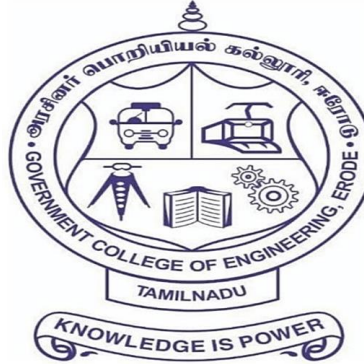


ERV Government College Of Engineering (Formally IRTT)

ERODE-638316



Bonifide certificate

Certificate that this project titled "ESTIMATE THE CROP YIELD USING DATA ANALYTICS" is the bonafide work of

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Customer Care Registry

1. INTRODUCTION

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source Code,GitHub &Project Demo Link

INTRODUCTION OF CUSTOMER CARE REGISTRTRY

Companies today are modernizing customer care,using advanced AI to ensure a positive customer experience strating from the first interaction and through the buyer's journey.customer care is more than just providing great service.It's a proactive approach to providing information,tools,and each point they interact with a brand.

1.1 PROJECT Overview

This Application has been developed to help the customer in processing their complaints. The customers can raise the ticket with a detailed description of the issue. An Agent will be assigned to the Customer to solve the problem. Whenever the agent is assigned to a customer they will be notified with an email alert. Customers can view the status of the ticket till the service is provided.

Admin : The main role and responsibility of the admin are to take care of the whole process. Starting from Admin login followed by the agent creation and assigning the customer's complaints. Finally, He will be able to track the work assigned to the agent and a notification will be sent to the customer.

User: They can register for an account. After the login, they can create the complaint with a description of the problem they are facing. Each user will be assigned with an agent. They can view the status of their complaint.

1.2 purpose

Customer care is more than just providing great customer service. It's a proactive approach to providing information, tools, and services to customers at each point they interact with a brand.

Companies benefit from investing in customer care for multiple reasons:
Customers get the insights they need to make an informed purchase.

Customer satisfaction can increase and customer loyalty can improve.
Customer service agents spend less time on routine tasks and answering commonly asked questions, enabling agents to do more meaningful tasks.

Using AI to optimize customer care can increase the bottom line and provide a positive return on investment.

Customer service is reactive. Here, the focus is on helping customers solve problems or answer questions before purchase, either in a self-serve fashion or via the customer support team

2. LITERATURE SURVEY

2.1 Existing problem

This software has been developed for a cellular company Concerning all the details given by company. By this software anyone can handle customer complaint details without any difficulty. To maintain customer complaint details and to generate the complaint report to the clients they have to maintain the following information in various files:

1. In the first they record the client's personnel information, such as client code, client name, address, etc. this details are entered in this file when the new client comes into the organization.
2. Then second is used to record the product details of each individual product, this file, this file contain the detail like the product code and all other details concerning about products.
3. They records the complaints of the customers, which we received from the customers. Each complaint is assigned a separate a CCR No. I.e. Customer Complaint Number. This file records the detailed description of the complaint.

2.2 References

Theory and practice of customer related improvements" Daniel Gyllenham maretal " 2022, 92%.It is proposed that future research should address howand when to involve the customer in improvements, and by this aid practitioners. Here, researchers can apply an action research approach to facilitate the enrichment acknowledgement, as those studies utilising action research .

Improving customer Service in Healthcare"Muhamma d Ansharietal" 2021 89%.The use of ICT in healthcare organizations has grown in the same pattern it is the growing within the larger industry landscape.

The use of web technology, database management systems and network infrastructure are part of ICT initiative that willinfluence of healthcare practice and administration.

Customer Experience modelling from customer experience to services they use design "Jorge Teixeira,Lia Patri cioetal" 2019 90% This multimedia service provided a rich foundation for understanding the complexity of the customer experience and the systematic nature of CEM. New applications to other service contexts would enable further developmentsand refinements of the approach.

