IBM-EPBL/IBM-Project-28620-1660114403

CUSTOMER CARE REGISTRY REPORT

TEAM DETAILS:

Team ID	**:** PNT2022TMID13422
College Name	**:** P.S.R. ENGINEERING COLLEGE
Department	**:** COMPUTER SCIENCE & ENGINEERING

TEAM MEMBERS :

Yoga Vignesh MK
Vignesh K
Vijaya Kumar B
Surya V

ABSTRACT

An online comprehensive Customer Care Solution is to manage customer interaction and complaints with the Service Providers over phone or through and e-mail. The system should have capability to integrate with any Service Provider from any domain or industry like Banking, Telecom, Insurance, etc

Customer Service also known as Client Service is the provision of service to customers its significance varies by product, industry and domain. In many cases customer services is more important if the purchase relates to a service as opposed to a product.

Customer Service may be provided by a Person or Sales & Service Representatives Customer Service is normally an integral part of a company's customer value proposition.

CONTENTS

CHAPTER 1
INTRODUCTION

1.1 INTRODUCTION TO PROJECT

The Customer Service Desk is a web based project.Customer Service also known as Client Service is the provision of service to customers' .Its significance varies by product, industry and domain. In many cases customer services is more important if the information relates to a services opposed to a Customer. Customer Service may be provided by a Service Representatives Customer Service is normally an integral part of a company's customer value proposition.

ORGANIZATION PROFILE

SOFTWARE SOLUTION

Software Solutions is an IT solution provider for a dynamic environment where business and technology strategies converge. Their approachfocuses on new ways of business combiningIT innovation and adoption while also leveraging an organization's current IT assets. Their work with large global corporations and new products or services and to implement prudent business and technology strategies in today's environment.

RANGE OF EXPERTISE INCLUDES:

- Software Development Services
- Engineering Services
- Systems Integration
- Customer Relationship Management
- Product Development
- Electronic Commerce
- Consulting
- IT Outsourcing

We apply technology with innovation and responsibility to achieve two broad objectives:

- Effectively address the business issuesour customers face today.

THIS APPROACH RESTS ON:

- A strategy wherewe architect, integrate and manage technology services and solutions - we call it AIM for success.
- A robustoffshore development methodology and reduced demand
- on customerresources.
- A focusonthe use ofreusable frameworks to provide cost and times benefits.

They combinethe best people,processes and technology to achieve excellentresults - consistency. We offer customers the advantages of:

SPEED:

They understand the importance of timing, of getting there before the

competition. A rich portfolioof reusable, modular frameworks helps jump-start projects. Tried and tested methodology ensures that we follow a predictable, low - risk path to achieve results. Our track record is testimony to complex projects delivered within andevens before schedule.

EXPERTISE:

Our teams combine cutting edge technology skills with rich domain

expertise. What’s equally important - they share a strong customer orientation that means they actually start by listening to the customer. They’re focused on coming up with solutions that serve customer requirements today and anticipate future needs.

A FULL SERVICE PORTFOLIO:

They offer customers the advantage of being able to Architect, integrate and manage technology services. This means that they can rely on one, fully accountable source instead of trying to integrate disparate multi vendor solutions.

SERVICES:

Xxx is providing it’s services to companies which are in the field of production, quality control etcWith their rich expertise and experience and information technology they are in best position to provide software solutionsto distinct business requirements.

1.2 PURPOSEOF THE PROJECT

An online comprehensive Customer Care Solution is to manage customer interaction and complaints with the Service Providers over phone or through and e-mail. The system should have capability to integrate with any Service Provider from any domain or industry like Banking, Telecom, Insurance, etc.

Customer Service also known as Client Service is the provisionof service to customers Its significance varies by product, industryand domain. In many cases customer servicesis more important if the information relates to a service as opposed to a Customer.

Customer Service may be provided by a Service Representatives Customer
Service is normally an integral part of a company’s customer.

CHAPTER 2

LITERATURE SURVEY

2.1 PROBLEMS IN EXISTING SYSTEM

The existing system is a semi-automated at where the information is stored in the form of excel sheets in disk drives. The information sharing to the Volunteers, Group members, etc. is through mailing feature only. The information storage and maintenance is more critical in this system.Tracking the member's activities and progress of the work is a tedious job here. This system cannot provide the information sharing by 24x7 days.

2.2 REFERENCES

TITLE: Customer Care and Relationship Support Office

AUTHOR NAME: Hubert Baumeister & Piotr Kosi

YEAR: September 2000

DESCRIPTION:

Customer Relationship Management (CRM) is an inherent business strategy for companies big and small. The technology has reached a point where it is truly enabling the way enterprises manage their customer relationships. The goal of the EU funded project CARUSO is the design of a software toolkit that facilitates the building and maintaining of high quality business-to-business and business-to-customer relationships. CARUSO is designed to allow a multi-dimensional way of looking at markets, customers, suppliers, products, personnel, internal and external information, communication and action flow. This will be accomplished by the following core features: front-office application builder with customer care and marketing desk, basic technologies comprising a general communication server, intelligent information, document and contact access, unified messaging, and a customizable user interface. Emphasis will be put on exploiting existing tool packages as much as possible. The CARUSO toolkit is targeted at European Small and Medium Sized Enterprises (SME) and allows them to optimize their business operations to the mutual benefit of both the supplier and the consumer.

TEAM ID: PNT2022TMID13422

TITLE: Customer Care Management Model for Service Industry
AUTHOR NAME: Muthusamy Nataraj , Nallasamy Gunasekaran
YEAR: Received January 12th, 2010; revised February 23rd, 2010; accepted April 11th, 2010.
DESCRIPTION:
This describes a model for Customer care management in an automotive service industry. Design/ methodology/approach – Customer care management (CCM) model is developed using TQM techniques, Quality Function Deployment (QFD) and Six Sigma. The matrix structure in QFD is used to transform customer complaints into Critical-to-Quality (CTQ) parameters. By using Six Sigma DMAIC approach, the customer complaint parameters are analyzed for improvement. Findings – The application of CCM model in an automobile service industry has determined that the workload planning is the chronic problem for customer complaint. Further analysis through this model leads to restructuring of existing workload planning practice through a set of algorithms. Research limitations/implications – CCM model lacks to accommodate the effect of relationship between rectification factors. Also competitor technical contemplation is not possible in this model. Originality/value – Customer is the focal point and early response to their complaint is the key to success of every business. This paper has developed a structured complaint management practice which warrants the timely response to customer complaints and speedy resolution for survival in today’s customer driven market

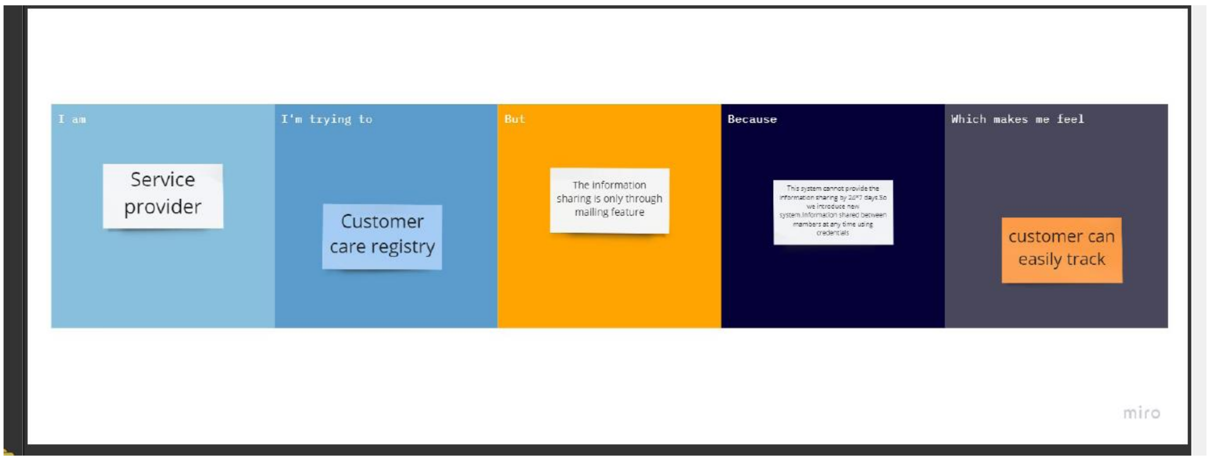
TITLE: BUILDING CARE THROUGH CUSTOMER CARE
AUTHOR NAME: Brian R. Wood
DESCRIPTION:
Building maintenance has long been portrayed as a 'Cinderella' activity (Seeley, 1976), unattractive and often poorly considered; and yet it is a very substantial part of the construction economy- in the UK £28 Billion compared with £10 Billion for new-build (Barbour, 1998). Research by the author over recent years has identified a shift from the 'received wisdom' of Planned Preventive Maintenance (PPM) programmes to more responsive practices using technology to get closer to the customer. This paper integrates work published by the author under titles such as

Just In Time Maintenance (1995, 1997), Call-Centred Maintenance (1998) and Intelligent Building Care (1999) to demonstrate how the new approach to building maintenance with a focus on care for the customer and a service culture is evolving.

TITLE: CUSTOMER SATISFACTION DETERMINATION AND LEVEL OF COMPLAINT
AUTHOR NAME: Yusuf Indra Wibowo
DESCRIPTION:
Previous research or relevant research is very important in a scientific research or article. Previous research or relevant research serves to strengthen the theory and influence of relationships or influences between variables. Article ini review customer satisfaction determination and complaint level: Product Quality and Service Quality Analysis, A Study of Marketing Management Literature. The purpose of writing this article is to build a hypothesis of influence between variables to be used in future research. The result of this risearch library is that: 1) Product Quality affects Customer Satisfaction; 2) Service Quality affects Customer Satisfaction; 3) Product Quality affects complaint level; 4) Service Quality affects complaint level; and 5) Customer Satisfaction affects complaint level.

2.3 PROBLEM STATEMENT DEFINITION

The development of this new system objective is to provide the solution to the problems of existing system. By using this new system, we can fully automate the entire process of the current system. The new system would like to make as web-enabled so that the information can be shared between the members at any time using the respective credentials. To track the status of an individual process, the status update can be centralized using the new system. Being a web-enabled system, the process can be accessed across the world over net. This system also providing the features like Chatting, Mailing between the members; Images Upload – Download via the web site; updating the process status in centralized location; generated reports can also be exporting to the applications like MS-Excel, PDF format, etc. In this new system, the members like Donors can give their valuable feedback to the Volunteers so that the Volunteers can check their progress of the tasks.The entire process categorized as different modules like Admin module, Volunteermodule, etc. at where we can classify the functionality as an individual process.Using the new systementering into Admin module we can perform…. In this new system using the Volunteermodule we can do….

