profile</span>
     </a>
     <a href="/addcomplaint">
      <span class="icon"><ion-icon name="document-text-outline"></ion-icon></span>
       <span class="title">Lodge Complaint</span>
      </a>
     <a href="/comphistory">
      <span class="icon"><ion-icon name="chatbubbles-outline"></ion-icon></span>
       <span class="title">Complaint History</span>
      </a>
     <a href="/logout">
      <span class="icon"><ion-icon name="log-out-outline"></ion-icon></span>
       <span class="title">logout</span>
     </a>
   </div>
</header>
 <script type="module" src="https://unpkg.com/ionicons@5.5.2/dist/ionicons/ionicons.esm.js"></script>
 <script nomodule src="https://unpkg.com/ionicons@5.5.2/dist/ionicons/ionicons.js"></script>
 <script>
  let navigation = document.querySelector('.navigation');
```

```
let toggle = document.querySelector('.toggle');
toggle.onclick = function(){
 navigation.classList.toggle('active')
}
</script>
<div class="wrapper">
  <thead>
       ComplaintNumber
       Category
       Date
       Phone Number
       State
       Email
       Complaint Type
       Status
      </thead>
      {% for row in complaints: %}
     {{ row.id }}
       {{ row.selectcategory }}
       {\{ row.dt \} }
       {{ row.phone }}
       { f row.state } }
       {{ row.email }}
       {{ row.complaint }}
       {{ row.status}}
     {% endfor %}
```

```
</div>
</body>
</html>
admin.html:
<!DOCTYPE html>
<html lang="en">
<head>
     <meta charset="UTF-8">
     <title>Admin</title>
     link
href="https://fonts.googleapis.com/css2?family=Poppins:wght@400;600;700;900
&display=swap" rel="stylesheet">
     <link href="../static/admin.css" rel="stylesheet">
     <link rel="shortcut icon" type="image/jpg" href="../static/img3.jpg">
</head>
<body>
     <div class="contact-form">
                                    alt=""
                                                             class="avatar"
           <img
src="https://i.postimg.cc/zDyt7KCv/a1.jpg">
           <h2>Admin login</h2>
           <form action="/adminlog" method="POST">
                Email<input placeholder="Enter Email" type="email"
name="email" required>
                                           placeholder="Enter Password"
                Password<input
type="password" name="password"required>
                <input type="checkbox">Remember Me
```

```
<input type="submit" value="Sign in">
                 {{a}}
           </form>
     </div>
</body>
</html>
admin dashboard.html:
<!DOCTYPE html>
<html lang="en" dir="ltr">
 <head>
  <meta charset="utf-8">
  <title>admin dashboard</title>
  <link rel="stylesheet" href="../static/admind.css">
            rel="stylesheet" href="https://cdnjs.cloudflare.com/ajax/libs/font-
  link
awesome/5.15.3/css/all.min.css"/>
 </head>
  <body>
    <input type="checkbox" id="check">
    <label for="check">
    <i class="fas fa-bars" id="btn"></i>
    <i class="fas fa-times" id="cancel"></i>
    </label>
    <div class="sidebar">
       <header>Dashboard</header>
       \langle ul \rangle
         <a href="#"><i class="fas fa-qrcode"></i>Dashboard</a>
```

```
<a href="/agent"><i class="fas fa-link"></i>Agent Creation</a>
          <a
                       href="/adcomplainthist"><i
                                                          class="fas
                                                                           fa-calendar-
week"></i>Complaint history</a>
          <a href="/loggout"><i></i>Logout</a>
        </div>
  </body>
</html>
admincomphist.html:
<!DOCTYPE html>
<html lang="en" dir="ltr">
 <head>
  <meta charset="utf-8">
  <title>admin complaint history</title>
  <link rel="stylesheet" href="/static/admind.css">
  <link rel="stylesheet" href="/static/userd.css">
                    rel="stylesheet"
  link
                                               href="https://cdnjs.cloudflare.com/ajax/libs/font-
awesome/5.15.3/css/all.min.css"/>
 </head>
  <body>
   <div class="navigation">
    <div class="toggle"></div>
     <ul>
       <a href="/adminpage">
        <span class="icon"><ion-icon name="home-outline"></ion-icon></span>
         <span class="title">Dashboard</span>
        </a>
        <a href="/agentcreate">
         <span class="icon"><ion-icon name="person-circle-outline"></ion-icon></span>
          <span class="title">Agent Creation</span>
        </a>
```

