TEAM REPORT

CUSTOMER CARE REGISTRY

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ABSTRACT

Develop cloud applications not only to resolve customer complaints, but also to provide customers with satisfaction in using specific business products. This application helps customers file her complaints about problems they are facing with their products. The customer should provide his/her the detailed description of the issue she is facing and her priority level. After the Manager confirms the complaint, an agent is assigned to the complaint filed by the Customer. Each complaining customer will be notified of the process via email. You can also see the status of the complaint.

CHAPTER - 1

INTRODUCTION

Customers are the focus of every company. Business survival depends on customer satisfaction. Customers expect high quality service and are even willing to pay a premium for better service. From the customer's perspective, smart service quality leads to semi-permanent customer relationships and is measured by reuse and cross-selling. In addition, customers endorse service for others. Service is fundamentally different from manufacturing. This distinction contributes to the accumulation of quality of service complexity. Therefore, companies make every effort to provide quality services to satisfy their customers. Despite our best efforts, occasional criticism is inevitable. But sincere recovery turns dissatisfied and dissatisfied customers back into loyal customers. The key to success is recognizing the importance of responding fairly and effectively to customer complaints. Complaints are usually the accumulation of accumulated knowledge, leading to constructive concepts for future service increases and improvements. Survey shows that only many dissatisfied customers actually complain, giving the company an opportunity to fix itself. Others change loyalties. Therefore, complaints should be resolved as soon as possible, honestly and without being defensive. Structured customer criticism management is a recipe for negative interference in the long run. In this paper, we decided to develo such a customer care registration model.

CHAPTER - 2 LITERATURE SURVEY

S.NO	JOURNAL NAME	AUTHOR NAME	YEAR	PROPOSED SYSTEM
1	Cloud-based Solution Proposed for Telecom Industry Customer Satisfaction	Nurulhuda Mustafa, Lew Sook Ling, Sit i Fatimah Abdul Razak	2019	The proposed cloud-based customer supports solutions for the telecom industry. Suggested improvements include: Mutual agreement between customer and company when executing recovery plans, enabling real-time and status tracking, using app to review completed work Implement loyalty programs such as summaries of work completed, which increase customer confidence by receiving signatures.
2	Mobile Government Information Services Use of SMS and Web Technologies on the Platform	Hua Zhang , Fayu Wang	2010	One SMS technology proposed in the mobile service platform is the new electronic office platform that integrates traditional electronic management and mobile communication. With the constant progress of mobile communication

3	Real World Smart	Patensohn	2017	technology and the emergence of 3G, this will further accelerate the development of mobile information in our country. Short Message Research based on mobile administration platform creates an efficient, friendly, and peoplecentred mode of government administration, which bridges government and citizens, and builds a harmonious socialist society. The proposed Real
	Chatbot for Customer Care with a Software as a Service (SaaS) architecture.	Michael D'silva, Sank- et Aretha, Sharddha More and Jeril Kuriakos		World Smart Chatbot system architecture focuses on analysing these social chats by identifying whether a customer's messages are actionable. All actionable messages are sent to the chatbot and tries to solve the problem of the user by initiating a conversation with him customer in a more human way. As a result, saves a lot of money and resources for the companies that use his in customer service,making

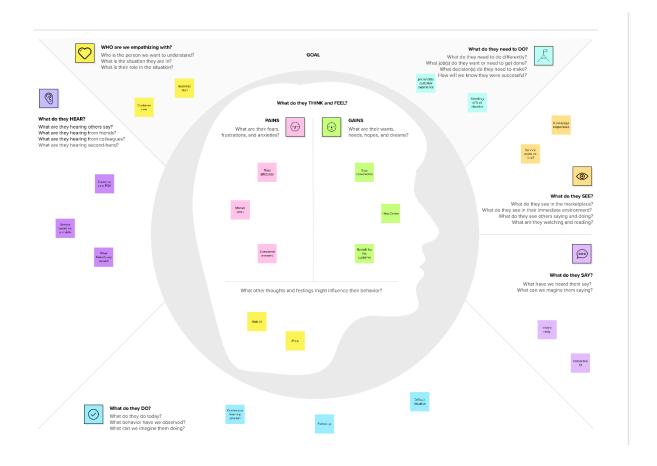
				's customers happier and happier. The system proposed by is implemented in the AWS public cloud, so the system can handle a large user base.
4	Blockchain and AutoML Approach to Open and Automated Customer Service	Zhi Li, Hanyang Guo, Wai Ming Wang, Yijiang Guan, Ali Vatankhah Barenji, George Q. Huang, Kevin S. McFall and Xin Chen	2019	The proposed system describes a blockchain and AutoML implementation that incorporates the open and decentralized advantages of blockchain and the automation advantages of AutoML. A new concept for open and automated customer service is proposed. Compared to his traditional customer service methods, the proposed platform creates a shared, trust less data trading environment. This is especially useful for SMEs to collect enough data to enable automated customer service and develop core customer service capabilities.
5	Online complaint registration system for municipalities.	A.Prassana and Dr. A.V. Senthil Kumar	2020	In the proposed system, the Android