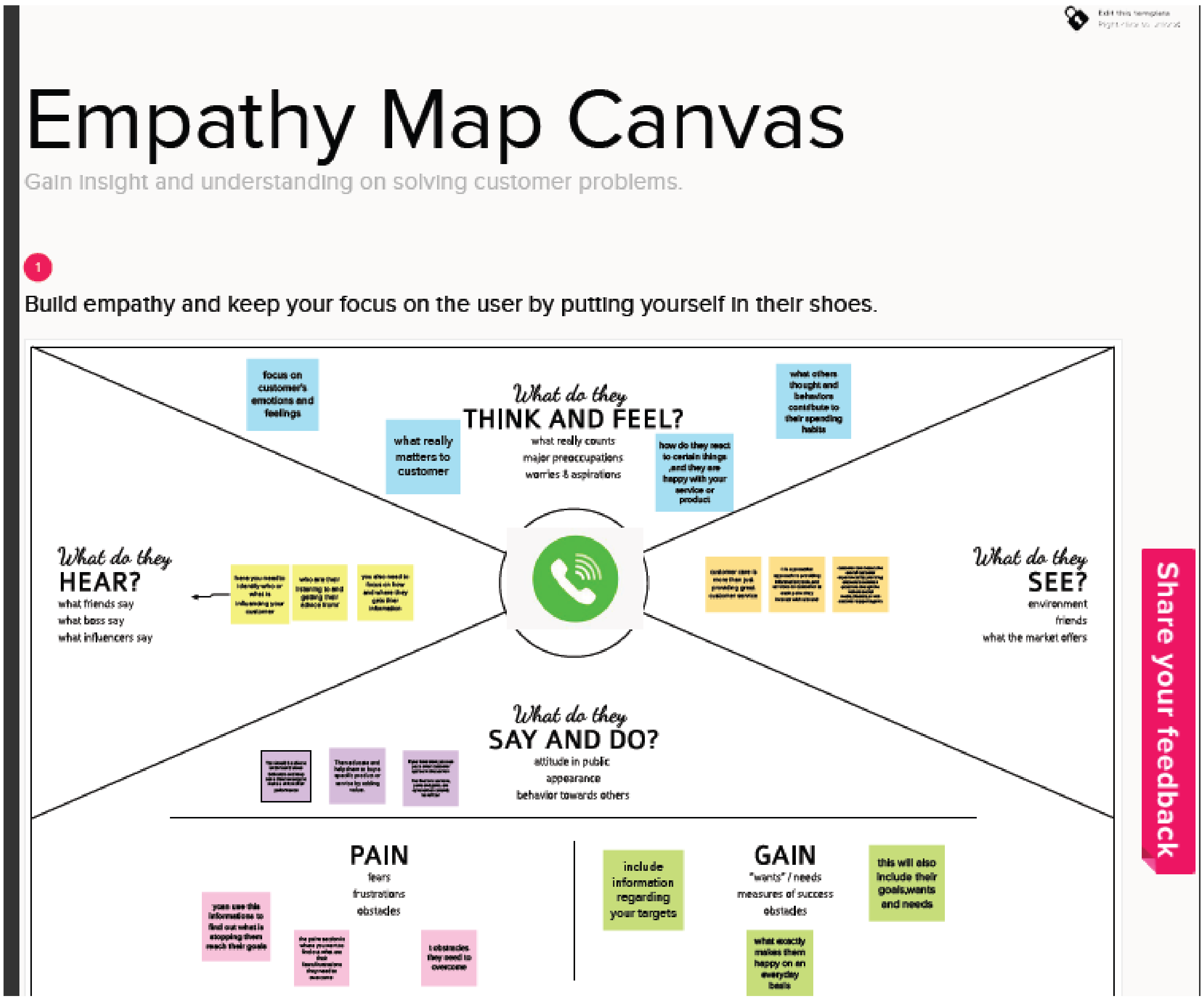

I am
Service provider
I'm trying to
Customer care registry
But
The information sharing is only through mailing feature
Because
This system cannot provide the information sharing by 24*7 days.So we introduce new system.Information shared between members at any time using credentials
Which makes me feel
customer can easily track
miro

CHAPTER 3

IDEATION & PROPOSED SOLUTION

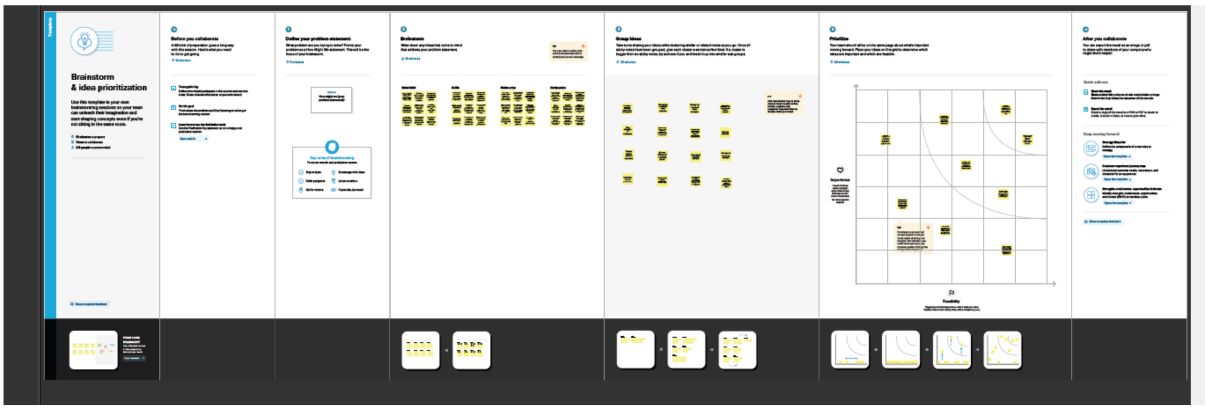
3.1 EMPATHY MAP

An empathy map is a simple, easy-to-digest visual that captures knowledge about a user’s behaviours and attitudes. It is a useful tool to helps teams better understand their users. Creating an effective solution requires understanding the true problem and the person who is experiencing it. The exercise of creating the map helps participants consider things from the user’s perspective along with his or her goals and challenges.


Empathy Map Canvas
Gain insight and understanding on solving customer problems.
1
Build empathy and keep your focus on the user by putting yourself in their shoes.
What do they THINK AND FEEL?
what really counts
major preoccupations
worries & aspirations
focus on customer's emotions and feelings
what really matters to customer
how do they react to certain things ,and they are happy with your service or product
what others thought and behaviors contribute to their spending habits
What do they HEAR?
what friends say
what boss say
what influencers say
here you need to identify who or what is influencing your customer
who are their listening to and getting their advice from
you also need to focus on how and where they gets their information
What do they SEE?
environment
friends
what the market offers
customer care is more than just providing great customer service
What do they SAY AND DO?
attitude in public
appearance
behavior towards others
PAIN
fears
frustrations
obstacles
yuo use this informations to find out what is stopping them reach their goals
obstacles they need to overcome
GAIN
"wants" / needs
measures of success
obstacles
include information regarding your targets
what exactly makes them happy on an everyday basis
this will also include their goals,wants and needs
Share your feedback

3.2 IDEATION AND BRAINSTORMING

Brainstorming provides a free and open environment that encourages everyone within a team to participate in the creative thinking process that leads to problem solving. Prioritizing volume over value, out-of-the-box ideas are welcome and built upon, and all participants are encouraged to collaborate, helping each other develop a rich amount of creative solutions.



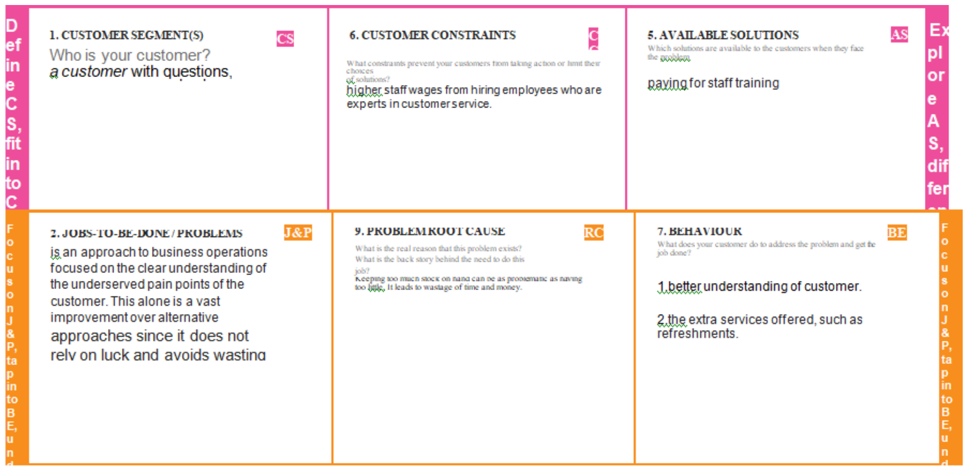
3.3 PROPOSED SOLUTIONS

S.No.	Parameter	Description
1.	Problem Statement (Problem to be solved)	A customer problem statement **outlines problems that your customers face**. It helps you figure out how your product or service will solve this problem for them. The statement helps you understand the experience you want to offer your customers
2.	Idea / Solution description	Know Your Customer and How to Solve Their Problem Foster a Customer-Centric Culture Assign One Customer Service Representative to a Single Customer / Account

3.	Novelty / Uniqueness	Improve Customer Service with Chat bots Offer a **Self service** Channel
4.	Social Impact / Customer Satisfaction	Recognize that the behavior and expectations of customers has changed and that this has implications for customer service
5.	Business Model (Revenue Model)	**Fixed package**: Whenever clients hire you to provide customer service for their business, they have to pay a fixed package cost. The amount is billed either annually, semi-annually or quarterly. **Customised packages**: Here, you set the costs for each client based on the services they require and the volume of customer queries/complaints you handle. **Commission-based**: In this model, your revenue is based on how many customer conversions you drive for the client.
6.	Scalability of the Solution	Customer support services should be able to grow and adapt to meet the changing demands of customers. As the climate for your industry changes, your services will need to change accordingly to ensure that consumers are always being served efficiently. **Scalable customer support** means ramping up or scaling back the efforts needed to take care of all customers, and to maintain a loyal base.

TEAM ID: PNT2022TMID13422

3.4 PROBLEM SOLUTION FIT



Define CS, fit into C

1. CUSTOMER SEGMENT(S) CS

Who is your customer?
a customer with questions,

6. CUSTOMER CONSTRAINTS CC

What constraints prevent your customers from taking action or limit their choices of solutions?
higher staff wages from hiring employees who are experts in customer service.

5. AVAILABLE SOLUTIONS AS

Which solutions are available to the customers when they face the problem
paying for staff training

Explore AS, differen

Focus on J&P, tap into BE, und

2. JOBS-TO-BE-DONE / PROBLEMS J&P

is an approach to business operations focused on the clear understanding of the underserved pain points of the customer. This alone is a vast improvement over alternative approaches since it does not rely on luck and avoids wasting

9. PROBLEM ROOT CAUSE RC

What is the real reason that this problem exists?
What is the back story behind the need to do this job?
Keeping too much stock on hand can be as problematic as having too little. It leads to wastage of time and money.

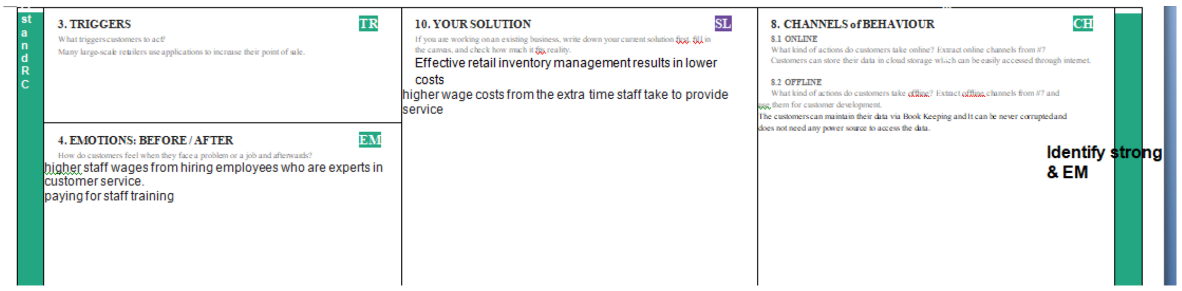
7. BEHAVIOUR BE

What does your customer do to address the problem and get the job done?

1.better understanding of customer.

2.the extra services offered, such as refreshments.

Focus on J&P, tap into BE, und



st and RC

3. TRIGGERS TR

What triggers customers to act?
Many large-scale retailers use applications to increase their point of sale.

4. EMOTIONS: BEFORE / AFTER EM

How do customers feel when they face a problem or a job and afterwards?
higher staff wages from hiring employees who are experts in customer service.
paying for staff training

10. YOUR SOLUTION SL

If you are working on an existing business, write down your current solution first, fill in the canvas, and check how much it fits reality.
Effective retail inventory management results in lower costs
higher wage costs from the extra time staff take to provide service

8. CHANNELS of BEHAVIOUR CH

8.1 ONLINE
What kind of actions do customers take online? Extract online channels from #7
Customers can store their data in cloud storage which can be easily accessed through internet.

8.2 OFFLINE
What kind of actions do customers take offline? Extract offline channels from #7 and use them for customer development.
The customers can maintain their data via Book Keeping and It can be never corrupted and does not need any power source to access the data.

Identify strong & EM

CHAPTER 4
REQUIREMENT ANALYSIS

4.1 FUNCTIONAL REQUIREMNETS

FR No.	Functional Requirement (Epic)	Sub Requirement (Story/ Sub-Task)
1	User Registration	Registration through Form Registration through Gmail Registration throughLinkedIN
2	User Confirmation	Confirmation via Email Confirmation viaOTP
3	Defining problem	Type what is the problem.
4	Allocating agents	According to the problem agent will be allocated.
5	Analysing problem	Problem and its requirements are analysed by the agents.
6	Tracking problem solution	Track whatis the condition of the problem solution through credentials.
7	Solving problem	Agents solvethe problem and inform to user through mail.
8	Customer feedback	User can sendfeedback through credentials.