```
<a href="/adcomplainthist">
         <span class="icon"><ion-icon name="chatbubbles-outline"></ion-icon></span>
          <span class="title">Complaint Details</span>
         </a>
        <a href="/loggout">
         <span class="icon"><ion-icon name="log-out-outline"></ion-icon></span>
          <span class="title">logout</span>
        </a>
      </div>
   <script
                                                                                       type="module"
src="https://unpkg.com/ionicons@5.5.2/dist/ionicons/ionicons.esm.js"></script>
    <script nomodule src="https://unpkg.com/ionicons@5.5.2/dist/ionicons/ionicons.js"></script>
    <script>
     let navigation = document.querySelector('.navigation');
     let toggle = document.querySelector('.toggle');
     toggle.onclick = function(){
       navigation.classList.toggle('active')
      }
    </script>
    <div class="wrapper">
    <div class="history">
     <span class="tab" style="position: relative;</pre>
     top: -250px;
     left: -400px;
     padding: 10px; width: 940px;
     font-weight: bold;">{{a}}</span>
      <div class="tab" style="position: relative;</pre>
     border: 1px solid black;
     top: -250px;
     left: -400px;
     padding: 10px; width: 940px;">
```

```
text-align: left;">{{ row.0 }}</span>
      <span style="margin-left: 10px;</pre>
     text-align: left;">{{ row.2 }}</span>
      <span style="margin-left: 20px;</pre>
      text-align: left;">{{ row.3 }}</span>
      <span style="margin-left: 20px;</pre>
      text-align: left;">{{ row.4 }}</span>
      <span style="margin-left: 20px;</pre>
      text-align: left;">{{ row.5 }}</span>
      <span style="margin-left: 30px;</pre>
      text-align: left;">{{ row.6 }}</span>
      <span style="margin-left: 20px;</pre>
      text-align: left;">{{ row.7 }}</span>
      <span style="margin-left: 20px;</pre>
      text-align: left;">{{ row.8 }}</span>
    </div>
</div>
     <thead>
         ComplaintNumber
         Category
         Date
         Phone Number
         State
         Email
         Complaint Type
         Status
     </thead>
     <!--<tr>
         {\{ row.0 \}}
         {\{ row.1 \}}
         {\{ row.2 \}}
```

<span style="margin-left: 10px;</pre>

```
{{ row.3 }}
           {\{ row.4 \}}
           {\{ row.5 \}}
           {\{ row.7 \}}
           <a href="/solved/{{ row.0 }} "><span style="margin-left: 20px;
             text-align: left;">{{ row.8 }}</span></a>
      -->
      </div>
  </body>
</html>
adminagent.html:
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <title>agent creation </title>
  <link rel="stylesheet" href="/static/agentcreation.css">
  <link rel="stylesheet" href="/static/userd.css">
  link
                     rel="stylesheet"
                                                  href="https://cdnjs.cloudflare.com/ajax/libs/font-
awesome/5.15.3/css/all.min.css"/>
</head>
<body>
  <div class="navigation">
    <div class="toggle"></div>
    <ul>
     <a href="/adminpage">
      <span class="icon"><ion-icon name="home-outline"></ion-icon></span>
       <span class="title">Dashboard</span>
      </a>
     <a href="/agentcreate">
      <span class="icon"><ion-icon name="person-circle-outline"></ion-icon></span>
       <span class="title">Agent Creation</span>
```