application allows users to register
complaints in a
simple and neat
format. Mainly, he
marks his location
on Google Maps
when making a
complaint so he can
easily help
people.
They are also fully aware of the
progress of the
complaint. You can also check his
status regarding
needs. User has
posted feedback for
this her CMS system
and administrators
can view this
feedback.

CHAPTER -3

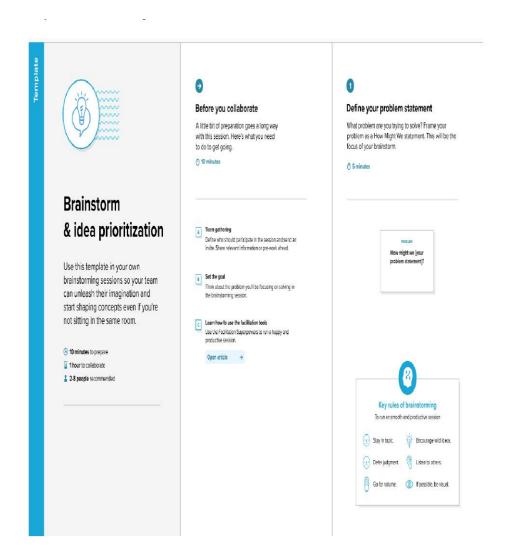
IDEATION & PROPOSED SOLUTION

3.1 Empathy Map Canvas:

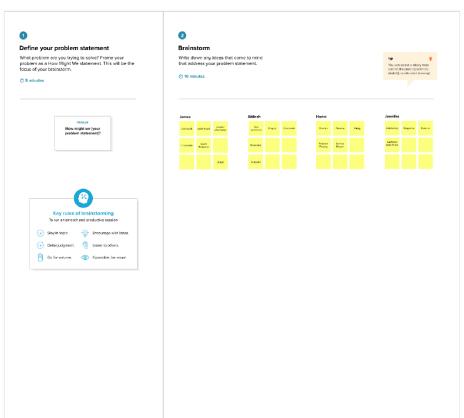


3.2 Ideation & Brainstorming:

Step 1: Team Gathering, Collaboration and Select the Problem Statement

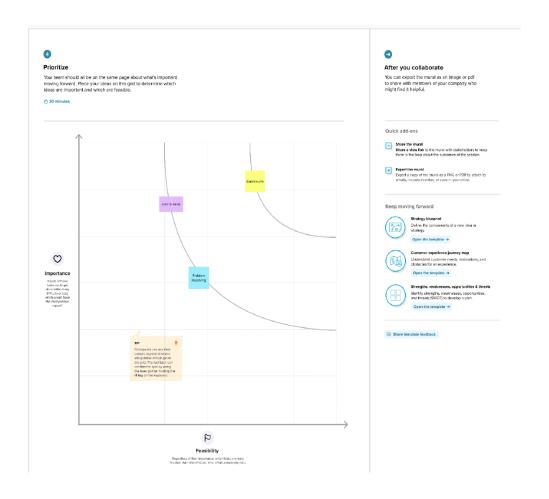


Step 2: Brainstorm, Idea Listing and Grouping:

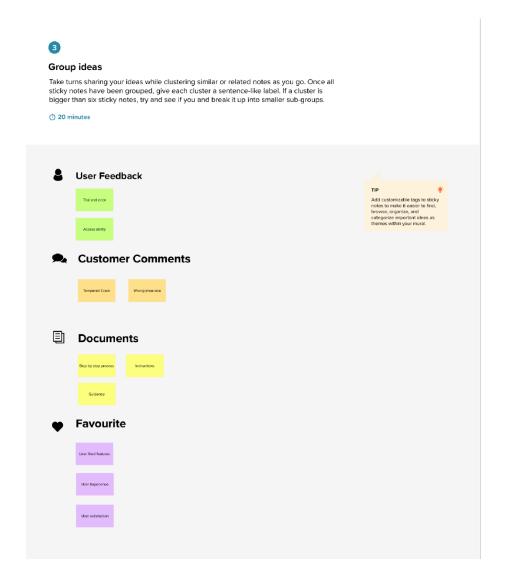


Step-2: Brainstorm, Idea Listing and Grouping

Step 3: Idea Prioritization:



Step 4: Group Idea:

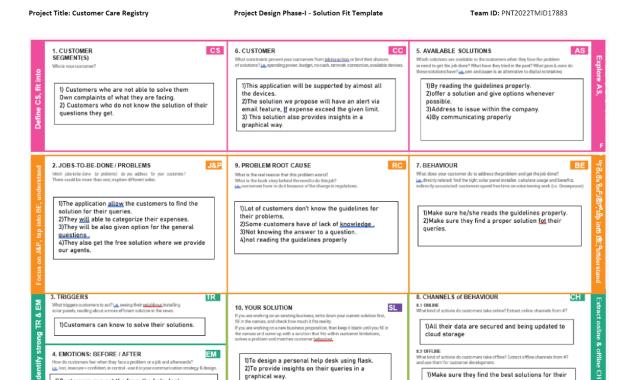


3.3 Proposed Solution:

S.NO	PARAMETER	DESCRIPTION
1	Problem statement (Problem to be solved)	To solve the issues faced by the customer by a cloud application.
2	Idea / Solution description	Directly routing specific agent about the issue. Automated ticket closure by daily sync database.
3	Novelty/Uniqueness	Assigned agent routing, automated ticket closure, backup data retrieval lost data.
4	Social Impact / Customer Satisfaction	Customer satisfaction and easy agent communication.
5	Business Model (Revenue Model)	Key partners are third party members. Customer relationship have 24/7 support.
6	Scalability of the solution	Providing an environment to solve critical customer issues.

3.4 Problem Solution Fit:

1)Customers can get the from the help desk.



complaints.

CHAPTER 4

REQUIREMENT ANALYSIS

4.1 Functional Requirement:

FR NO.	FUNCTIONAL REQUIREMENT (EPIC)	SUB REQUIREMENT (STORY / SUB-TASK)
FR-1	User Registration	Registration through form . Registration through Gmail. Registration through LinkedIN.
FR-2	User Confirmation	Confirmation via Email. Confirmation via OTP.
FR-3	User Login	Login via Google with Email id and Password.
FR-4	Admin Login	Login via Google with Email id and Password.
FR-5	Quary Form	Description of the issues contact information.
FR-6	E-mail	Login alertness.
FR-7	Feedback	Customer Feedback.

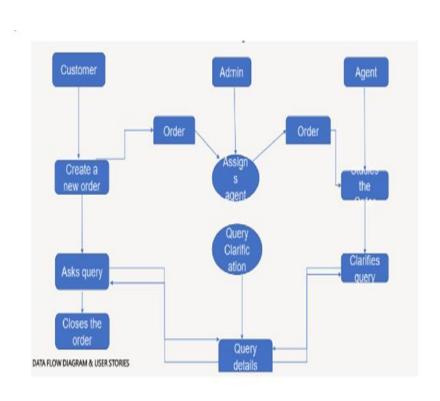
4.2 Non-Functional Requirement:

NFR NO.	NON-FUNCTIONAL REQUIREMENT	DESCRIPTION
NFR-1	Usability	To provide the solution to the problem.
NFR-2	Security	Track the login authentication.
NFR-3	Realiability	Tracking of decade status through email.
NFR-4	Performance	Effective development of web application.
NFR-5	Availability	24/7 service.
NFR-6	Scalability	Agents scalability as per the number of customer.