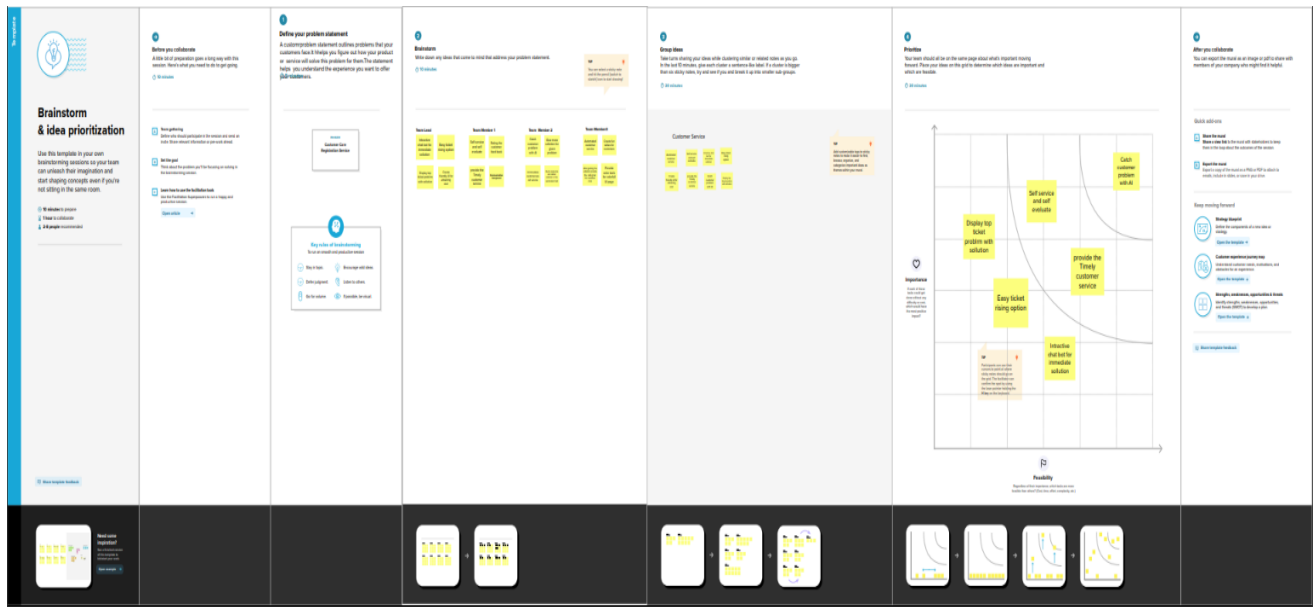
2.3 PROBLEM STATEMENT

Customer care is a way of dealing with customers when they interact with your brand, products, or services to keep them happy and satisfied. Customer care goes beyond customer service and support because it focuses on building emotional connections between brands and customers.

This Application has been developed to help the customer in processing their complaints. The customers can raise the ticket with a detailed description of the issue. An Agent will be assigned to the Customer to solve the problem. Whenever the agent is assigned to the customer, they will be notified with an email alert. Customers can view the status of the ticket till the service is provided.

The main use of this project is to help the customer in processing their complaints. The customers can raise the ticket of their issues and the problem will be solved by the organization.

3.2 IDEATION AND BRAINSTROM

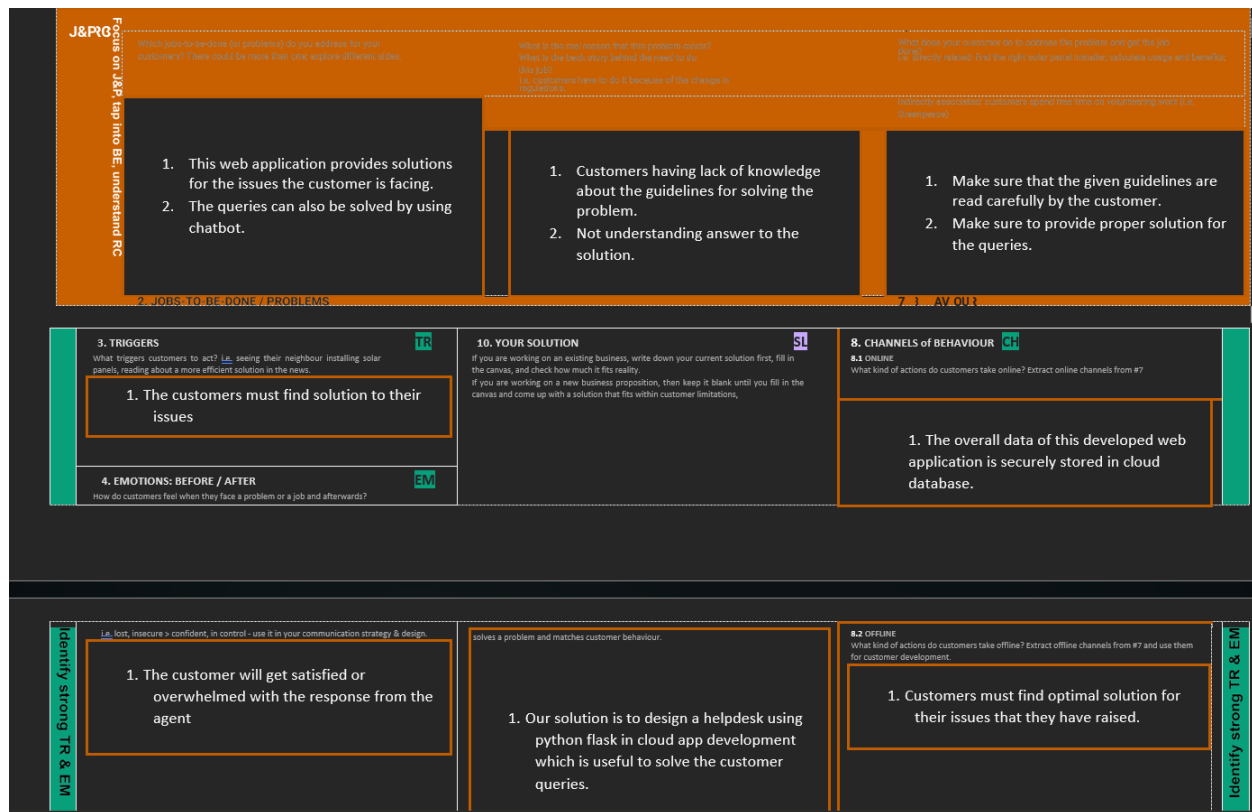


3.3 PROPOSED SOLUTION

S.No.	Parameter	Description
1.	Problem Statement (Problem to be solved)	<p>Problem phase describes that the customer care is more than just providing great customer service. It's a proactive approach to providing information, tools, and services to customers at each point they interact with a brand. For organizations, and for product and design teams, there can be a number of reasons why a product could fail. But not taking the time to consider a customer's conditions and their current situation could potentially harm your product's future. By working with a problem statement you can make sure you are defining a customer's experience and attempting to transform your product for the better. So the problem statement mainly defines to solve customer issues using Cloud Application Development.</p>