```
</a>
     <a href="/adcomplainthist">
      <span class="icon"><ion-icon name="chatbubbles-outline"></ion-icon></span>
       <span class="title">Complaint History</span>
      </a>
     <a href="/loggout">
      <span class="icon"><ion-icon name="log-out-outline"></ion-icon></span>
       <span class="title">logout</span>
     </a>
   </div>
                                                                                type="module"
   <script
src="https://unpkg.com/ionicons@5.5.2/dist/ionicons/ionicons.esm.js"></script>
    <script nomodule src="https://unpkg.com/ionicons@5.5.2/dist/ionicons/ionicons.js"></script>
    <script>
     let navigation = document.querySelector('.navigation');
     let toggle = document.querySelector('.toggle');
     toggle.onclick = function(){
      navigation.classList.toggle('active')
     }
    </script>
    <div class="vj">
     <img src="/static/img8.png" alt="">
    </div>
 <div class="wrapper">
  <div class="form">
    <h2> Agent Creation</h2>
    <form action="/agentdata" method="POST">
      Name
      <div class="name">
      <input placeholder="Enter your name" type="text" name="username" required>
      </div>
      Password
```

#### admin.html:

```
link
href="https://fonts.googleapis.com/css2?family=Poppins:wght@400;600;700;900&display=swa
p" rel="stylesheet">
       <link href="../static/agent.css" rel="stylesheet">
</head>
<body>
       <div class="form">
              <h2> Agent login</h2>
              <form action="/agentdata" method="POST">
                     Username<input placeholder="Enter your name" type="text"</p>
name='username'>
                     Password<input placeholder="Enter password" type="password"</p>
name='password'>
                     <input type="submit" value="Sign in">
              </form>
    <div class="links">
      click here for dashboard <a href="/adminpage"> Click here</a>
    </div>
              {{a}}
       </div>
</body>
</html>
app.py:
from flask import Flask, render_template, request, redirect, url_for, session
import ibm_db
import re
from flask_mail import Mail, Message
app = Flask(__name___)
mail = Mail(app)
```

```
app.config['MAIL_SERVER']='smtp.gmail.com'
app.config['MAIL_PORT'] = 465
app.config['MAIL_USERNAME'] = 'customercare.in2022@gmail.com'
app.config['MAIL_PASSWORD'] = 'dutxqvejaxonmmew'
app.config['MAIL_USE_TLS'] = False
app.config['MAIL_USE_SSL'] = True
mail = Mail(app)
app.secret_key='a'
                                                              ibm_db.connect("DATABASE=bludb;HOSTNAME=54a2f15b-5c0f-46df-8954-
conn
7e38e612c2bd.c1ogj3sd0tgtu0lqde00.databases.appdomain.cloud; PORT=32733; Security=SSL; SSLServenger (SSLS) and the substitution of the substitut
rCertificate=DigiCertGlobalRootCA.crt;UID=fqt70379;PWD=KdUUJ3RnMlMqAimg;",",")
@app.route('/')
def home():
     return render_template('/home.html')
@app.route('/registertemp',methods=["POST","GET"])
def registertemp():
     return render_template("register.html")
@app.route('/uploaddata',methods =['GET','POST'])
def register():
     msg = "
     if request.method == 'POST':
            firstname = request.form['firstname']
            lastname = request.form['lastname']
            username = request.form['username']
            email = request.form['email']
            password = request.form['password']
            address = request.form['address']
            stmt = ibm_db.prepare(conn, 'SELECT * FROM users WHERE username = ?')
            ibm_db.bind_param(stmt, 1, username)
```