CHAPTER - 5

PROJECT DESIGN

5.1 Data Flow Diagrams:

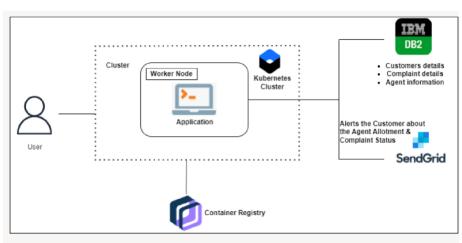


5.2 Solution & Technical Architecture:

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

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

Technical Architecture:



5.3 User Stories

User type	Functional Requirement (Epic)	User Story Numb er	User story / Task	Acceptance Criteria	Priorit y	Relea se
Custo mer (Mobile user)	Registration	USN-1	AS a customer, I can register for application by entering my email,passw ord and confirming my password.	I can access my account / dashboard.	High	Sprint -1
	Login	USN-2	As a customer, I can login to the application by entering correct email and password.	I can access my account/ dashboard.	High	Sprint -1
	Dashboard	USN-3	As a customer, I can see all the orders raised by me.	I get all the info needed in my dashboard.	Low	Sprint -2
	Order Creation	USN-4	As a customer, I can place my order with the detailed	I can ask my query.	Mediu m	Sprint -2

			description of my query.			
	Address Column	USN-5	As a customer, I can have conversations with the assigned agent and get my queries clarified.	My queries are clarified.	High	Sprint -3
	Forgot Password	USN-6	As a customer, I can rest my password by this option in case I forgot my old password.	I can get access to my account again.	Mediu m	Sprint -4
	Order Details	USN-7	As a customer, I can see the current state of the order.	I get a better understanding.	Mediu m	Sprint -4
Agent (web user)	Login	USN-1	As an agent, I can see login to the application by entering the correct email id and password.	I can access to my account / dashboard.	High	Sprint -3

	Dashboard	USN-2	As a agent, I can see the order details assigned to me by admin.	I can see the tickets to which I could answer.	High	Sprint -3
	Address Col umn	USN-3	As a agent, I get to have conversatio n with the customer and clear his/her dobuts.	I can clarify the issues.	High	Sprint -3
	Forgot Password	USN-4	As a agent, I can get reset my password by this option in case I forgot my old password.	I get access to my account again.	Mediu m	Sprint -4
Admin (Mobile user)	Login	USN-1	As a admin, I can login to the application by entering the correct email and password.	I can access my account/dashb oard.	High	Sprint -1
	Dashboard	USN-2	As a admin, I can see all the order raised in the entire system and IoT more.	I can assign agent by seeing those order.	High	Sptint -1

Agent creation	USN-3	As an admin, I can create an agent for clarifying the customers quries.	I can create agent.	High	Sprint -2
Assignment agent	USN-4	As a admin ,I can assign an agent for each order created by the customer.	Enable agent to clarify the queries.	High	Sprint -1
Forgot Password	USN-5	As an admin, I can reset my password by this option in case I forgot my old password.	I get access to my account.	High	Sprint -1

CHAPTER 6

PROJECT PLANNING & SCHEDULING

6.1 Sprint Planning & Estimation:

SPRI NT	FUNCTION AL REQUIREM ENT (EPIC)	USER STROY NU MBER	USER STORY / TASK	STORYPOI NTS	PRIORI TY	TEAM MEMBE R
Sprint -1	User panel	USN-1	The user will login into the website and gothrough the servuce available on the webpage.	20	High	James Chistop her Akilesh
Sprint -2	Admin panel	USN-2	The role of the admin is to check out the database about the availability and have a tract of all the things that the user going to service.	20	High	Harini Jeevith a Harsini
Sprint -3	Chat Bot	USN-3	The user can directly talk to the chatbox regarding the service. Get the recommend	20	High	James Chistop her Akilesh

			ation based on the information provided by the user.			
Sprint -4	Final Delivery	USN-4	Container of the application using Dicker kubernetes and deployment the application. Create the docimentati on and final Submit the application.	20	High	Harini Jeevith a Harsini

6.2 Project Tracker

SPRINT	TOTAL STORY POINT	DURATION	SPRINT START DATE	SPRINT END DATE (PLANNED)	STORY POINT COMPLET- ED (AS ON PLANNED END DATE)	SPRINT RELEASE DATE (ACTUAL)
Sprint-1	20	6 Days	24 Oct 2022	29 Oct 2022	20	29 Oct 2022
Sprint-2	20	6 Days	31 Oct 2022	05 Nov 2022	20	05 Nov 2022
Sprint-3	20	6 Days	07 Nov 2022	12 Nov 2022	20	12 Nov 2022
Sprint-4	20	6 days	14 Nov 2022	19 Nov 2022	20	19 Nov 2022