4.2 NON FUNCTIONAL REQUIREMENTS

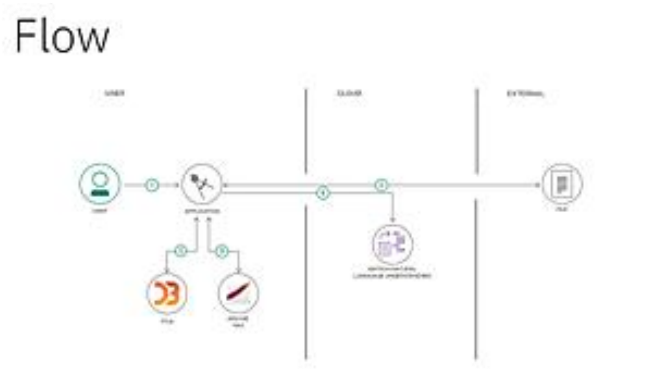
FR No.	Non-Functional Requirement	Description
1	**Usability**	The error rate of users submitting their problem details at the ticketmustn't exceed 10 percent.

2	**Security**	Assures All the data inside the system or in the part will be protected against the malwareattack or unauthorized access.
3	**Reliability**	The system must perform withoutfailure in 95percent of use cases during a month.
4	**Performance**	The landing page supporting 3,000 users per hour must provide 5 second or less response time in a Chrome desktopbrowser, including therendering of text and images.
5	**Availability**	This must be available to US users99.98 percent of the time every month during business hours IST.
6	**Scalability**	The system must be scalable enoughto support 1,00,000 visits at the same time while maintaining optimal performance.

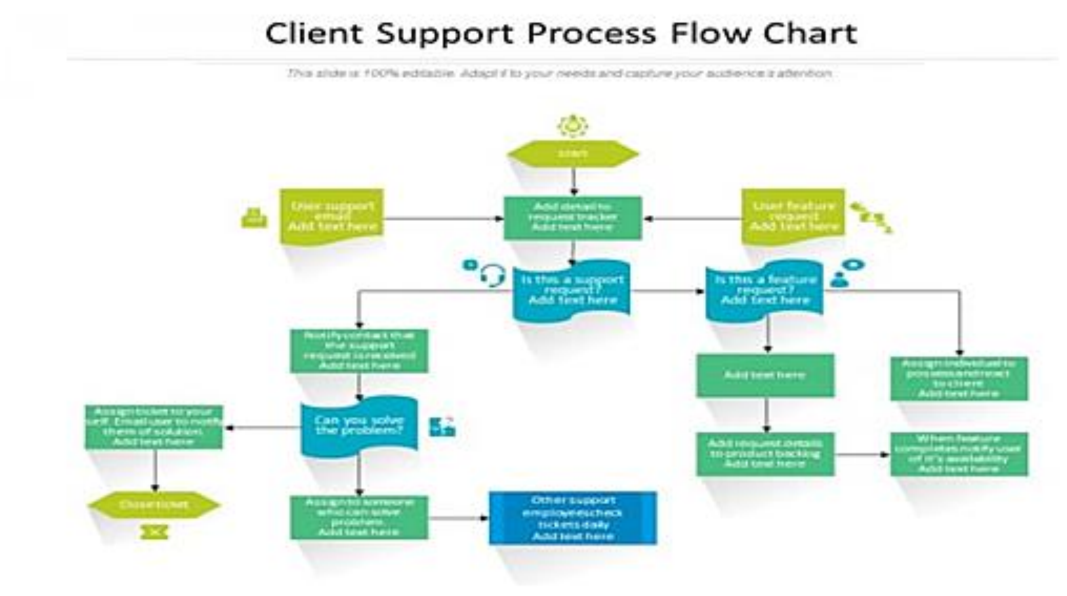
CHAPTER 5
PROJECT DESIGN

5.1 DATAFLOW DIAGRAMS

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.



1. User configures credentials for the Watson Natural Language Understanding service and starts the app.
2. User selects data file to process and load.
3. Apache Tika extracts text from the data file.
4. Extracted text is passed to Watson NLU for enrichment.
5. Enriched data is visualized in the UI using the D3.js library.


Client Support Process Flow Chart
This slide is 100% editable. Adapt it to your needs and capture your audience's attention.
start
User support email Add text here
Add detail to request tracker Add text here
User feature request Add text here
Is this a support request? Add text here
Is this a feature request? Add text here
Notify contact that the support request is received Add text here
Add text here
Assign individual to process and react to client Add text here
Assign ticket to yourself. Email user to notify them of solution. Add text here
Can you solve the problem?
Add request details to product backlog Add text here
When feature completes notify user of it's availability Add text here
Close ticket
Assign to someone who can solve problem. Add text here
Other support employees check tickets daily Add text here

5.2 SOLUTION AND TECHNICAL ARCHITECTURE

Technical Architecture:

The Deliverable shall include the architectural diagram as below and the information as per the table1 & table 2

Guidelines:

1. Include all the processes (As an application logic / Technology Block)
2. Provide infrastructural demarcation (Local / Cloud)
3. Indicate external interfaces (third party API's etc.)
4. Indicate Data Storage components / services
5. Indicate interface to machine learning models (if applicable)
6. Hire the Right Employees.
7. Set Goals for Customer Service.
8. Train on Service Skills.
9. Hold People Accountable.
10. Reward and Recognize Good Service

Table-1 : Components & Technologies:

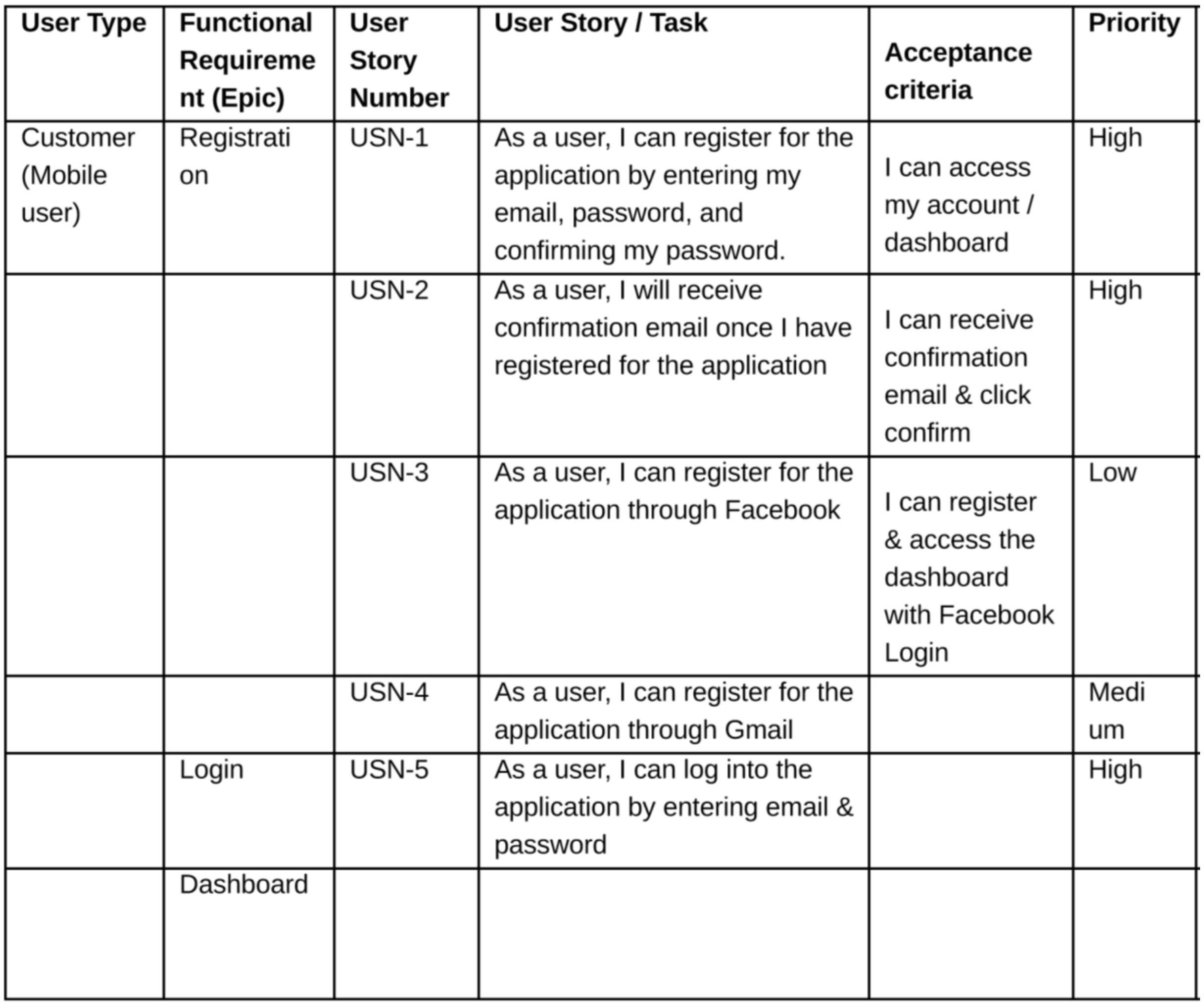
S.No	Component	Description	Technology
1.	User Interface	How user interacts with application e.g. Web UI, Mobile App, Chatbot etc.	HTML, CSS, JavaScript / Angular Js / React Js etc.
2.	Application Logic-1	Logic for a process in the application	Java / Python
3.	Application Logic-2	Logic for a process in the application	IBM Watson STT service
4.	Application Logic-3	Logic for a process in the application	IBM Watson Assistant
5.	Database	Data Type, Configurations etc.	MySQL, NoSQL, etc.
6.	Cloud Database	Database Service on Cloud	IBM DB2, IBM Cloudant etc.
7.	File Strage	File storage requirements	IBM Block Storage or Other Storage Service

8.	External API-1	Purpose of External API used in the application	IBM Weather API, etc.
9.	External API-2	Purpose of External API used in the application	Aadhar API, etc.
10.	Machine Learning Model	Purpose of Machine Learning Model	Object Recognition Model, etc.
11.	Infrastructure (Server / Cloud)	Application Deployment on Local System / Cloud Local Server Configuration: Cloud Server Configuration :	Local, Cloud Foundry, Kubernetes, etc.

Table-2: Application Characteristics:

S.No	**Characteristics**	**Description**	**Technology**
1.	Open-Source Frameworks	List the open-source frameworks used	Technology of Opensource framework
2.	Security Implementations	List all the security / access controls implemented, use of firewalls etc.	e.g. SHA-256, Encryptions, IAM Controls, OWASP etc.
3.	Scalable Architecture	Justify the scalability of architecture (3 – tier, Microservices)	Technology used
4.	Availability	Justify the availability of application (e.g. use of load balancers, distributed servers etc.)	Technology used
5.	Performance	Design consideration for the performance of the application (number of requests per sec, use of Cache, use of CDN's) etc.	Technology used

5.3 USER STORIES



User Type	Functional Requirement (Epic)	User Story Number	User Story / Task	Acceptance criteria	Priority
Customer (Mobile user)	Registration	USN-1	As a user, I can register for the application by entering my email, password, and confirming my password.	I can access my account / dashboard	High
		USN-2	As a user, I will receive confirmation email once I have registered for the application	I can receive confirmation email & click confirm	High
		USN-3	As a user, I can register for the application through Facebook	I can register & access the dashboard with Facebook Login	Low
		USN-4	As a user, I can register for the application through Gmail		Medium
	Login	USN-5	As a user, I can log into the application by entering email & password		High
	Dashboard				

CHAPTER 6
PROJECT PLANNING & SCHEDULING

6.1 SPRINT PLANNING AND ESTIMATION

ProductBacklog,Sprint Schedule,andEstimation

Sprint	Functional Requirement (Epic)	user story Number	UserStory/Task	Story Points	Priori ty
Sprint-1	UserPanel	USN-1	The user will go in into the website and go through the Services available on the webpage	20	High
Sprint-2	Adminpanel	USN-2	The role of the admin is to check out the database about the availability and have a track of all the things that the users are going to service	20	High
Sprint-3	ChatBot	USN-3	The user can directly talk to Chatbot regarding the services. Get the recommendations based on information provided by the user.	20	High
Sprint-4	finaldelivery	USN-4	Container of applications using docker kubernetes and deployment the application. Create the documentation and final submit the application	20	High