```
ibm db.execute(stmt)
    account = ibm_db.fetch_assoc(stmt)
    if account:
       msg = 'Account already exists!'
    elif not re.match(r'[^@]+@[^@]+\.[^@]+', email):
       msg = 'Invalid email address!'
    elif not re.match(r'^[A-Za-z0-9_.-]*$', username):
       msg = 'name must contain only characters and numbers!'
    else:
       prep_stmt = ibm_db.prepare(conn, INSERT INTO users(firstname, lastname, username, email,
password, address) VALUES(?, ?, ?, ?, ?, ?)')
       ibm_db.bind_param(prep_stmt, 1, firstname)
       ibm_db.bind_param(prep_stmt, 2, lastname)
       ibm_db.bind_param(prep_stmt, 3, username)
       ibm_db.bind_param(prep_stmt, 4, email)
       ibm_db.bind_param(prep_stmt, 5, password)
       ibm_db.bind_param(prep_stmt, 6, address)
       ibm_db.execute(prep_stmt)
       msg = 'Dear % s You have successfully registered!'%(username)
       msg1 = Message('Hello', sender = 'customercare.in2022@gmail.com', recipients = [email])
       msg1.body = 'Hello'+ username +'",
              Account creation in customer care registry was successful.
              For raising Complaints, login with your username and password.
              Thank You)"
       mail.send(msg1)
    return render_template('register.html',a = msg,indicator="success")
  else:
    msg = 'Please fill the form!'
  return render_template('register.html',a = msg, indicator='failure')
@app.route('/login',methods=["POST","GET"])
def login():
  return render_template("login.html")
```

```
@app.route('/logindata',methods=["POST","GET"])
def logindata():
  global userid
  msg = "
  if request.method == 'POST' and 'username' in request.form and 'password' in request.form:
    username = request.form['username']
    password = request.form['password']
    stmt = ibm_db.prepare(conn, 'SELECT * FROM users WHERE username = ? AND password = ?')
    ibm_db.bind_param(stmt,1,username)
    ibm_db.bind_param(stmt,2,password)
    ibm_db.execute(stmt)
    account = ibm_db.fetch_tuple(stmt)
    if account:
       session['id'] = account[0]
       userid = account[0]
       session['username'] = account[1]
       return redirect(url_for('dashboard'))
    else:
       msg = 'Incorrect username / password !'
       return render_template('login.html', b = msg, indicator="failure")
@app.route('/home')
def dashboard():
  if 'id' in session:
    uid = session['id']
    stmt = ibm_db.prepare(conn, 'SELECT * FROM users WHERE id = ?')
    ibm_db.bind_param(stmt, 1, uid)
    ibm_db.execute(stmt)
    ibm_db.fetch_tuple(stmt)
    username = session['username']
    return render_template('user dashboard.html', name = username)
  return render_template('user dashboard.html')
@app.route('/profile',methods=["POST","GET"])
```

```
def profile():
  if 'id' in session:
    uid = session['id']
    stmt = ibm_db.prepare(conn, 'SELECT * FROM users WHERE id = ?')
    ibm_db.bind_param(stmt, 1, uid)
    ibm_db.execute(stmt)
    acc = ibm_db.fetch_tuple(stmt)
    return
render_template('userprofile.html',fullname=acc[1]+acc[2],username=acc[3],email=acc[4],address=acc[6]
  return render_template('userprofile.html')
@app.route('/edit')
def edit():
  return render_template('editprofile.html')
@app.route('/editprofile', methods=["POST","GET"])
def editprofile():
  if request.method == 'POST':
    msg = "
    if 'id' in session:
       uid = session['id']
       firstname = request.form['firstname']
       lastname = request.form['lastname']
       username = request.form['username']
       email = request.form['email']
       address = request.form['address']
       stmt = ibm_db.prepare(conn, "UPDATE users SET firstname = ?, lastname = ?, username = ?, email
= ?, address = ? WHERE id = ?")
       ibm_db.bind_param(stmt, 1, firstname)
       ibm_db.bind_param(stmt, 2, lastname)
       ibm_db.bind_param(stmt, 3, username)
       ibm_db.bind_param(stmt, 4, email)
       ibm_db.bind_param(stmt, 5, address)
```