2.	Idea / Solution description	Solution phase describes the web application that has been developed to help the customer in processing their complaints. The customers can raise the ticket with a detailed description of the issue. An Agent will be assigned to the Customer to solve the problem. Whenever the agent is assigned to a customer they will be notified with an email alert. Customers can view the status of the ticket till the service is provided.
3.	Novelty / Uniqueness	Customer care registry provides instant reply and the assigned work can be tracked at any time and provides tutorial for website.
4.	Social Impact / Customer Satisfaction	Customer care registry provides direct communication between admin and user and provides variety of services.
5.	Business Model (Revenue Model)	Customer care registry can be linked with industrial organizations to provide customer care support.
6.	Scalability of the Solution	Customer care registry provides an environment which has both time and cost efficient.

3.4 Proposed solution Fit



4 REQUIREMENT ANALYSIS

4.1 Functional Requirements:

Following are the functional requirements of the proposed solution.

FR No	Functional Requirement (Epic)	Sub Requirement (Story/ Sub-Task)

1	User Registration	Registration through Form Registration through Gmail Registration through Google
2	User Confirmation	Confirmation via Email Confirmation via OTP
3	User Login	Login via Google Login with Email id and Password
4	Admin Login	Login via Google Login with Email id and Password
5	Query Form	Description of the issues Contact information
6	E-mail	Login alertness
7	Feedback	Customer feedback

4.2Non-functional Requirements:

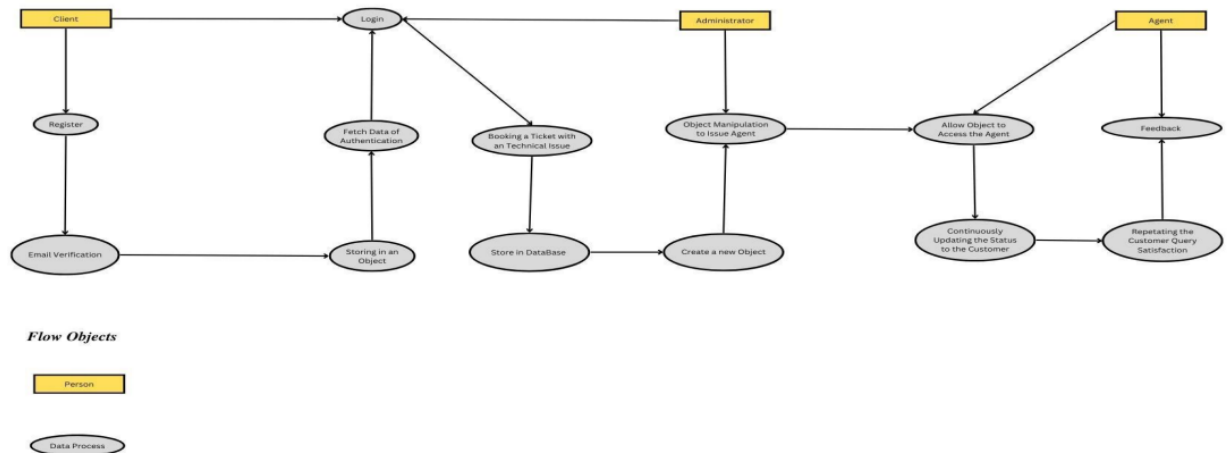
Following are the non-functional requirements of the proposed solution.

FR No	Non-Functional Requirement	Description
1	Usability	To provide the solution to the problem
2	Security	Track of login authentication
3	Reliability	Tracking of decade status through email

4	Performance	Effective development of web application
5	Availability	24/7 service
6	Scalability	Agents scalability as per the number of customers