6.2 PROJECT PLANNING

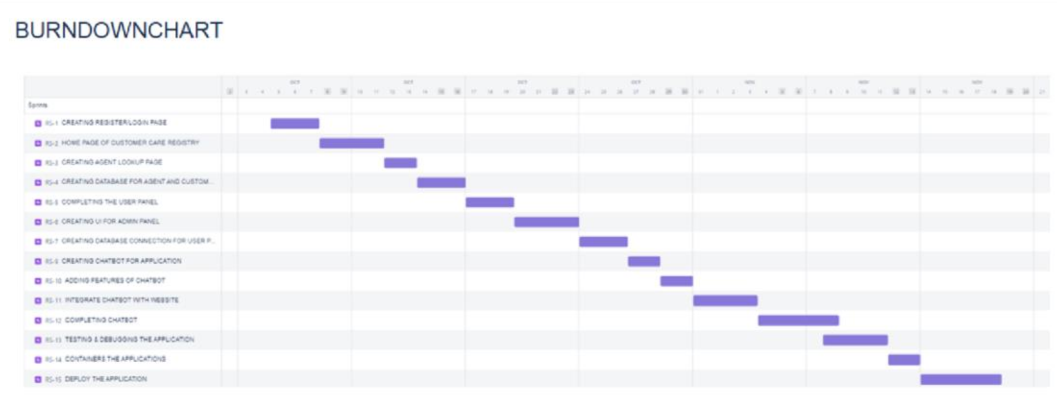
Sprint	Total story points	Duration	Sprint start date	Sprint end date	Story point completion	Sprint release date
Sprint 1	20	6Days	24Oct2022	29Oct2022		29Oct2022
Sprint 2	20	6Days	31Oct2022	05Nov2022		05Nov2022
Sprint 3	20	6Days	07Nov2022	12Nov2022		12Nov2022
Sprint 4	20	6Days	14Nov2022	19Nov2022		19Nov2022

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) periteration unit (story points per day)

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

BURNDOWNCHART



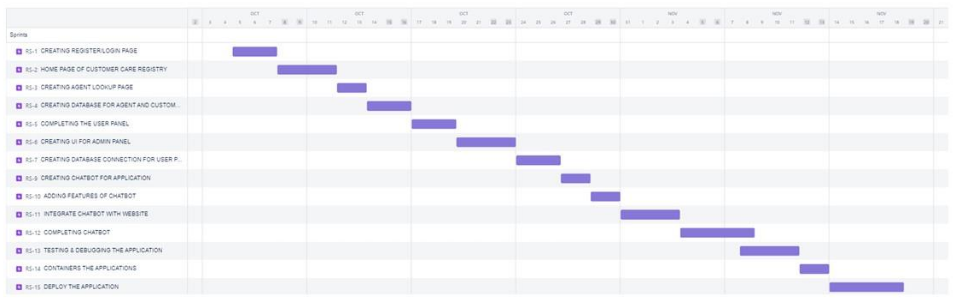
6.3 SPRINT DELIVEYRY SCHEDULE

TITLE	DESCRIPTION	DATE
Literature Survey &InformationGathering	Literature survey on theselected project & gatheringinformation by referring the,technical papers,researchpublicationsetc.	28SEPTEMBER2022
PrepareEmpathyMap	Prepare Empathy Map Canvasto capture the user Pains &Gains, Prepare list of problemstatements	24SEPTEMBER2022
Ideation	List the by organizing thebrainstormingsessionandprioritize the top 3 ideasbased on the feasibility &importance.	25SEPTEMBER2022
ProposedSolution	Preparetheproposedsolutiondocument, which includes thenovelty, feasibility of idea,business model, social impact,scalabilityofsolution,etc.	23SEPTEMBER2022
ProblemSolutionFit	Prepare problem - solution fitdocument.	30SEPTEMBER2022
SolutionArchitecture	Prepare solution architecturedocument.	28SEPTEMBER2022
CustomerJourney	Prepare the customer journeymaps to understand the userinteractions & experienceswith the application (entry toexit).	20OCTOBER2022

FunctionalRequirement	Prepare the functionalrequirementdocument.	8OCTOBER2022
DataFlowDiagrams	Draw the data flowdiagrams and submit forreview.	9OCTOBER2022
TechnologyArchitecture	Prepare thetechnology architecturediagram.	10OCTOBER2022
Prepare Milestone & ActivityList	Preparethemilestones&activitylistoftheproject.	22OCTOBER2022
Project Development-DeliveryofSprint-1,2,3&4	Develop & submit thedevelopedcodebytestingit.	

6.4 REPORTS FROM JIRAA

BURNDOWNCHART



CHAPTER 7
CODING & SOLUTIONING

7.1 FEATURE 1

CUSTOMER LOGIN PAGE

The login page allows a user to gain access to an application by entering their
username and password or by authenticating using a social media login.
A user navigates to an application and is presented with a login page as a way to gain access to the application. There are two possible results:
■ Authentication is successful and the user is directed to the application
landing page.
■ Authentication fails and the user remains on the login page. If
authentication fails, the screen should show an informational or error
message about the failure.
A user is automatically logged out due to inactivity. In this event, they will be returned to the login page, which will display an informational message explaining what happened. Once the user logs in again, they should be taken back to the page they were previously on before being timed out. Thirty minutes is the suggested duration before a session timeout, but this is subject to change based on your product's security requirements.

CUSTOMER REGISTER PAGE

All customers that have created online account need to provide customer registration information, which is used to capture customer profile as well as generate and issue commercial registration certificate. After logging-in to the system for the first time, customers are provided with a wizard-like interface that allows them to provide information required for capturing customer profile and generating commercial registration certificate.

7.2 FEATURE 2

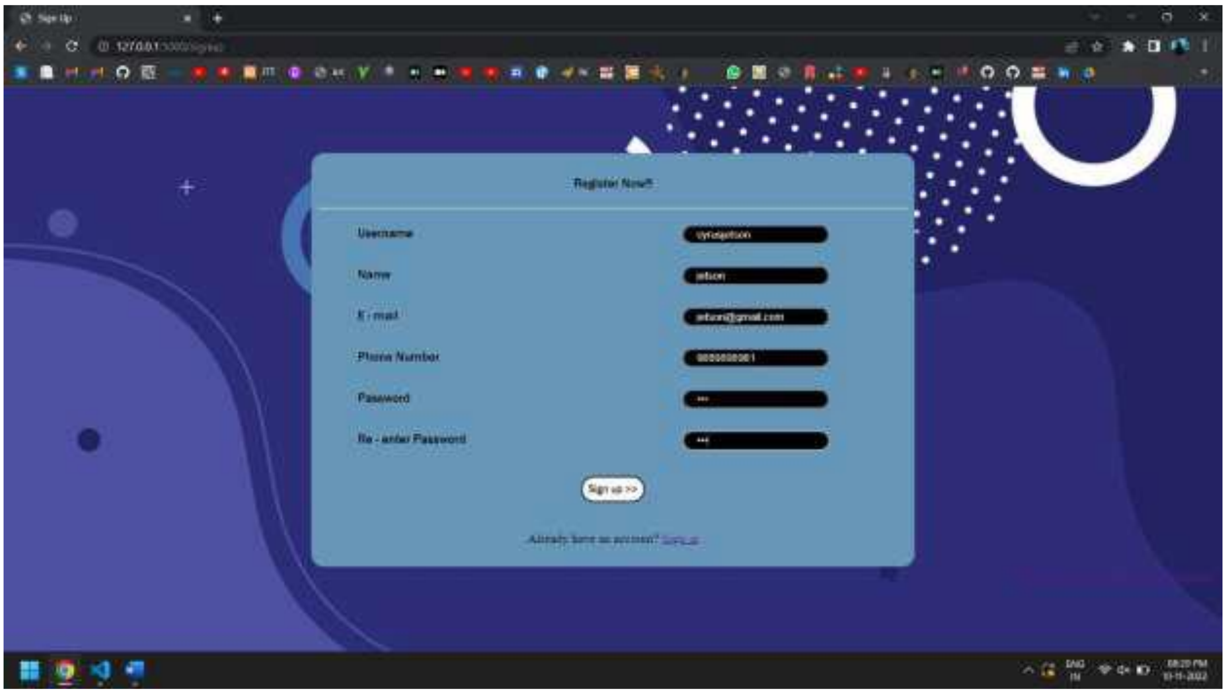
DASHBOARD

A customer dashboard allows the business to evaluate any number of metrics about their customers. They can also look at the metrics collected over time to see how the business is doing. Additionally, a customer dashboard allows a business to test different hypotheses about the structure of their sales, marketing and customer service operations. The data they collect can help them identify what works well for their business and identify areas of improvement. It can also help them make decisions about how various elements are operating within their company.

CHAPTER 8

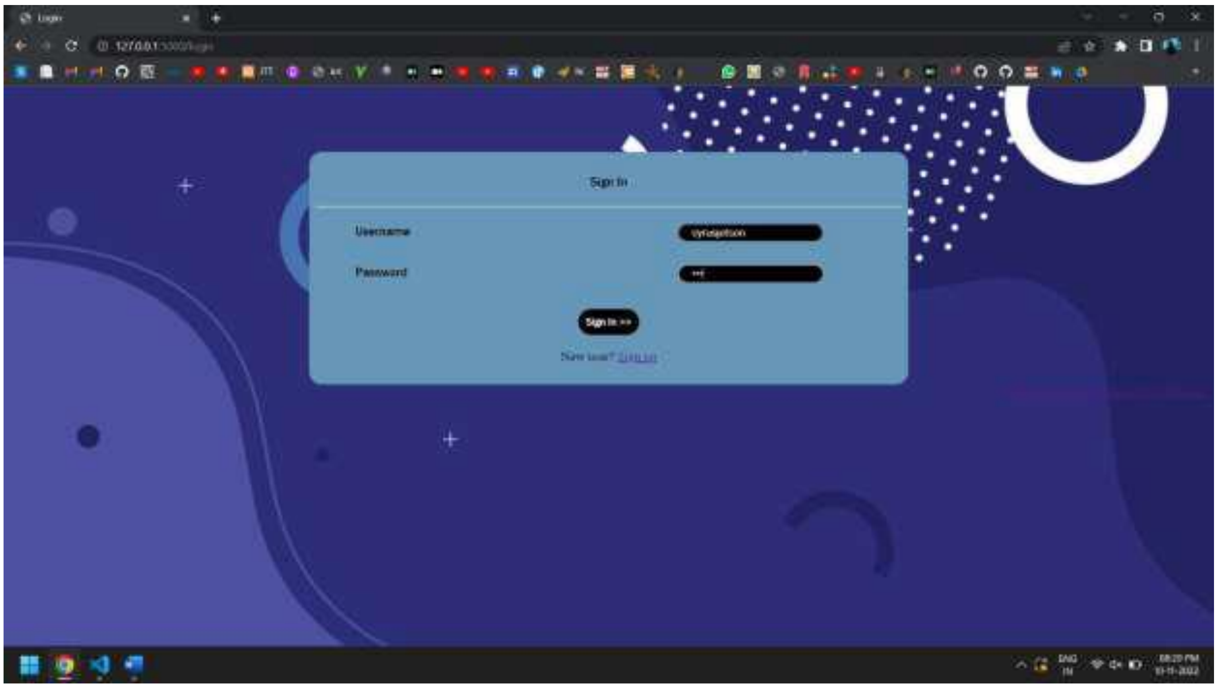
TESTING

8.1 TEST CASES



Register Now!!