```
ibm db.bind param(stmt, 6, uid)
       ibm_db.execute(stmt)
       msg = 'Profile Updated Successfully!'
       return render_template('editprofile.html',a = msg)
  return render template('editprofile.html')
@app.route('/addcomplaint',methods=["POST","GET"])
def addcomplaint():
  if request.method == "POST":
    if 'id' in session:
       msg = "
       uid=session['id']
       selectcategory = request.form['selectcategory']
       date = request.form['dt']
       phone = request.form['phone']
       state = request.form['state']
       email = request.form['email']
       complaint = request.form.get('complaint')
       stmt = ibm_db.prepare(conn,"SELECT * FROM users WHERE id = ?")
       ibm db.bind param(stmt, 1, uid)
       ibm_db.execute(stmt)
       acc = ibm_db.fetch_tuple(stmt)
       email = acc[4]
       prep stmt = ibm db.prepare(conn, INSERT INTO complaintdetails(uid, selectcategory, dt, phone,
state, email, complaint, status) VALUES (?, ?, ?, ?, ?, ?, ?, ?)')
       ibm_db.bind_param(prep_stmt, 1, uid)
       ibm_db.bind_param(prep_stmt, 2, selectcategory)
       ibm_db.bind_param(prep_stmt, 3, date)
       ibm_db.bind_param(prep_stmt, 4, phone)
       ibm_db.bind_param(prep_stmt, 5, state)
       ibm_db.bind_param(prep_stmt, 6, email)
       ibm_db.bind_param(prep_stmt, 7, complaint)
       ibm_db.bind_param(prep_stmt, 8, 'pending')
```

```
ibm_db.execute(prep_stmt)
       msg = 'You have successfully registered your complaint'
       TEXT1 = Message('Hello', sender = 'customercare.in2022@gmail.com', recipients = [email])
       TEXT1.body = """ Dear """+acc[1]+" "+acc[2]+"""
              Your complaint has been succesfully registered...!!
              One of our agent is assigned, will surely resolve your complaint as soon as possible
              Please check the complaint details in dashboard for status of complaint."""
       mail.send(TEXT1)
       se = ibm_db.exec_immediate(conn, 'SELECT * FROM agentinfo ORDER BY RAND() LIMIT 1')
       agmail = ibm_db.fetch_tuple(se)
       agentemail = agmail[1]
       TEXT = Message('Hello', sender = 'customercare.in2022@gmail.com', recipients = [agentemail])
      TEXT.body = """New Complaint from """+acc[1]+" "+acc[2]+"""
           Complaint Description:
           """+complaint+""""
       mail.send(TEXT)
       return render_template('userlodgecomp.html',a = msg)
  return render_template('userlodgecomp.html')
@app.route('/view',methods=["POST","GET"])
def view():
  if 'id' in session:
    return render_template('usercomphist.html')
@app.route('/comphistory',methods=['POST','GET'])
def compview():
  if 'id' in session:
    uid=session['id']
    stmt = ibm_db.prepare(conn, 'SELECT * FROM users WHERE id = ? ')
    ibm_db.bind_param(stmt, 1, uid)
    ibm db.execute(stmt)
```

```
stmt1 = ibm_db.prepare(conn, 'SELECT id, selectcategory, dt, phone, state, email, complaint, status
FROM complaintdetails WHERE uid = ?')
    ibm_db.bind_param(stmt1, 1, uid)
    ibm_db.execute(stmt1)
    comp = ibm_db.fetch_assoc(stmt1)
    data = []
    while comp != False:
       data.append(comp)
       comp = ibm_db.fetch_assoc(stmt1)
    return render_template('usercomphist.html', complaints = data)
  return render_template('usercomphist.html')
@app.route('/admin')
def admin():
  return render_template('admin.html')
@app.route('/adminpage')
def adminpage():
  return render_template('admin dashboard.html')
@app.route('/adminlog',methods=["POST","GET"])
def adminlog():
  msg = "
  email = request.form['email']
  password = request.form['password']
  stmt = ibm_db.prepare(conn, 'SELECT * FROM admininfo WHERE email = ? and password = ?')
  ibm_db.bind_param(stmt,1, email)
  ibm_db.bind_param(stmt,2, password)
  ibm_db.execute(stmt)
  logged = ibm_db.fetch_assoc(stmt)
  if(logged):
    msg = 'successfully loggedin'
    return render_template("admin dashboard.html",a=msg)
  else:
```