5. Project Design

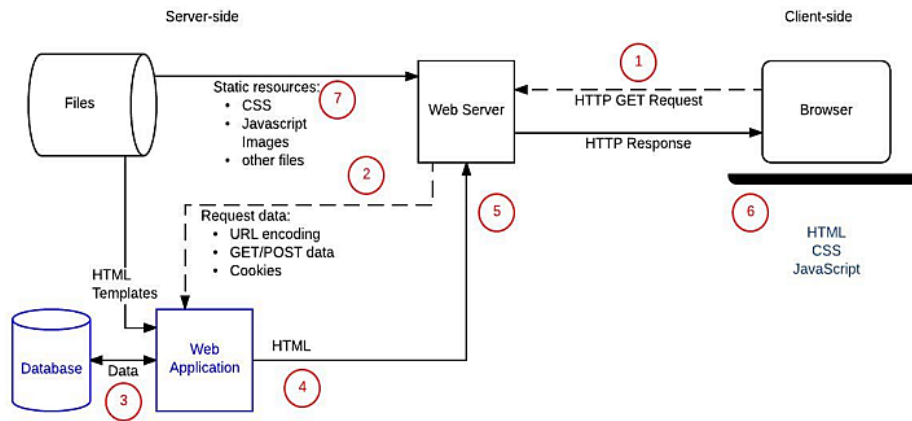
5.1 Data Flow Diagram

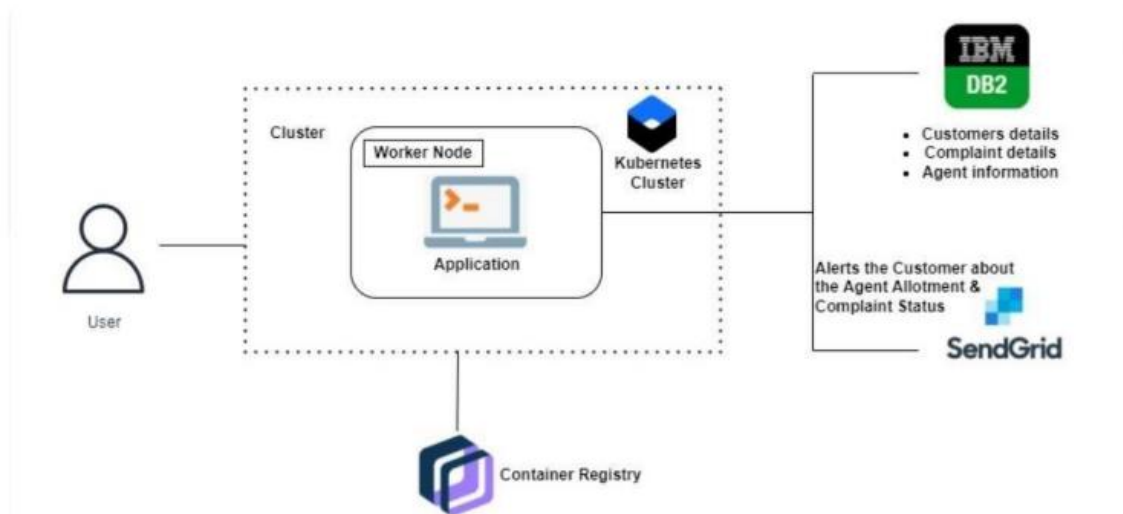


5.1 Solution and Technical Architecture

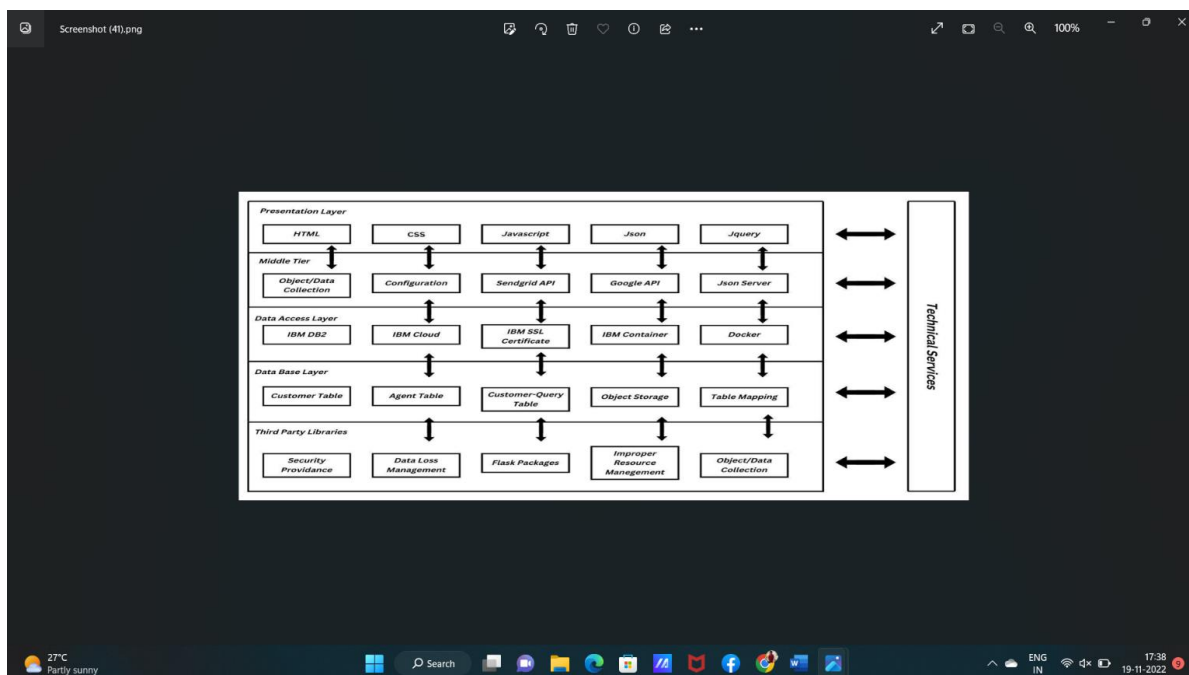
Solution architecture is a complex process – with many sub-processes – that bridges the gap between business problems and technology solutions. Its goals are to:

- Find the best tech solution to solve existing business problems.
- Describe the structure, characteristics, behavior, and other aspects of the software to project stakeholders.
- Define features, development phases, and solution requirements.
- Provide specifications according to which the solution is defined, managed, and delivered.