CHAPTER-7

CODING & SOLUTION

7.2 Feature 1: coding for registry

```
<!DOCTYPE html>
<html>
<head>
<meta name="viewport" content="width=device-width, initial-scale=1.0">
<link rel="stylesheet" href="{{ url_for('static', filename='style.css') }}">
<title>Register Page</title>
</head>
<body>
 <h2>Welcome To Customer Care Registry</h2>
 <div class="container" id="container">
   <div class="form-container sign-up-container">
     <form action="/" method="post" class="sign-in-form">
      <h1>Create Account</h1>
      <input type="text" name="username" placeholder="Enter Your</pre>
Name" required>
      <input type="password" name="password" placeholder="Enter</pre>
Your Password" required>
      <input type="text" name="email" placeholder="Enter Your</pre>
MailID" required />
      <input type="submit" value="Sign Up" class="sign-btn">
     </form>
   </div>
   <div class="form-container sign-in-container">
     <form action="/welcome" class="sign-up-form" method="post">
      <h1>Sign In</h1>
      <span>or use your account</span>
      <input type="text" name="username" placeholder="Enter Your</pre>
Name" required>
      <input type="password" name="password" placeholder="Enter</pre>
Your Password" required>
      <a href="#">Forgot your password?</a>
      <a href="/wel">
      <input type="submit" name="action" value="Sign In" class="sign-</pre>
btn2">
```

```
</a>
     </form>
   </div>
   <div class="overlay-container">
     <div class="overlay">
      <div class="overlay-panel overlay-left">
        <h1>Welcome Back!</h1>
        To keep connected with us please login with your personal
info
        <button class="ghost" id="signIn">Sign In</button>
      </div>
      <div class="overlay-panel overlay-right">
        <h1>Hello, Friend!</h1>
        Enter your personal details and start journey with us
        <button class="ghost" id="signUp">Sign Up</button>
      </div>
     </div>
   </div>
 </div>
 <h2>About us</h2>
<script>
 window.watsonAssistantChatOptions = {
  integrationID: "bc749225-c36f-4b6b-84ce-2f080d126e2a", // The ID of
this integration.
  region: "eu-gb", // The region your integration is hosted in.
  serviceInstanceID: "66610931-fcad-4d78-9237-6622b322b0f2", // The
ID of your service instance.
  onLoad: function(instance) { instance.render(); }
 };
 setTimeout(function(){
  const t=document.createElement('script');
  t.src="https://web-
chat.global.assistant.watson.appdomain.cloud/versions/" +
(window.watsonAssistantChatOptions.clientVersion || 'latest') +
"/WatsonAssistantChatEntry.js";
  document.head.appendChild(t);
 });
const signUpButton = document.getElementById('signUp');
const signInButton = document.getElementById('signIn');
```

```
const container = document.getElementById('container');
signUpButton.addEventListener('click', () => {
        container.classList.add("right-panel-active");
});
signInButton.addEventListener('click', () => {
        container.classList.remove("right-panel-active");
});
</script>
</body>
</html>
```

7.2 Feature 2: coding for Signout

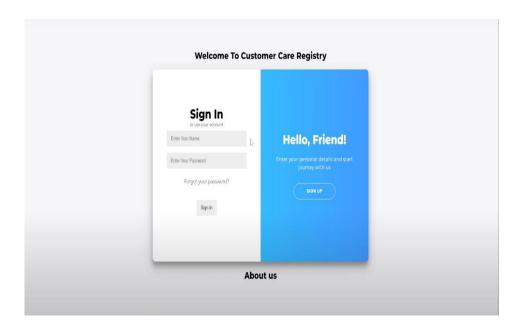
```
<html>
<head>
<meta name="viewport" content="width=device-width, initial-scale=1.0">
<title>Signout Page</title>
</head>
<body>
  <style>
    @import
url('https://fonts.googleapis.com/css?family=Montserrat:400,800');
    * {
      box-sizing: border-box;
    }
    body {
      background: #f8f6f6;
      display: flex;
      justify-content: space-between;
      flex-direction: column;
      font-family: 'Montserrat', sans-serif;
      margin: 20px 20px 20px;
    }
    h2{
      color: #f8f6f6;
      text-align: center;
```