```
return render_template("admin.html",a="Incorrect email/password")
@app.route('/adcomplainthist',methods=['POST','GET'])
def adcomplainthist():
    stmt1 = ibm_db.prepare(conn, 'SELECT * FROM complaintdetails')
    ibm_db.execute(stmt1)
    comp = ibm_db.fetch_assoc(stmt1)
    data = []
    while comp != False:
       data.append(comp)
       comp = ibm_db.fetch_assoc(stmt1)
    return render_template('admincomphist.html', complaints = data)
@app.route('/agcomplainthist',methods=['POST','GET'])
def agcomplainthist():
    stmt1 = ibm_db.prepare(conn, 'SELECT * FROM complaintdetails')
    ibm_db.execute(stmt1)
    comp = ibm_db.fetch_assoc(stmt1)
    data = []
    while comp != False:
       data.append(comp)
       comp = ibm_db.fetch_assoc(stmt1)
    return render_template('admincomphist.html', complaints = data)
@app.route('/agentcreate',methods=["POST","GET"])
def agentcreate():
  return render_template('adminagent.html')
@app.route('/agentdata',methods=["POST","GET"])
def agentdata():
  msg = "
  username = request.form['username']
  password = request.form['password']
  stmt = ibm_db.prepare(conn, 'INSERT INTO agentinfo(username, password) VALUES (?, ?)')
```

```
ibm_db.bind_param(stmt, 1, username)
  ibm_db.bind_param(stmt, 2, password)
  ibm_db.execute(stmt)
  msg = 'Agent has been created successfully'
  return render_template('adminagent.html',a = msg)
@app.route('/agent',methods=["POST","GET"])
def agent():
  return render_template('agent.html')
@app.route('/agentlogin',methods=["POST","GET"])
def agentlogin():
  msg = "
  email = request.form['username']
  password = request.form['password']
  stmt = ibm_db.prepare(conn, 'SELECT * FROM agentinfo WHERE username = ? and password = ?')
  ibm_db.bind_param(stmt,1, email)
  ibm_db.bind_param(stmt,2, password)
  ibm_db.execute(stmt)
  logged = ibm_db.fetch_assoc(stmt)
  if(logged):
    msg = 'successfully loggedin'
    return render_template("agentdashboard.html",a=msg)
  else:
    return render_template("agent.html",a="Incorrect email/password")
@app.route('/agentpage')
def agentpage():
  return render_template('agentdashboard.html')
@app.route('/loggout')
def loggout():
  if 'id ' in session:
    session.pop('id',None)
```

```
session.pop('email',None)
    session.pop('password',None)
  return redirect(url_for('home'))
@app.route('/logout')
def logout():
  session.pop('loggedin', None)
  session.pop('id', None)
  session.pop('username', None)
  return redirect(url_for('login'))
@app.route('/solved/<no>')
def solved(no):
  i = no
  stmt = ibm_db.prepare(conn, "UPDATE complaintdetails SET status = ? WHERE id = ?")
  ibm_db.bind_param(stmt, 1, 'solved')
  ibm_db.bind_param(stmt, 2, i)
  ibm_db.execute(stmt)
  se = ibm_db.prepare(conn, 'SELECT * FROM complaintdetails where id = ?')
  ibm_db.bind_param(se, 1, i)
  ibm_db.execute(se)
  em = ibm_db.fetch_tuple(se)
  email = em[6]
  print(email)
  TEXT = Message('Hello', sender = 'customercare.in2022@gmail.com', recipients = [email])
  TEXT.body = """Your Complaint has been solved."""
  mail.send(TEXT)
  return render_template('solve.html', a ="Complaint Resolved")
if __name__ == '__main__':
  app.debug=True
  app.run(host='0.0.0.0',port=8080)
```

GitHub & Project Demo Link	
http://159.122.177.141:32498/	
https://github.com/IBM-EPBL/IBM-Project-30173-1660141368	
https://www.youtube.com/embed/JU6GyGkjqm0	