Technical Architecture



5.3 User stories

User Story / Task
As a User, I will register for the application by entering my email, password, and confirming my password.
As a User, I will Validate the Customer Credentials once after the Email Verification.
As a User, I will issue the Customer with Login Id and Password through Object Creation from the Customer Credentials.
As a User, I will Login into the Portal using Login Credentials Provided.
As a User, I will book for a ticket from available sections along the Application and Submit the Ticket to the Portal
As a User, I will issue with a Suitable Agent to the Customer and provide a Bot Connectivity with the Agent.
As a User, I will connect the Bot to the Customer and provide with repeated Status of the Query to the Customer
As a User, I will satisfy all the queries to the Customer for all the repetitive responses from the Customers.
As a User, I will fill up the Feedback form provided to improve or service provided from the Application.
As a User, I will Log out of the Application when my Queries are over or else will begin again from the Beginning.

6 PROJECT PLANNING AND SCHEDULING

6.1 Sprint Planning and Estimation

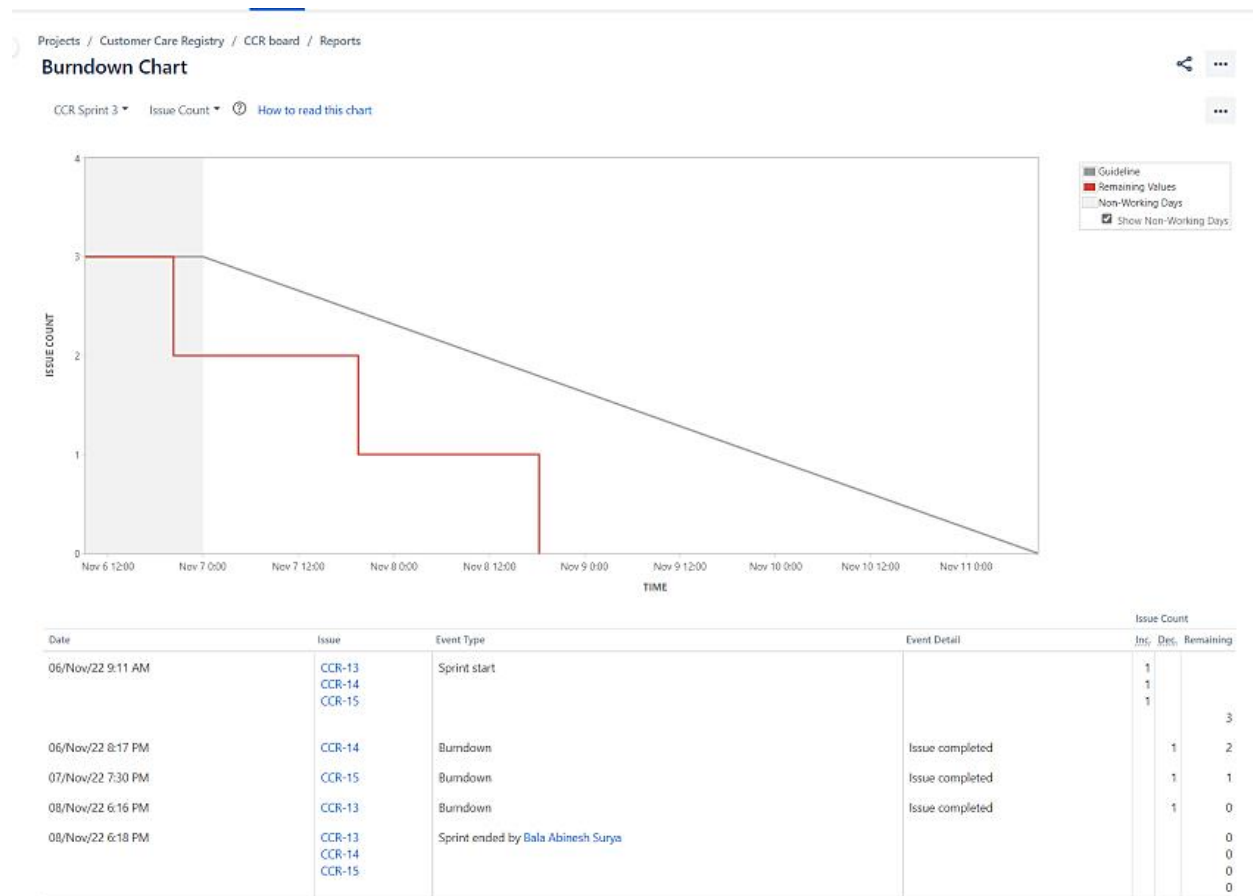
Develop a user interface for customer Agent and Admin. We have to create a login interface and register interface which has to be updated to cloud using **IBM DB2**