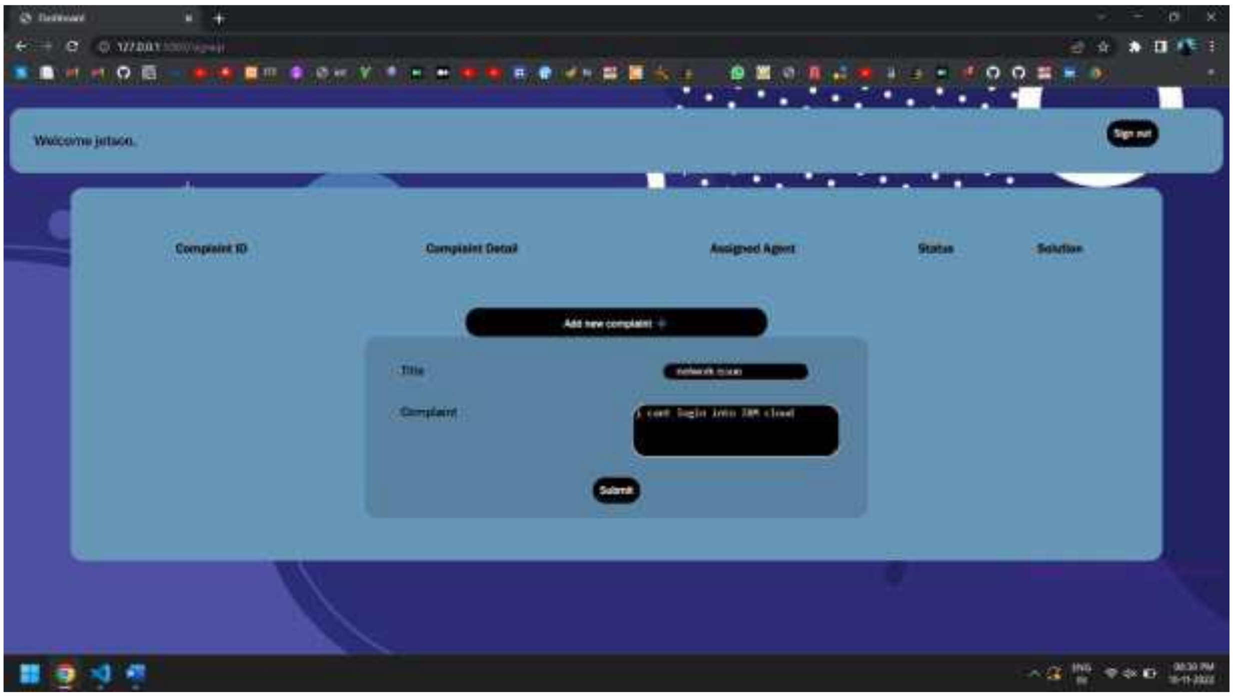
Username	cyrusjetson
Name	jetson
E - mail	jetson@gmail.com
Phone Number	8888888881
Password	***
Re - enter Password	***



Sign In

Username	cyrusjetson
Password	***

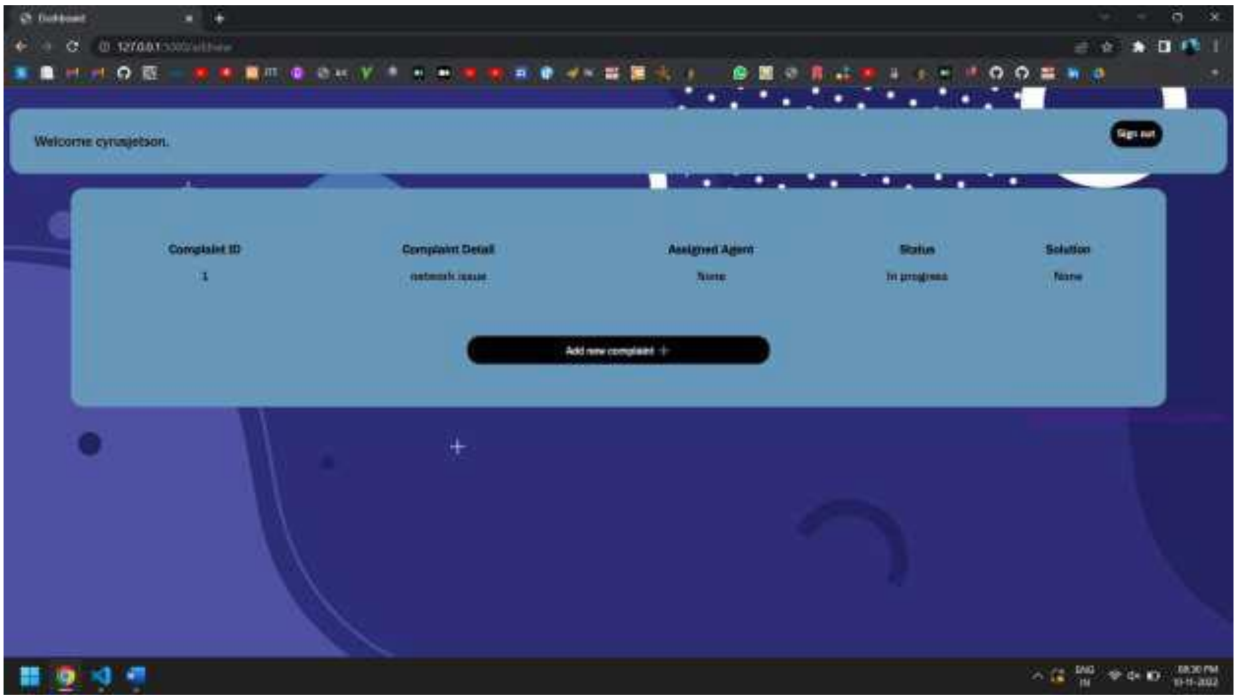
TEAM ID: PNT2022TMID13422


Welcome jetson.

Complaint ID	Complaint Detail	Assigned Agent	Status	Solution

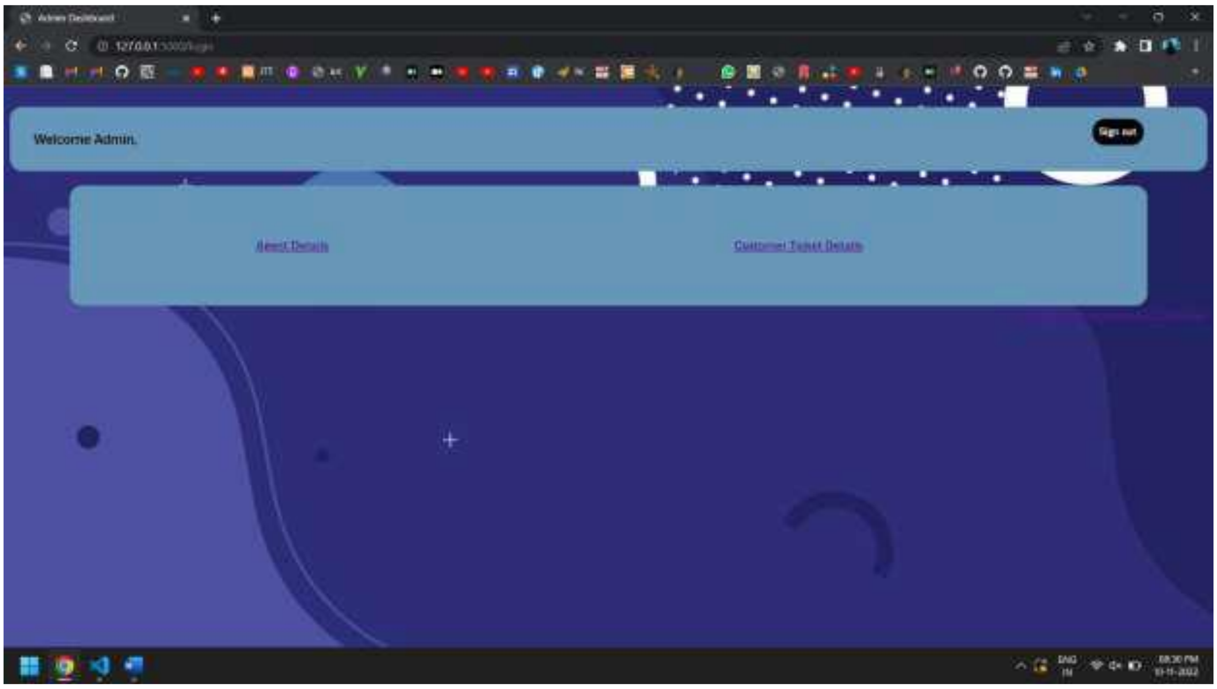
Title: network issue

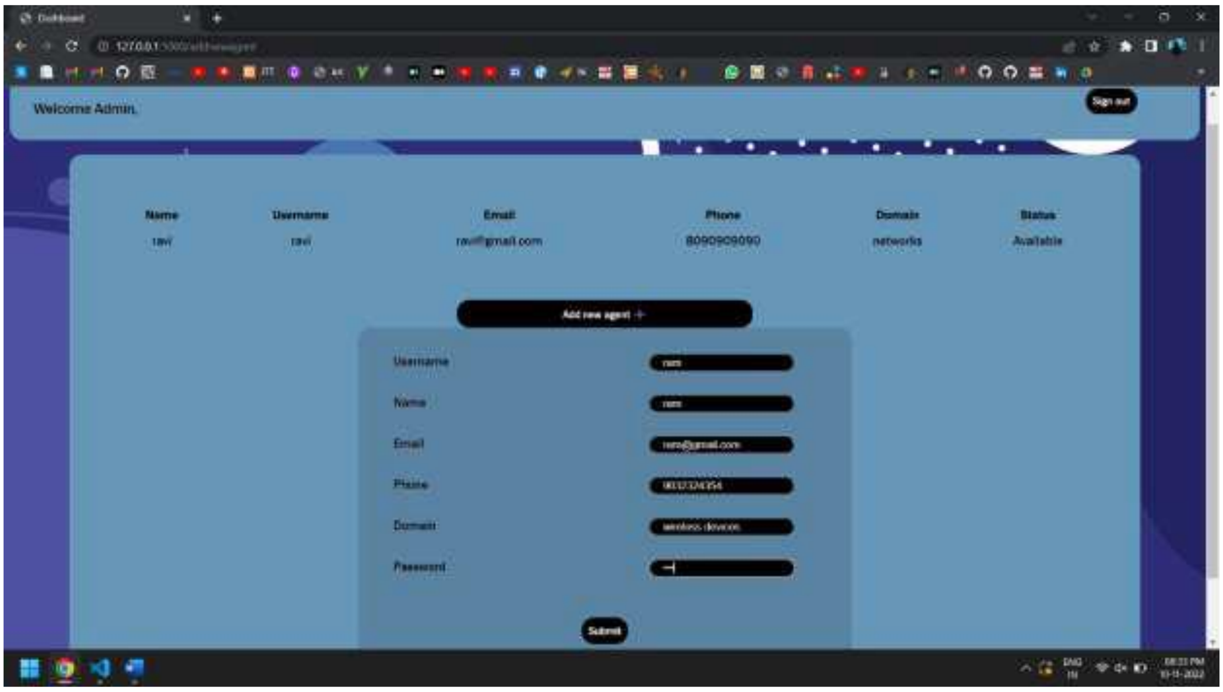
Complaint: i cant login into IBM cloud


Welcome cyrusjetson.

Complaint ID	Complaint Detail	Assigned Agent	Status	Solution
1	network issue	None	In progress	None

TEAM ID: PNT2022TMID13422

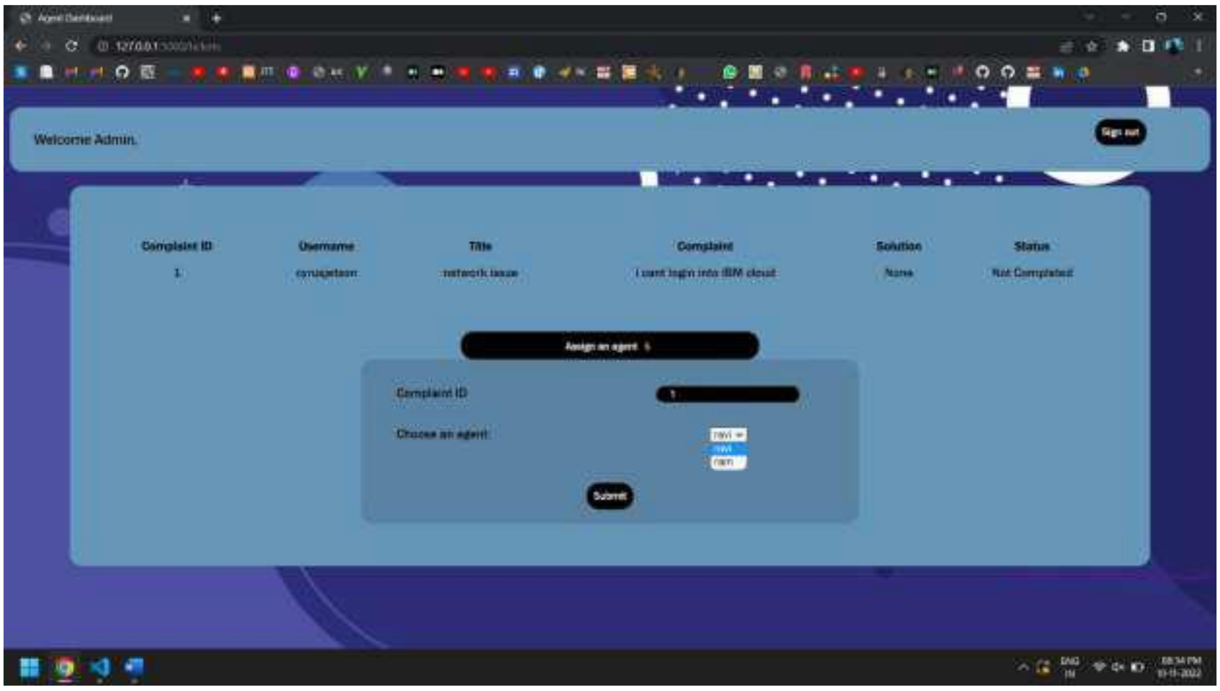

Welcome Admin.


Welcome Admin.