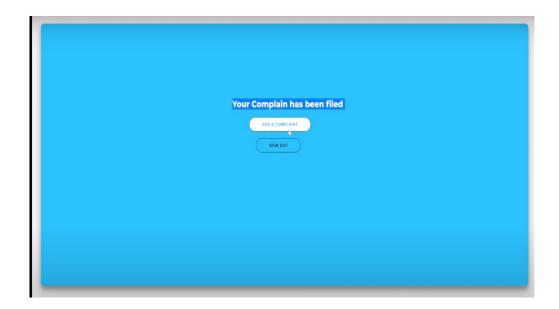
```
margin: 200px 20px 20px 40px;
}
.contain1-top{
  background-color: #2bc3ff;
  border-radius: 10px;
  box-shadow: 0 14px 28px rgba(0,0,0,0.25),
       0 10px 10px rgba(0,0,0,0.22);
  position: relative;
  overflow: hidden;
  width: 1650px;
  max-width: 100%;
  min-height: 60px;
  margin: 10px 10px 10px 10px;
  height: 700px;
}
.button2{
  margin: 0px 0px 0px 700px;
  border-radius: 20px;
  border: 1px solid #2bc3ff;
  background-color: #2b9cff;
  color: black;
  font-size: 12px;
  font-weight: bold;
  padding: 12px 45px;
  letter-spacing: 1px;
  text-transform: uppercase;
  transition: transform 80ms ease-in;
  transform: scale(0.95);
  outline: none;
  background-color: transparent;
  border-color: black;
}
.button2:hover {
  background-color: white;
  color: #2bc3ff;
}
.button3{
  margin: 0px 0px 0px 725px;
  border-radius: 20px;
  border: 1px solid #2bc3ff;
  background-color: #2b9cff;
```

```
color: black;
      font-size: 12px;
      font-weight: bold;
      padding: 12px 45px;
      letter-spacing: 1px;
      text-transform: uppercase;
      transition: transform 80ms ease-in;
      transform: scale(0.95);
      outline: none;
      background-color: transparent;
      border-color: black:
    .button3:hover {
      background-color: white;
      color: #2bc3ff;
    }
  </style>
  <div class="contain1">
    <div class="contain1-top">
      <h2>Your Complain has been filed</h2>
      <form action="/welred" method="post">
         <input type="submit" name="action" value="Add a Complaint"</pre>
class="button2">
      </form>
      <form action="/relogin" method="post">
         <input type="submit" name="action" value="Sign Out"
class="button3">
      </form>
    </div>
  </div>
  <script>
    window.watsonAssistantChatOptions = {
      integrationID: "bc749225-c36f-4b6b-84ce-2f080d126e2a", // The
ID of this integration.
      region: "eu-gb", // The region your integration is hosted in.
      serviceInstanceID: "66610931-fcad-4d78-9237-6622b322b0f2", //
The ID of your service instance.
      onLoad: function(instance) { instance.render(); }
    };
```

```
setTimeout(function(){
    const t=document.createElement('script');
    t.src="https://web-
chat.global.assistant.watson.appdomain.cloud/versions/" +
(window.watsonAssistantChatOptions.clientVersion || 'latest') +
"/WatsonAssistantChatEntry.js";
    document.head.appendChild(t);
    });
    const signOutButton = document.getElementById('signOut');
    </script>
</body>
</html>
```

CHAPTER-8 RESULTS





CHAPTER-9

ADVANTAGES AND DISADVANTAGES

ADVANTAGES:

- Customers can clarify their doubts just by creating a new ticket
- Customer gets replies as soon as possible
- Not only the replies are faster, the replies are more authentic and practical
- Customers are provided with a unique account, to which the latter can login at any time
- Very minimal account creation process

DISADVANTAGES:

- Only web application is available right now (as of writing)
- UI is not so attractive, it's just simple looking
- No automated replies
- No SMS alerts
- Supports only text messages while chatting with the Agent

CHAPTER - 10

CONCLUSION

As such, many customer service applications are available on the Internet. We focused on the building blocks of these applications and created a customer care registration application.

It will be a web application built with Flask (Python Micro-Web Framework), HTML, and JavaScript. Become a ticket-based customer service register. customers can register for the application using their email address, password and first and last name. Then you can log into the system and create tickets as needed in the form of tickets. These tickets are sent to the administrator to whom the agent is assigned. A commissioned agent conducts a personal interview with the customer to clarify the customer's questions. It is also the administrator's responsibility to create agents.

CHAPTER - 11

FUTURE SCOPE

Our application is not finished yet. There is a lot of room for improvement. Some of them will be improved in future versions.