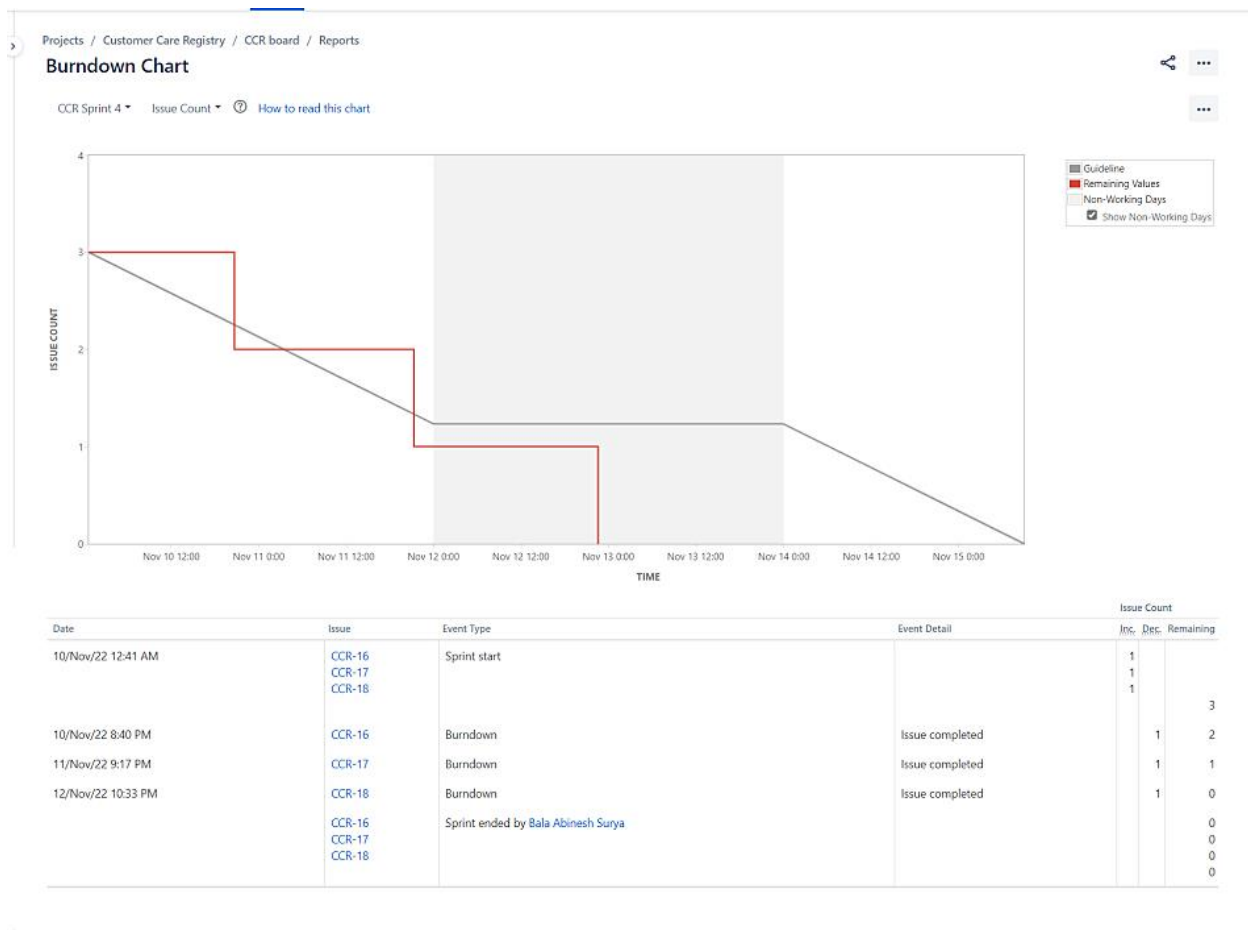
6.2 Sprint delivery schedule

Develop a user interface for Customer Agent and Admin. In excess we have to create a Dashboard page for individual profile which has to be redile accessible with multiple customers and agents then we have to create a ticket generation page for the cutomtomers to raise a complaints finally sengrid integration has to be done with the users.

And the the Admin dashboard the customer ticket available. After the admin create a agent for the ticket of customer complinet. And then the agent give the solution for the customer problems. The customer dashboard the solution is there fofr the problems

6.3 Reports from JIRA





7.CODING AND SOLUTIONING(Expian the feature added in the Project Along within Code)