Name	Username	Email	Phone	Domain	Status
ravi	ravi	ravi@gmail.com	8090909090	networks	Available

Username	ram
Name	ram
Email	ram@gmail.com
Phone	9032324354
Domain	wireless devices
Password	

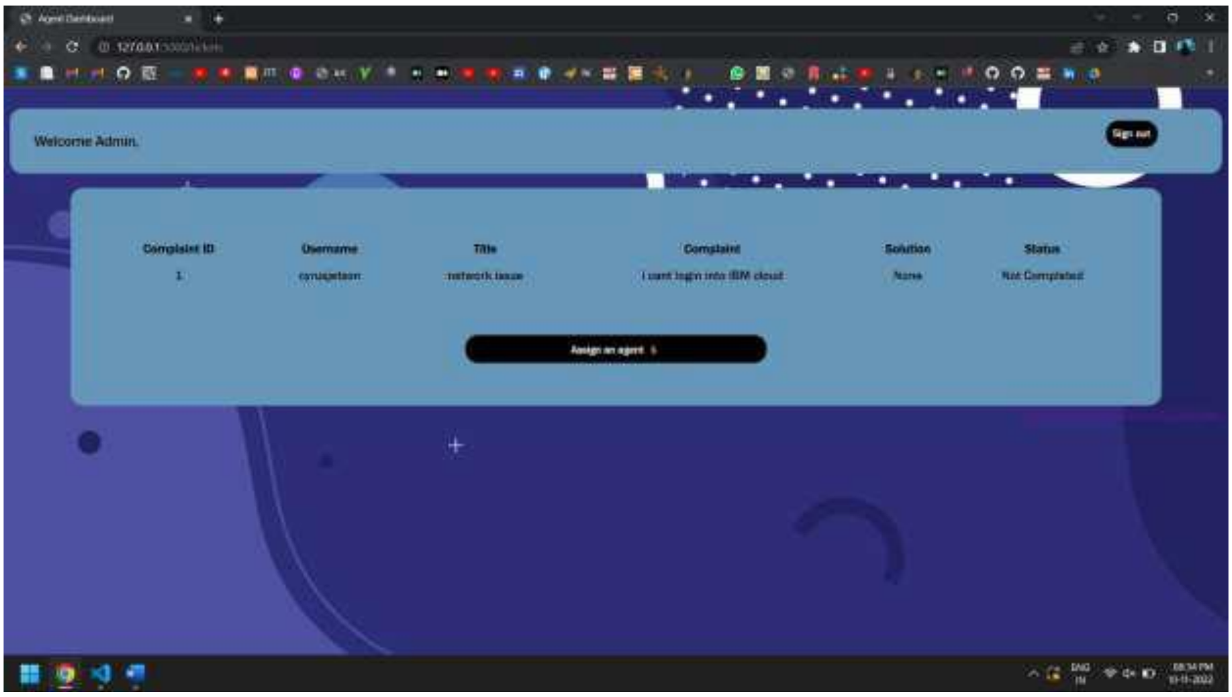
TEAM ID: PNT2022TMID13422


Welcome Admin.

Complaint ID	Username	Title	Complaint	Solution	Status
1	cyrusjetson	network issue	I cant login into IBM cloud	None	Not Completed

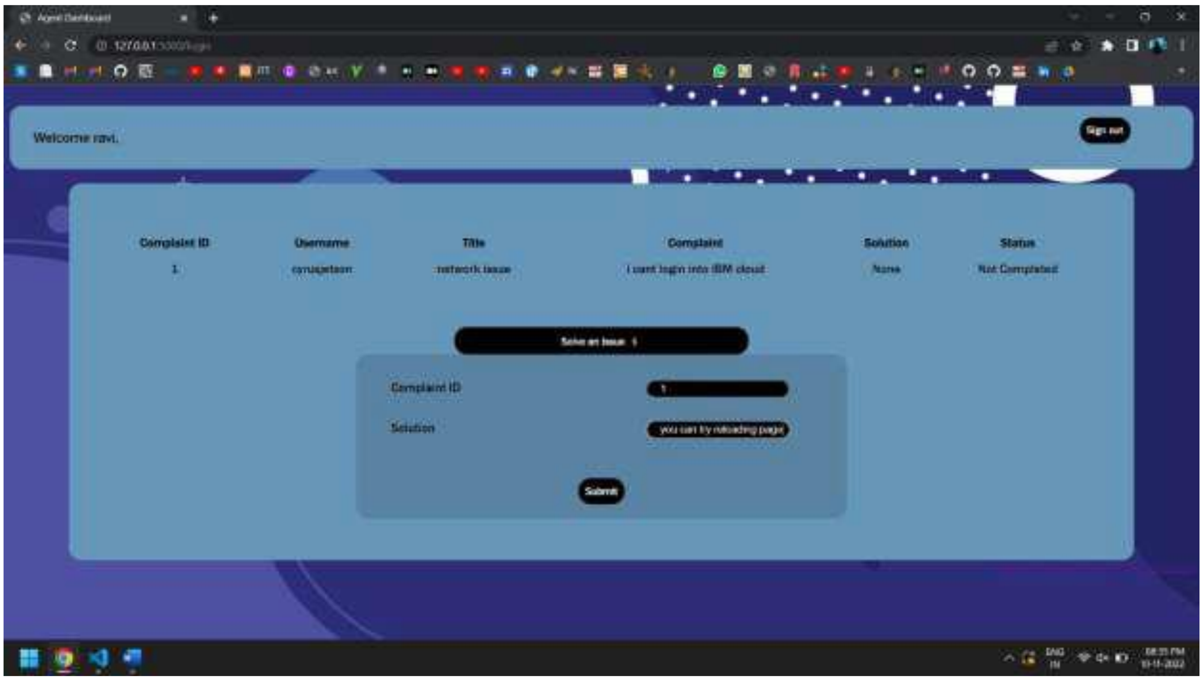
Complaint ID: 1

Choose an agent: ravi


Welcome Admin.

Complaint ID	Username	Title	Complaint	Solution	Status
1	cyrusjetson	network issue	I cant login into IBM cloud	None	Not Completed

TEAM ID: PNT2022TMID13422


Welcome ravi.

Complaint ID	Username	Title	Complaint	Solution	Status
1	ravuapteam	network issue	I cant login into IBM cloud	None	Not Completed

Complaint ID	1
Solution	you can try reloading page

8.2 USER ACCEPTANCE TESTING

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 (UAT).

Defect Analysis

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

Resolution	Severi ty 1	Severi ty 2	Severi ty 3	Severi ty 4	Subtot al
By Design	10	4	5	5	24
Duplicate	2	0	2	0	4
External	5	3	2	1	11
Fixed	15	5	5	10	35
Not Reproduced	0	0	0	0	0
Skipped	0	0	1	1	2
Won't Fix	0	5	2	1	8
Totals	32	17	17	18	84

Test Case Analysis

This report shows the numberof test cases that have passed, failed,and untested

TEAM ID: PNT2022TMID13422

Section	**Total Cas es**	**Not Test ed**	**Fail**	**Pass**
Print Engine	10	0	0	10
ClientApplication	40	0	0	40
Security	5	0	0	2

CHAPTER 9
RESULTS

9.1 PERFORMANCE METRICS

The Customer Feedback metric

The most important metric for your contact centre and the broader business is customer feedback. From the business perspective, you want to know if your customers are going to stay or leave and if they will recommend your business to their friends and colleagues. If you are the customer you want the right or incorrect processes improved so that you get the best experience. From the perspective of the employee, you want processes that will help deliver good service to customers.

The Service Efficiency Metric

The next thing is service efficiency. The main thing is to measure service efficiency at a macro level rather than at an individual level to avoid bad behaviours. The most common story is the service agent that passes customers to other agents to improve their average handling time. As a service organisation, you want to give your employees the tools that they need to provide the best experience for customers.

Quality, Consistency and Compliance

The next of the 4 key metrics for customer service focuses on the effective running of a contact centre or customer service organisation is quality, consistency and compliance. If you’re a customer you want to ensure that you get the same experience each time they come into contact with the service team. As a customer in addition to great service, you want to ensure that processes are in place to protect and safeguard sensitive information.

Employee Engagement

The final metric that we believe to be important is employee engagement. How engaged is the team that is interacting with customers? We have found that engaged employees provide better service and help deliver increased customer satisfaction. As a business, you want to ensure that employees are being managed properly and that employees.

CHAPTER 10

ADVANTAGES AND DISADVANTAGES

ADVANTAGES:

1.Customer loyalty

Loyal customers have many benefits for businesses. 91% of customers say a positive customer service experience makes them more likely to make a further purchase (source: Salesforce Research). Also, investing in new customers is five times more expensive than retaining existing ones (source: Invesp). Creating loyal customers through good customer service can therefore provide businesses with lucrative long-term relationships.

2. Increase profits

These long-term customer relationships established through customer service can help businesses become more profitable. Businesses can grow revenues between 4% and 8% above their market when they prioritise better customer service experiences (source: Bain & Company). Creating a better customer service experience than those offered by competitors can help businesses to standout in their market place, and in turn make more sales.

3. Customer recommendations

Providing good customer service can create satisfied customers, who are then more likely to recommend the business to others. 94% of customers will recommend a company whose service they rate as “very good” (source: Qualtrics XM Institute). This is useful, as 90% of customers are influenced by positive reviews when buying a product (source: Zendesk). Customers recommending a company through word of mouth or online reviews can improve the credibility of the business.

4. Increase conversion

Good customer service can help businesses turn leads into sales. 78% of customers say they have backed out of a purchase due to a poor customer experience (source: Glance). It is therefore safe to assume that providing good customer service will help to increase customer confidence and in turn increase conversion.

5. Improve public image

Customer service can help businesses to improve the public perception of the brand, which can then provide protection if there is a slip up. 78% of customers will forgive a company for a mistake after receiving excellent service (source: Salesforce Research). Meanwhile, almost 90% of customers report trusting a company whose service they rate as "very good." On the other hand, only 16% of those who give a "very poor" rating trust companies to the same degree(source: Qualtrics XM Institute). Creating positive customer experiences is vital in gaining customer trust and creating a strong public image.

Disadvantages:

The Consumer Protection Act in India has numerous restrictions and drawbacks, which are listed in this article.

Only services for which a particular payment has been made are covered under the consumer protection act. However, it does not protect medical professionals, or hospitals, and covers cases when this act does not apply to free medical care. This act does not apply to mandatory services, such as water supply, that are provided by state agencies.

Only two clauses related to the supply of hazardous materials are covered by this act. Consumer redress is not given any power by the consumer protection act.

The consumer protection act focuses on the supply of ineffective products, but there are no strict regulations for those who produce it.

CHAPTER 11
CONCLUSION

- ✓ It is a web-enabled project.
- ✓ With this project the details about the productwill be given to the customers in detail with in a short span of time.
- ✓ Queries regarding the product or the serviceswill also be clarified.
- ✓ It provides more knowledgeabout the varioustechnologies.
- ✓ Seek and promote customer feedback

CHAPTER 12

FUTURE SCOPE

The future of customer service increasingly will be driven by technology innovations. Ideally, these new technologies will improve customer and agent experiences, along with business metrics like revenue, operational costs and customer ratings. But businesses often miss the mark when they try to move too quickly with too much technology, ultimately resulting in consumer diss~~atisfaction rather than elation.~~

Customer expectations for what defines a good experience stay fairly consistent over time, but the approach to providing that experience changes. Meanwhile, advanced technologies, largely driven by artificial intelligence, analytics and automation, arm companies with new techniques for driving customer satisfaction and loyalty.

How are customer expectations changing?

Over the years, customer expectations generally haven't changed. Customers want to be served quickly and completely on the first try. If they're speaking to a human agent, they want a friendly, knowledgeable interaction -- the goal being to resolve the customer's problem or answer their question quickly and easily.
Drilling down, however, customer expectations are influenced by the changes in technology. Just five years ago, for example, few customers would have expected to communicate with businesses over SMS or messaging services from their mobile phone. Now, it's common because consumers use those applications in other areas of their lives.

Perhaps the biggest area of change is the interaction channels used to communicate with businesses. Today, 58% of customers interact with digital channels, and 50% of all transactions start digitally, according to Metrigy's research. Consumers now expect to have several options for communication, including messaging apps like Facebook Messenger, WeChat, WhatsApp and Apple Business Chat, along with web chat, SMS, screen-sharing, video, self-service knowledge bases and FAQs, and chatbots.

Consumers also are more open to proactive outreach -- whether the customer service team is inviting them to a customer loyalty program or reminding them of an appointment -- so long as those reminders, confirmations and invitations arrive at their preferred application.

How is technology influencing the future of customer service?

Businesses can provide quick, contextual customer service with tools like analytics, agent assist and workforce optimization (WFO) for agents in the contact center, as well as customer-facing tools such as self-service, chatbots and personalization.