- Attractive and responsive user interface throughout the application
- Publish cross-platform mobile applications.
- Multimedia support in chat box.
- Create a community where your customers can interact. phone support

CHAPTER-12

APPENDIX

Style.css

```
@import
url('https://fonts.googleapis.com/css?family=Montserrat:400,800');
* {
 box-sizing: border-box;
body {
 background: #f6f5f7;
 display: flex;
 justify-content: center;
 align-items: center;
 flex-direction: column;
 font-family: 'Montserrat', sans-serif;
 height: 100vh;
 margin: -20px 0 50px;
}
h1 {
 font-weight: bold;
 margin: 0;
}
h2 {
 text-align: center;
p {
 font-size: 14px;
 font-weight: 100;
 line-height: 20px;
```

```
letter-spacing: 0.5px;
 margin: 20px 0 30px;
}
span {
 font-size: 12px;
a {
 color: #333;
 font-size: 14px;
 text-decoration: none;
 margin: 15px 0;
}
button {
 border-radius: 20px;
 border: 1px solid #2bc3ff;
 background-color: #2b9cff;
 color: #FFFFF;
 font-size: 12px;
 font-weight: bold;
 padding: 12px 45px;
 letter-spacing: 1px;
 text-transform: uppercase;
 transition: transform 80ms ease-in;
}
button:active {
 transform: scale(0.95);
button:focus {
 outline: none;
button.ghost {
 background-color: transparent;
 border-color: #FFFFF;
}
form {
```

```
background-color: #FFFFFF;
 display: flex;
 align-items: center;
 justify-content: center;
 flex-direction: column;
 padding: 0 50px;
 height: 100%;
 text-align: center;
input {
 background-color: #eee;
 border: none:
 padding: 12px 15px;
 margin: 8px 0;
 width: 100%;
}
.container {
 background-color: #fff;
 border-radius: 10px;
  box-shadow: 0 14px 28px rgba(0,0,0,0.25),
     0 10px 10px rgba(0,0,0,0.22);
 position: relative;
 overflow: hidden;
 width: 768px;
 max-width: 100%;
 min-height: 480px;
}
.form-container {
 position: absolute;
 top: 0;
 height: 100%;
 transition: all 0.6s ease-in-out;
}
.sign-in-container {
 left: 0;
 width: 50%;
 z-index: 2;
```

```
.container.right-panel-active .sign-in-container {
 transform: translateX(100%);
.sign-up-container {
 left: 0;
 width: 50%;
 opacity: 0;
 z-index: 1;
}
.container.right-panel-active .sign-up-container {
 transform: translateX(100%);
 opacity: 1;
 z-index: 5;
 animation: show 0.6s;
}
@keyframes show {
 0%, 49.99% {
   opacity: 0;
   z-index: 1;
 }
 50%, 100% {
   opacity: 1;
   z-index: 5;
 }
.overlay-container {
 position: absolute;
 top: 0;
 left: 50%;
 width: 50%;
 height: 100%;
 overflow: hidden;
 transition: transform 0.6s ease-in-out;
 z-index: 100;
}
```

```
.container.right-panel-active .overlay-container{
 transform: translateX(-100%);
}
.overlay {
 background: #418dff;
 background: -webkit-linear-gradient(to right, #2b92ff, #41b3ff);
 background: linear-gradient(to right, #2bdcff, #419aff);
 background-repeat: no-repeat;
 background-size: cover;
 background-position: 0 0;
 color: #FFFFF;
 position: relative:
 left: -100%;
 height: 100%;
 width: 200%;
  transform: translateX(0);
 transition: transform 0.6s ease-in-out;
}
.container.right-panel-active .overlay {
   transform: translateX(50%);
}
.overlay-panel {
 position: absolute;
 display: flex;
 align-items: center;
 justify-content: center;
 flex-direction: column;
 padding: 0 40px;
 text-align: center;
 top: 0;
 height: 100%;
 width: 50%;
 transform: translateX(0);
 transition: transform 0.6s ease-in-out;
}
.overlay-left {
 transform: translateX(-20%);
```

```
.container.right-panel-active .overlay-left {
   transform: translateX(0);
}
.overlay-right {
   right: 0;
   transform: translateX(0);
}
.container.right-panel-active .overlay-right {
   transform: translateX(20%);
}
```

Project Demo Link:

https://youtu.be/gHmGNqHVgsE