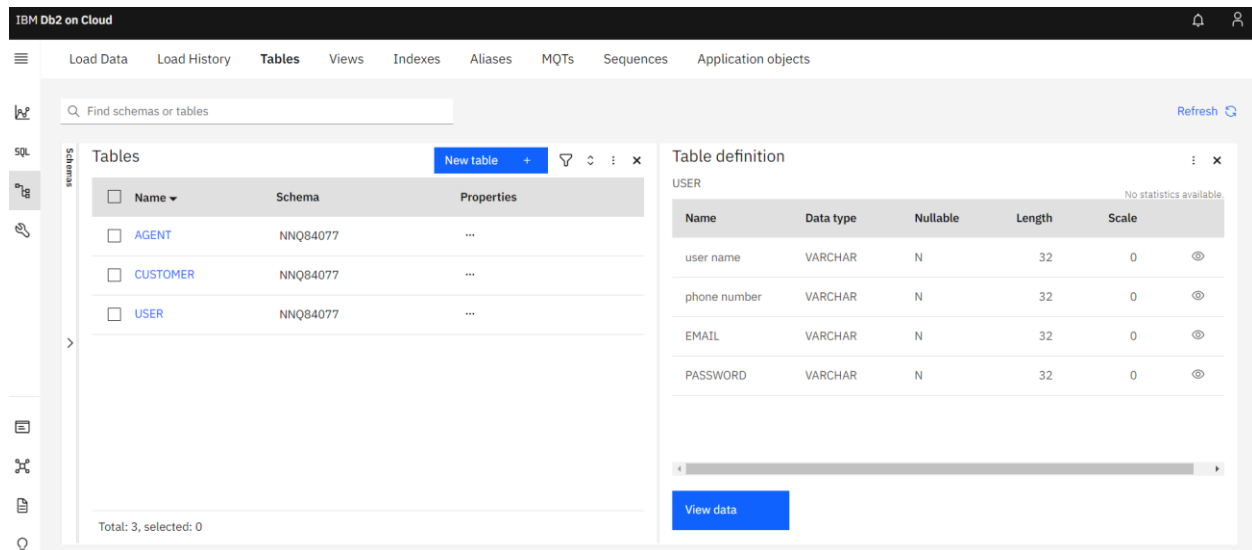
7.1 Feature 1

We have added the serndgrind integration with boosted performance which can be readily performed the replky mailles with the uers as one as possible.

7.2 Feature 2

We have aaded the tables which has been extracted from the IBM DB2 and the tables are forcely fitted with docker and it can Accessble with customers own time.

7.3 DATABASE SCHEMA (IF APPLICABLE)



8.TESTING

8.1 Test Cases

Test case ID	Test case Description	Test Data	Actual Results	Pass/Fail
1	Customer changing the existing password using invalid data	Password = 123456 New Password = 123456789 Confirm Password = 123456789	As expected	Pass
2	Customer changing the existing password using invalid data	Password = 123456 New Password = 123456789 Confirm Password = 123456789	As expected	Pass
3	Customer changing the existing password using invalid data	Password = 123456 New Password = 123456789 Confirm Password = 123456789	As expected	Pass

8.2 User Acceptance Testing

1.Purpose of Document

The purpose of this document is to briefly explain the test coverage and open issues of the **Customer Care Registry** project at the time of the release to User Acceptance Testing

2. Defect Analysis

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

Section	Total Cases	Not Tested	Fail	Pass
Client Application	72	0	0	72
Security	7	0	0	7
Exception Reporting	5	0	0	5
Final Report Output	4	0	0	4

Resolution	Severity 1	Severity 2	Severity 3	Severity 4	Subtotal
By Design	5	0	0	2	7
External	0	2	0	0	2
Fixed	12	11	35	45	103
Not Reproduced	0	5	0	0	5
Skipped	0	0	0	0	0
Totals	17	18	35	47	117

9 RESULTS

A Good customer Experience will create value for a customer.creating customer value better benifits versus price increase loyalty,markets share,price,reduces errors and increase efficiency.

9.1 PERFORMANCE METRICES

Operational metrics measure the performance of your customer service representatives. You'll find out exactly how many queries they receive, how many are resolved, and so on.

Organizational metrics probe into the customer's mind. What do they think about your product? How happy are they using it? While the customer service team does have a role in influencing these metrics, in essence, here's where your entire organization can pitch in. After all, no matter

which department they work in, superior customer experience should be an organization-wide goal.

10 Advantage and disadvantage

Be available to customers even when your team is offline

Schedule meetings with customer service or sales teams

- Automatically share links to relevant self- help articles, videos, etc.
 - Improve your chatbot function over time by adding more questions and answers
- Dia adv

Cons of Chatbot Customer Service:

Chatbots can offer only limited responses to customers

- Robotic responses can frustrate customers and force them to speak with an agent
- AI-powered chatbots can be expensive for your business
- Chatbot conversations often lack empathy and personalization

11 CONCLUSION

In conclusion, customer care, involves the use of basic ethics and any company whowants to have success and grow, needs to remember, that in order to do so, it must begin withestablishing a code of ethics in regards to how each employee is to handle the dealing withcustomers. Customers are at the heart of the company and its growth or decline

12 FUTURE SCOPE

Self-service, community-based service, and predictive support · 2. Personalization · 3. Human-to-human connection · 4. Rising