At the core of most new technologies are the three As -- artificial intelligence, automation and analytics. Working together, these technologies can provide organizations with advice, context, results and metrics for improvement, but it's imperative to roll out deployments cautiously instead of trying to boil the ocean. Businesses will then be able to identify how well these customer service tools address specific problems or opportunities and evaluate their performance through analytics.

Technology should improve customer service, customer experiences and agent satisfaction and continue to raise the bar for meeting customer expectations.

CHAPTER 13

APPENDIX

Source code

Admin.html

```
{% extends 'base.html' %}
{% block head %}
<title>
Admin Dashboard
</title>
{% endblock %}
{% block body %}
<!-- things
div 1
welcome jetson, sign out
div 2
your complaints status
add new complaint -->

<div class="fordashboardtop">
<div class="fordashboardtopelements1">
Welcome Admin,
</div>
<div class="fordashboardtopelements2">
<a href="/login"><button class="forbutton">Sign out</button></a>
</div>
</div>
<br>
<div class="outerofdashdetails">
<div class="fordashboarddetails">
<br>
<!-- table of customers complaints -->
<table class="fortable">
<thead>
</thead>
<tbody>
<tr>
<td class="pad">
<a href="/agents">Agent Details</a>
</td>
<td class="pad">
<a href="/tickets">Customer Ticket Details</a>
</td>
</tr>
</tbody>
</table>
<br>
</div>
</div>
```

Agentdas.html

```
{% extends 'base.html' %}
{% block head %}
```

TEAM ID: PNT2022TMID13422

```
<title>
Agent Dashboard
</title>
{% endblock %}
{% block body %}
<!-- things
div 1
welcome jetson, sign out
div 2
your complaints status
add new complaint -->
<br>
<!-- <br>
{% for i in range(11) %}
{{ i }}
{% endfor %}
<br>
{% for i in complaints %}
{{ i['USERNAME'] }}
<br>
{% for j in i.values() %}
{{ j }}
{% endfor %}
<br>
{% endfor %} -->
<div class="fordashboardtop">
<div class="fordashboardtopelements1">
Welcome {{ name }},
</div>
<div class="fordashboardtopelements2">
<a href="/login"><button class="forbutton">Sign out</button></a>

</div>
<br>
<div class="outerofdashdetails">
<div class="fordashboarddetails">
<br>
<!-- table of customers complaints -->
<table class="fortable">
<thead>
<th>Complaint ID</th>
<th class="pad">Username</th>
<th>Title</th>
<th>Complaint</th>
<th>Solution</th>
<th>Status</th>
</thead>
<tbody>
{% for i in complaints %}
<tr>
<td class="pad">
{{ i['C_ID'] }}
</td>
<td class="pad">
{{ i['USERNAME'] }}
</td>
```

```
<td>
{{ i['TITLE'] }}
</td>
<td>
{{ i['COMPLAINT'] }}
</td>
<td>
{{ i['SOLUTION'] }}
</td>
<td>
{% if i['STATUS'] == 1 %}
Completed
{% else %}
Not Completed
{% endif %}
</td>
</tr>
{% endfor %}
</tbody>
</table>
<br>
<center>
<div class="fordashboarddetails">

<button type="button" class="collapsible">Solve an Issue
 ⚡ </button>
<div class="content">
<br>
<form action="/updatecomplaint" method="post">
<div class="forform">
<div class="textinformleft">
Complaint ID
</div>
<div class="textinformright">
<input type="name" name="cid">
</div>
</div>
<div class="forform">
<div class="textinformleft">
Solution
</div>
<div class="textinformright">
<input type="text" name="solution">
</div>
</div>
<br>
<br>
<div>
<button class="forbutton" type="submit"> Submit
</button>
</div>
</form>
<br>
</div>
</div>
</center>
```

```
</div>
</div>
{% endblock %}
```

Agents.html

```
{% extends 'base.html' %}
{% block head %}
<title>
Dashboard
</title>

{% endblock %}
{% block body %}
<!-- things
div 1
welcome jetson, sign out
div 2
your complaints status
add new complaint -->
<br>
<!-- <br>
{% for i in range(11) %}
{{ i }}
{% endfor %}
<br>
{% for i in complaints %}
{{ i['USERNAME'] }}
<br>
{% for j in i.values() %}
{{ j }}
{% endfor %}
<br>
{% endfor %} -->
<div class="fordashboardtop">
<div class="fordashboardtopelements1">
Welcome Admin,
</div>
<div class="fordashboardtopelements2">
<a href="/login"><button class="forbutton">Sign out</button></a>
</div>
</div>
<br>
<div class="outerofdashdetails">
<div class="fordashboarddetails">
<br>
<!-- table of customers complaints -->
<table class="fortable">
<thead>
<th class="pad">Name</th>

<th>Username</th>
<th>Email</th>
<th>Phone</th>
<th>Domain</th>
<th>Status</th>
</thead>
```

```
<tbody>
{% for i in agents %}
<tr>
<td class="pad">
{{ i['NAME'] }}
</td>
<td class="pad">
{{ i['USERNAME'] }}
</td>
<td>
{{ i['EMAIL'] }}
</td>
<td>
{{ i['PHN'] }}
</td>
<td>
{{ i['DOMAIN'] }}
</td>
<td>
{% if i['STATUS'] == 1 %}
Assigned to job
{% elif i['STATUS'] == 0 %}
not Available
{% else %}
Available
{% endif %}
</td>
</tr>
{% endfor %}
</tbody>
</table>
<br>
<center>
<div class="fordashboarddetails">
+</button>
<button type="button" class="collapsible">Add new agent
<div class="content">
<br>
<form action="/addnewagent" method="post">
<div class="forform">
<div class="textinformleft">
Username

</div>

<div class="textinformright">
<input type="name" name="username">
</div>
</div>
<div class="forform">
<div class="textinformleft">
Name
</div>
<div class="textinformright">
<input type="name" name="name">
</div>
```

```
</div>
<div class="forform">
<div class="textinformleft">
Email
</div>
<div class="textinformright">
<input type="name" name="email">
</div>
</div>
<div class="forform">
<div class="textinformleft">
Phone
</div>
<div class="textinformright">
<input type="name" name="phone">
</div>
</div>
<div class="forform">
<div class="textinformleft">
Domain
</div>
<div class="textinformright">
<input type="name" name="domain">
</div>
</div>
<div class="forform">
<div class="textinformleft">
Password
</div>
<div class="textinformright">
<input type="name" name="password">
</div>
</div>
</button>
<br>
<br>
<div>
<button class="forbutton" type="submit"> Submit
</div>
</form>

<br>

</div>
</div>
</center>
</div>
</div>
{% endblock %}
```

Dashboard.html

```
{% extends 'base.html' %}
{% block head %}
<title>
Dashboard
</title>
{% endblock %}
```

TEAM ID: PNT2022TMID13422

```
{% block body %}
<!-- things
div 1
welcome jetson, sign out
div 2
your complaints status
add new complaint -->
<br>
<!-- <br>
{% for i in range(11) %}
{{ i }}
{% endfor %}
<br>
{% for i in complaints %}
{{ i['USERNAME'] }}
<br>
{% for j in i.values() %}
{{ j }}
</div>
</div>
</center>
</div>
</div>
{% endblock %

{% endfor %}
<br>
{% endfor %} -->
<div class="fordashboardtop">
<div class="fordashboardtopelements1">
Welcome {{ name }},
</div>
<div class="fordashboardtopelements2">
<a href="/login"><button class="forbutton">Sign out</button></a>
</div>
</div>
<br>
<div class="outerofdashdetails">
<div class="fordashboarddetails">
<br>
<!-- table of customers complaints -->
<table class="fortable">
<thead>
<th>Complaint ID</th>
<th class="pad">Complaint Detail</th>
<th>Assigned Agent</th>
<th>Status</th>
<th>Solution</th>
</thead>
<tbody>
{% for i in complaints %}
<tr>
<td>
{{ i['C_ID'] }}
</td>
<td class="pad">
```

```
{{ i['TITLE'] }}
</td>
<td>
{{ i['ASSIGNED_AGENT'] }}
</td>
<td>
{% if i['STATUS'] == 1 %}
Completed
{% elif i['STATUS'] == 0 %}
Not completed
{% else %}
In progress
{% endif %}
</td>
<td>
{{ i['SOLUTION'] }}
</td>
</tr>

{% endfor %}

</tbody>
</table>
<br>
<center>
<div class="fordashboarddetails">
+</button>
<button type="button" class="collapsible">Add new complaint
<div class="content">
<br>
<form action="/addnew" method="post">
<div class="forform">
<div class="textinformleft">
Title
</div>
<div class="textinformright">
<input type="name" name="title">
</div>
</div>
<div class="forform">
<div class="textinformleft">
Complaint
</div>
<div class="textinformright">
<textarea name="des"
style="border-radius: 1rem;width:
90%;height: 150%;background-color: black;color: white;"></textarea>
</div>
</div>
</button>
<br>
<br>
<div>
<button class="forbutton" type="submit"> Submit
</div>
</form>
```

TEAM ID: PNT2022TMID13422

```
<br>
</div>
</div>
</center>
</div>
</div>
{% endblock %}
```

Login.html

```
{% extends 'base.html' %}
{% block head %}
<title>
Login
</title>
{% endblock %}
{% block body %}
<div class="forpadding">
<!-- for box of the signup form -->
<div class="sign">
<div>
<p class="fortitle">
Sign In
</p>
<hr>
<form action="/login" method="post">
<div class="forform">
<div class="textinformleft">
Username
</div>
<div class="textinformright">
<input type="name" name="username">
</div>
</div>
<div class="forform">
<div class="textinformleft">
Password
</div>
<div class="textinformright">
<input type="password" name="pass">
</div>
</div>
<br>
<div>
<button class="forbutton" type="submit"> Sign In >></button>
</div>
</form>

<br>

<div>
New user? <a href="/signup">Sign up</a>
</div>
<br>
</div>
</div>
</div>
{% endblock %}
```

TEAM ID: PNT2022TMID13422

Signup.html

```
{% extends 'base.html' %}
{% block head %}
<title>
Sign Up
</title>
{% endblock %}
{% block body %}
<div class="forpadding">
<!-- for box of the signup form -->
<div class="sign">
<div>
<p class="fortitle">
Register Now!!
</p>
<hr>
<form action="/signup" method="post">
<div class="forform">
<div class="textinformleft">
Username
</div>
<div class="textinformright">
<input type="name" name="username">
</div>
</div>
<div class="forform">
<div class="textinformleft">
Name
</div>
<div class="textinformright">

<input type="name" name="name">

</div>
</div>
<div class="forform">
<div class="textinformleft">
E - mail
</div>
<div class="textinformright">
<input type="name" name="email">
</div>
</div>
<div class="forform">
<div class="textinformleft">
Phone Number
</div>
<div class="textinformright">
<input type="name" name="phn">
</div>
</div>
<div class="forform">
<div class="textinformleft">
Password
</div>
<div class="textinformright">
```

```
<input type="password" name="pass">
</div>
</div>
<div class="forform">
<div class="textinformleft">
Re - enter Password
</div>
<div class="textinformright">
<input type="password" name="repass">
</div>
</div>
<br>
<div>
<button class="forbutton" type="submit"> Sign up >></button>
</div>
</form>
<br>
<div>
{{msg}}
</div>
<br>
<div>
Already have an account? <a href="/login">Sign in</a>
</div>
<br>
</div>
</div>

{% endblock %}
```

Tickets.html

```
{% extends 'base.html' %}
{% block head %}
<title>
Agent Dashboard
</title>
{% endblock %}
{% block body %}
<!-- things
div 1
welcome jetson, sign out
div 2
your complaints status
add new complaint -->
<br>
<!-- <br>
{% for i in range(11) %}
{{ i }}
{% endfor %}
<br>
{% for i in complaints %}
{{ i['USERNAME'] }}
<br>
{% for j in i.values() %}
{{ j }}
{% endfor %}
```

TEAM ID: PNT2022TMID13422

```
<br>
{% endfor %} -->
<div class="fordashboardtop">
<div class="fordashboardtopelements1">
Welcome Admin,
</div>

<div class="fordashboardtopelements2">
<a href="/login"><button class="forbutton">Sign out</button></a>
</div>
</div>
<br>
<div class="outerofdashdetails">
<div class="fordashboarddetails">
<br>
<!-- table of customers complaints -->
<table class="fortable">
<thead>
<th>Complaint ID</th>
<th class="pad">Username</th>
<th>Title</th>
<th>Complaint</th>
<th>Solution</th>
<th>Status</th>
</thead>
<tbody>
{% for i in complaints %}
<tr>
<td>{{ i['C_ID'] }}</td>
<td class="pad">
{{ i['USERNAME'] }}
</td>
<td>
{{ i['TITLE'] }}
</td>
<td>
{{ i['COMPLAINT'] }}
</td>
<td>
{{ i['SOLUTION'] }}
</td>
<td>
{% if i['STATUS'] == 1 %}
Completed
{% else %}
Not Completed
{% endif %}
</td>
</tr>
{% endfor %}
</tbody>
</table>
<br>
<center>

<button type="button" class="collapsible">Assign an agent
<div class="content">
```

TEAM ID: PNT2022TMID13422

```
<br>
<form action="/assignagent" method="post">
<div class="forform">
<div class="textinformleft">
Complaint ID
</div>
<div class="textinformright">
<input type="name" name="ccid">
</div>
</div>
<div class="forform">
<div class="textinformleft">
<label for="agent">Choose an agent:</label>
</div>
<div class="textinformright">
<select name="agent" id="agent">
{% for i in freeagents %}
<option value={{ i['USERNAME'] }}>{{
i['USERNAME'] }}</option>
{% endfor %}
</select>
</div>
</div>
</button>
<br>
<br>
<div>
<button class="forbutton" type="submit"> Submit
</div>
</form>
<br>
</div>
</div>
</center>
</div>
</div>
{% endblock %}
```

App.py:

```
from flask import Flask, render_template, request, redirect, session, url_for

from flask import Flask, render_template, request, redirect, session
import ibm_db
import re
app = Flask( name )
import ibm_db
import re
app = Flask( name )
# for connection
# conn= ""

app.secret_key = 'a'
print("Trying to connect...")
conn = ibm_db.connect("DATABASE=bludb;HOSTNAME=824dfd4d-99de-440d-9991-
629c01b3832d.bs2io90l08kqb1od8lcg.databases.appdomain.cloud;PORT=30119;SECURIT
Y=
```

TEAM ID: PNT2022TMID13422

```
SSL;SSLServerCertificate=DigiCertGlobalRootCA.crt;UID=qvk70423;PWD=saDlGasU4iQ
y1
yvk;", '', '')
print("connected..")
@app.route('/signup', methods=['GET', 'POST'])
def signup():
global userid
msg = ''
if request.method == 'POST':
username = request.form['username']
name = request.form['name']
email = request.form['email']
phn = request.form['phn']
password = request.form['pass']
repass = request.form['repass']
print("inside checking")
print(name)
if len(username) == 0 or len(name) == 0 or len(email) == 0 or len(phn)
== 0 or len(password) == 0 or len(repass) == 0:
msg = "Form is not filled completely!!"
print(msg)
return render_template('signup.html', msg=msg)
elif password != repass:
msg = "Password is not matched"
print(msg)
return render_template('signup.html', msg=msg)
elif not re.match(r'[a-z]+', username):
msg = 'Username can contain only small letters and numbers'

print(msg)
return render_template('signup.html', msg=msg)
elif not re.match(r'[^@]+@[^@]+\.[^@]+', email):
msg = 'Invalid email'
print(msg)
return render_template('signup.html', msg=msg)
elif not re.match(r'[A-Za-z]+', name):
msg = "Enter valid name"
print(msg)
return render_template('signup.html', msg=msg)
elif not re.match(r'[0-9]+', phn):
msg = "Enter valid phone number"
print(msg)
return render_template('signup.html', msg=msg)
sql = "select * from users where username = ?"
stmt = ibm_db.prepare(conn, sql)
ibm_db.bind_param(stmt, 1, username)
ibm_db.execute(stmt)
account = ibm_db.fetch_assoc(stmt)
print(account)
if account:
msg = 'Acccount already exists'
else:
userid = username
insert_sql = "insert into users values(?,?,?,?,?)"
prep_stmt = ibm_db.prepare(conn, insert_sql)
ibm_db.bind_param(prep_stmt, 1, username)
ibm_db.bind_param(prep_stmt, 2, name)
ibm_db.bind_param(prep_stmt, 3, email)
ibm_db.bind_param(prep_stmt, 4, phn)
ibm_db.bind_param(prep_stmt, 5, password)
ibm_db.execute(prep_stmt)
print("successs")
msg = "succesfully signed up"
return render_template('dashboard.html', msg=msg, name=name)
else:
return render_template('signup.html')
@app.route('/dashboard')
def dashboard():
return render_template('dashboard.html')
@app.route('/login', methods=["GET", "POST"])
def login():
global userid
msg = ''
if request.method == 'POST':
username = 'POST':
username = request.form['username']
userid = username
password = request.form['pass']

if userid == 'admin' and password == 'admin':
print("its admin")
return render_template('admin.html')
else:
sql = "select * from agents where username = ? and password = ?"
stmt = ibm_db.prepare(conn, sql)
ibm_db.bind_param(stmt, 1, username)
ibm_db.bind_param(stmt, 2, password)
ibm_db.execute(stmt)
account = ibm_db.fetch_assoc(stmt)
print(account)
if account:
session['Loggedin'] = True
session['id'] = account['USERNAME']
userid = account['USERNAME']
session['username'] = account['USERNAME']
msg = 'logged in successfully'
# for getting complaints details
sql = "select * from complaints where assigned_agent = ?"
complaints = []
stmt = ibm_db.prepare(conn, sql)
ibm_db.bind_param(stmt, 1, username)
ibm_db.execute(stmt)
dictionary = ibm_db.fetch_assoc(stmt)
while dictionary != False:
complaints.append(dictionary)
dictionary = ibm_db.fetch_assoc(stmt)
print(complaints)
return render_template('agentdash.html',
name=account['USERNAME'], complaints=complaints)
sql = "select * from users where username = ? and password = ?"
stmt = ibm_db.prepare(conn, sql)
ibm_db.bind_param(stmt, 1, username)
```

TEAM ID: PNT2022TMID13422

```
ibm_db.bind_param(stmt, 2, password)
ibm_db.execute(stmt)
account = ibm_db.fetch_assoc(stmt)
print(account)
if account:
session['Loggedin'] = True
session['id'] = account['USERNAME']
userid = account['USERNAME']
session['username'] = account['USERNAME']
msg = 'logged in successfully'
# for getting complaints details
sql = "select * from complaints where username = ?"
complaints = []
stmt = ibm_db.prepare(conn, sql)
ibm_db.bind_param(stmt, 1, username)
ibm_db.execute(stmt)
dictionary = ibm_db.fetch_assoc(stmt)

while dictionary != False:
# print "The ID is : ", dictionary["EMPNO"]
# print "The Name is : ", dictionary[1]
complaints.append(dictionary)
dictionary = ibm_db.fetch_assoc(stmt)
print(complaints)
return render_template('dashboard.html', name=account['USERNAME'],
complaints=complaints)
else:
msg = 'Incorrect user credentials'
return render_template('dashboard.html', msg=msg)
else:
return render_template('login.html')
@app.route('/addnew', methods=["GET", "POST"])
def add():
if request.method == 'POST':
title = request.form['title']
des = request.form['des']
try:
sql = "insert into complaints(username,title,complaint)
values(?,?,?)"
stmt = ibm_db.prepare(conn, sql)
ibm_db.bind_param(stmt, 1, userid)
ibm_db.bind_param(stmt, 2, title)
ibm_db.bind_param(stmt, 3, des)
ibm_db.execute(stmt)
except:
print(userid)
print(title)
print(des)
print("cant insert")
sql = "select * from complaints where username = ?"
complaints = []
stmt = ibm_db.prepare(conn, sql)
ibm_db.bind_param(stmt, 1, userid)
ibm_db.execute(stmt)
dictionary = ibm_db.fetch_assoc(stmt)
while dictionary != False:
```

TEAM ID: PNT2022TMID13422

```
# print "The ID is : ", dictionary["EMPNO"]
# print "The Name is : ", dictionary[1]
complaints.append(dictionary)
dictionary = ibm_db.fetch_assoc(stmt)
print(complaints)
return render_template('dashboard.html', name=userid,
complaints=complaints)
@app.route('/agents')
def agents():
sql = "select * from agents"

agents = []
stmt = ibm_db.prepare(conn, sql)
ibm_db.execute(stmt)
dictionary = ibm_db.fetch_assoc(stmt)
while dictionary != False:
agents.append(dictionary)
dictionary = ibm_db.fetch_assoc(stmt)
return render_template('agents.html', agents=agents)
@app.route('/addnewagent', methods=["GET", "POST"])
def addagent():
if request.method == 'POST':
username = request.form['username']
name = request.form['name']
email = request.form['email']
phone = request.form['phone']
domain = request.form['domain']
password = request.form['password']
try:
sql = "insert into agents values(?,?,?,?,?,?,2)"
stmt = ibm_db.prepare(conn, sql)
ibm_db.bind_param(stmt, 1, username)
ibm_db.bind_param(stmt, 2, name)
ibm_db.bind_param(stmt, 3, email)
ibm_db.bind_param(stmt, 4, phone)
ibm_db.bind_param(stmt, 5, password)
ibm_db.bind_param(stmt, 6, domain)
ibm_db.execute(stmt)
except:
print("cant insert")
sql = "select * from agents"
agents = []
stmt = ibm_db.prepare(conn, sql)
ibm_db.execute(stmt)
dictionary = ibm_db.fetch_assoc(stmt)
while dictionary != False:
agents.append(dictionary)
dictionary = ibm_db.fetch_assoc(stmt)
return render_template('agents.html', agents=agents)
@app.route('/updatecomplaint', methods=["GET", "POST"])
def updatecomplaint():
if request.method == 'POST':
cid = request.form['cid']
solution = request.form['solution']
try:
sql = "update complaints set solution =? where c_id = ? and
```

TEAM ID: PNT2022TMID13422

```
assigned_agent=?"
stmt = ibm_db.prepare(conn, sql)
ibm_db.bind_param(stmt, 1, solution)

ibm_db.bind_param(stmt, 2, cid)
ibm_db.bind_param(stmt, 3, userid)
ibm_db.execute(stmt)
sql = "update agents set status =3 where username=?"
stmt = ibm_db.prepare(conn, sql)
ibm_db.bind_param(stmt, 1, userid)
ibm_db.execute(stmt)
except:
print("cant insert")
sql = "select * from complaints where assigned_agent = ?"
complaints = []
stmt = ibm_db.prepare(conn, sql)
ibm_db.bind_param(stmt, 1, userid)
ibm_db.execute(stmt)
dictionary = ibm_db.fetch_assoc(stmt)
while dictionary != False:
complaints.append(dictionary)
dictionary = ibm_db.fetch_assoc(stmt)
# print(complaints)
return render_template('agentdash.html', name=userid,
complaints=complaints)
@app.route('/tickets')
def tickets():
sql = "select * from complaints"
complaints = []
stmt = ibm_db.prepare(conn, sql)
ibm_db.execute(stmt)
dictionary = ibm_db.fetch_assoc(stmt)
while dictionary != False:
complaints.append(dictionary)
dictionary = ibm_db.fetch_assoc(stmt)
sql = "select username from agents where status <> 1"
freeagents = []
stmt = ibm_db.prepare(conn, sql)
ibm_db.execute(stmt)
dictionary = ibm_db.fetch_assoc(stmt)
while dictionary != False:
freeagents.append(dictionary)
dictionary = ibm_db.fetch_assoc(stmt)
print(freeagents)
return render_template('tickets.html', complaints=complaints,
freeagents=freeagents)
@app.route('/assignagent', methods=['GET', 'POST'])
def assignagent():
if request.method == "POST":
ccid = request.form['ccid']
agent = request.form['agent']
print(ccid)

print(agent)
try:
sql = "update complaints set assigned_agent =? where c_id = ?"
stmt = ibm_db.prepare(conn, sql)
```

TEAM ID: PNT2022TMID13422

```
ibm_db.bind_param(stmt, 1, agent)
ibm_db.bind_param(stmt, 2, ccid)
ibm_db.execute(stmt)
sql = "update agents set status =1 where useername = ?"
stmt = ibm_db.prepare(conn, sql)
ibm_db.bind_param(stmt, 1, userid)
ibm_db.execute(stmt)
except:
print("cant update")
return redirect(url_for('tickets'))
@app.route('/about')
def about():
return render_template('about.html')
@app.route('/privacyterms')
def privacyterms():
return render_template('privacyterms.html')
if name == " main "

app.run(debug=True)
```

GITHUB LINK

https://github.com/IBM-EPBL/IBM-Project-28620-1660114403

DEMO LINK

https://drive.google.com/file/d/1_wCvtLk7l9aGg1tbrEC7XlHUOrRggq9f/view?usp=sharing