13.APPENDIX

```
1 {% extends 'admin dashboard.html' %}
2
3 {% block title %}
4     All tickets
5 {% endblock %}
6
```

```

7 {% block right %}
8     <div class="profile-div">
9         <h1>Unassigned Tickets</h1>
10
11         <div class="new-t-div">
12             {% if tickets_to_show %}
13                 <p>{{ msg }}</p>
14                 <table class="agents-table">
15                     <tr>
16                         <th class="agents-
17 table-heading">TICKET ID</th>
18                         <th class="agents-
19 table-heading">DATE</th>
20                         <th class="agents-
21 table-heading">CUSTOMER</th>
22                         <th class="agents-
23 table-heading">QUERY</th>
24                         <th class="agents-
25 table-heading">ASSIGN</th>
26                     </tr>
27                     {% for ticket in tickets
28 %}
29                         <tr>
30                             <td class="agents-
31 table-element">{{ ticket[0][0:5] }}</td>
32                             <td class="agents-
33 table-element">{{ ticket[1] }}</td>
34                             <td class="agents-
35 table-element">{{ ticket[2] }}</td>
36                             <td class="agents-
37 table-element">
38                                 <button
39 onclick="showTicket('{{ ticket[3] }}')"
40 class="view-query">View</button>
41                             </td>

```

```

30             <td class="agents-
table-element">
31                 <select
class="agent-select" id="for-customer"
onclick="agentSelected()" >
32                     <option
class="agent-option" selected
value="Choose">Choose</option>
33                     {% for
agent in agents %}
34                     <option class="agent-option" value="{{
agent[1] }}" {{ ticket[0] }}">{{ agent[0]
}}</option>
35                     {% endfor
%}
36                 </select>
37             </td>
38         </tr>
39     {% endfor %}
40 </table>
41 {% else %}
42     <p>{{ msg }}</p>
43 {% endif %}
44 </div>
45 </div>
46
47 <script>
48     function showTicket(ticket){
49         alert(ticket)
50     }
51
52     function agentSelected(){
53         var x =
document.getElementById('for-customer').value;
54

```

```

55         if (x !== "Choose"){
56             var decision = confirm("Are
you sure you want to assign this agent?")
57
58             if(decision){
59                 const temp = x.split(" ")
60
61                 url = '/admin/update/' +
temp[0] + '/' + temp[1]
62
63                 fetch(url, {
64
65                     }).then((_res) => {
66                         window.location.href =
"/admin/tickets"
67                     })
68                 }
69             }
70         }
71     </script>
72{% endblock %}

```

```

1  {% extends 'base.html' %}
2
3  {% block main %}
4      <div class="dashboard-div">
5          <nav>
6              <div class="dash-nav">
7                  <div>
8                      <div class="dash-img-text">
9                          
10                     <h3>Customer Care Registry</h3>
11                 </div>
12             </div>
13         </div>

```

```
14         <div class="online-div"
15         onclick="showSettings()">
16             
18         </div>
19     </div>
20
21     <div class="dash-body">
22         <div class="dash-left">
23             {% block left %}
24             {% endblock %}
25         </div>
26         <div class="dash-right">
27             {% block right %}
28             {% endblock %}
29         </div>
30     </div>
31
32     <div class="settings-menu" id="settings-menu"
33     style="visibility: hidden;">
34         <div>
35             <p>Want to Logout?</p>
36             <a href="{{ url_for('blue_print.logout') }}">
37                 <button class="logout-btn"
38                 type="button">Logout</button>
39             </a>
40         </div>
41
42     <script>
43         function showSettings(){
44             var settings = document.getElementById("settings-
45             menu");
46             settings.style.visibility =
47             settings.style.visibility == "hidden" ? "visible" : "hidden";
48         }
49     </script>
50     {% endblock %}
```

```

1 {% extends 'base.html' %}
2
3 {% block title %}
4     Login
5 {% endblock %}
6
7 {% block main %}
8     <section class="login-section">
9         <div class="login-div">
10             <div class="login-header">
11                 
14                 <h2>Sign in</h2>
15                 <p>Use your Registry Account</p>
16             </div>
17             <div class="login-remind">
18                 <form action="{{ url_for('blue_print.login')
19 }}" method="POST" class="login-form">
20                     <label>Email</label>
21                     <input type="email" required value="{{
22 email }}" name="email" placeholder="Enter your email"/>
23
24                     <label>Password</label>
25                     <input type="password" required
26 value="{{ password }}" name="password" id="password-input"
27 placeholder="Enter your email"/>
28
29                     <div class="show-pass-div">
30                         <input type="checkbox"
31 onclick="showPassword()" style="height: 20px;"/>
32                         <p>Show Password</p>
33                     </div>
34
35                     <div class="role-div">
36                         <p>Role : </p>
37                         <div>
38                             <div>
39                                 <input type="radio"
40 style="height: 20px;" value="Customer" checked name="role-
41 check"/>

```



```

33             <p>Customer</p>
34         </div>
35     </div>
36         <input type="radio"
37     style="height: 20px;" value="Agent" name="role-check"/>
38         <p>Agent</p>
39     </div>
40 </div>
41
42     <button class="submit-btn"
43 type="submit">Login</button>
44
45     <div>
46         <a href="#" class="links">Forgot
47 Password?</a> <br>
48         <div>
49             <a href="{{
50 url_for('blue_print.register') }}" class="links">Don't have
51 an account yet? Register</a>
52         </div>
53     </div>
54 </form>
55 </div>
56 </section>
57 {% endblock %}

```

GitHub:

<https://github.com/IBM-EPBL/IBM-Project-898-1658329453>

Demo:

https://drive.google.com/file/d/1C3Bq01qjHrEtLbWj4VTHNwXUlxB-AxwU/view?usp=share_link

