TEAM ID:PNT2022TMID45240

CUSTOMER CARE REGISTRY

TEAM DETAILS:

Team ID   : PNT2022TMID45240

College Name   : MAM COLLEGE OF ENGINEERING AND TECHNOLOGY

Department   : INFORMATION TECHNOLOGY

TEAM MEMBERS :

- *SASIDHARAN S*
- *RAGUL R*
- *NITHISH V*
- *GOWSEELAN K*

CONTENT

1.   *INTRODUCTION*

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 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 value proposition.*

PURPOSE OF 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 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 service as opposed to as Customer*

- *Customer Service may be provided by a Service Representatives Customer Service is normally an integral part of a company's customer value proposition*

LITERATURE SURVEY

Literature Survey

Customer Care Registry

Abstract:

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 research 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 com

Introduction:

Customer satisfaction is an important factor in the phenomenon of the construction process and customer relationship. As Construction Companys increases its antagonism, greater attention continues to be placed on customer relationships and satisfied customers. Customer satisfaction accredits construction companies to differentiate themselves from their competitors and create sustainable advantage. Those who buy the goods or services provided by companies are customers. In other words, a customer is a stakeholder of an organization who provides payment in exchange for the offer provided to him by the organization with the aim of fulfilling a need and to maximize satisfaction. Sometimes the term customer and consumer are confusing. Companies use numerous forms of customer satisfaction accessions in developing and monitoring service offerings in order to manage and improve customer relationships. Measuring customer satisfaction has several benedictions for organizations: Improvement in communication between parties and enable mutual agreement, A recognition of the demand of improvement in the process, Better understanding of the problems, Interpretation of progress towards the goal and Monitoring and reporting accomplished results and changes.

Literature Survey:

Customer Satisfaction :

Customer Satisfaction is afeeling of pleasure or disappointment of someone who appears after comparing the performance (results) of the product thought against the expected performance results (Kotler 2006:177, 2019)]. The dimension or indicator of Customer Satisfaction is if the performance is below the expectations of eating dissatisfied

Product Quality:

Product Quality is the ability of a product to perform its functions, including the overall product, reliability, accuracy, ease of operation, repair, and other attributes.

Dimensions or indicators of Product Quality is that customers can get all the benefits of the products offered to him.(Novia et al., 2020) Product Quality is a dynamic condition that is interconnected although it can have different definitions but in essence has a specification that can cause a sense of satisfaction that exceeds expectations for customers who use it.(Rahman et al., 2018). Product Quality has been researched by many previous researchers, including (Irma like Saputri, 2017; Novia et al., 2020;

Conclusion:

Based on theory, relevant articles and discussions can then be formulated hypotheses for further research: Product Quality affects Customer Satisfaction. Quality of Service affects Customer Satisfaction. Product Quality affects the Level of Complaints. The quality of service affects the level of complaints.Customer Satisfaction affects the Level of Complaints.

Suggestion:

Based on the conclusion above, the advice in this article is that there are many other factors that affect Customer Satisfaction and Complaint Levels, apart from Customer Satisfaction and Complaint Levels at all types and levels of organizations or companies, therefore further studies are needed to look for other factors that can affect Customer Satisfaction and Complaint levels other than those researched in this

Reference :

Andersson, R., Eriksson, H.,& Torstensson, H. (2006). Similarities and differences between TQM, six sigma and lean. *The TQM Magazine*, *18*(3), 282-296. https://doi.org/10.1108/0954478061 0660004 [Crossref], [Google Scholar]

Alba, S., Dillip, A., Hetzel, M.W., Mayumana, I., Mshana, C., Makemba, A., Alexander, M., Obrist, B., Schulze, A., Kessy, F., Mshinda, H., & Lengeler, C. (2010, June 15). Improvements in access to malaria treatment in Tanzania following community, retail sector and health facility interventions – A user perspective. *Malaria Journal*, *9*, 163. https://doi.org/10.1186/14 75-2875-9-163 [Crossref], [PubMed], [Web of Science ®], [Google Scholar]

Agus, A. (2004). TQM as a focus for improving overall service performance and customer satisfaction: An empirical study on a public service sector in Malaysia. *Total Quality Management & Business Excellence*, *15*(5–6), 615–628. https://doi.org/10.1080/1478336041 0001680107 [Taylor & Francis Online], [Web of Science ®], [Google Scholar]

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.

References

1. help desk

2. live chat box support

Problem Statement Definition

A problem statement is a concise description of the problem or issues a project seeks to address. The problem statement identifies the current state, the desired future state and any gaps between the two. A problem statement is an important communication tool that can help ensure everyone working on a project knows what the problem they need to address is and why the project is important.

PROBLEM STATEMENTS

AGENT :

Admin → Can → Track the work assigned to the agent → Make sure that → Customer ticket will be resolved
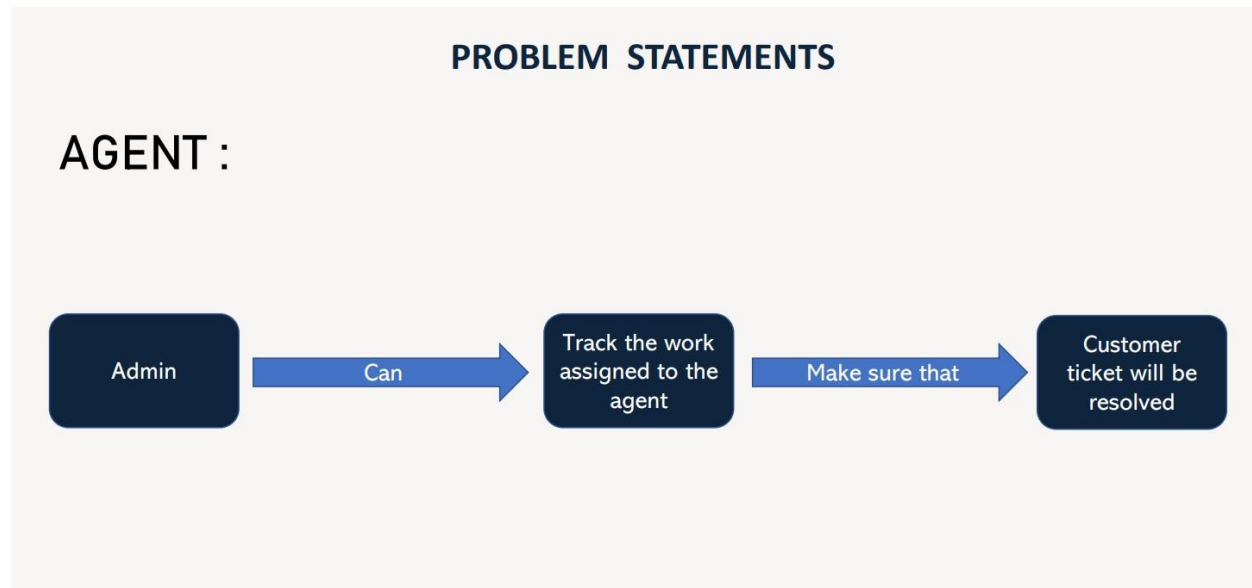
3.   *IDEATION & PROPOSED SOLUTION*

Empathy Map Canvas

An empathy map is **a collaborative tool teams can use to gain a deeper insight into their customers**. *Much like a user persona, an empathy map can represent a group of users, such as a customer segment. The empathy map was originally created by Dave Gray and has gained much popularity within the agile community.*
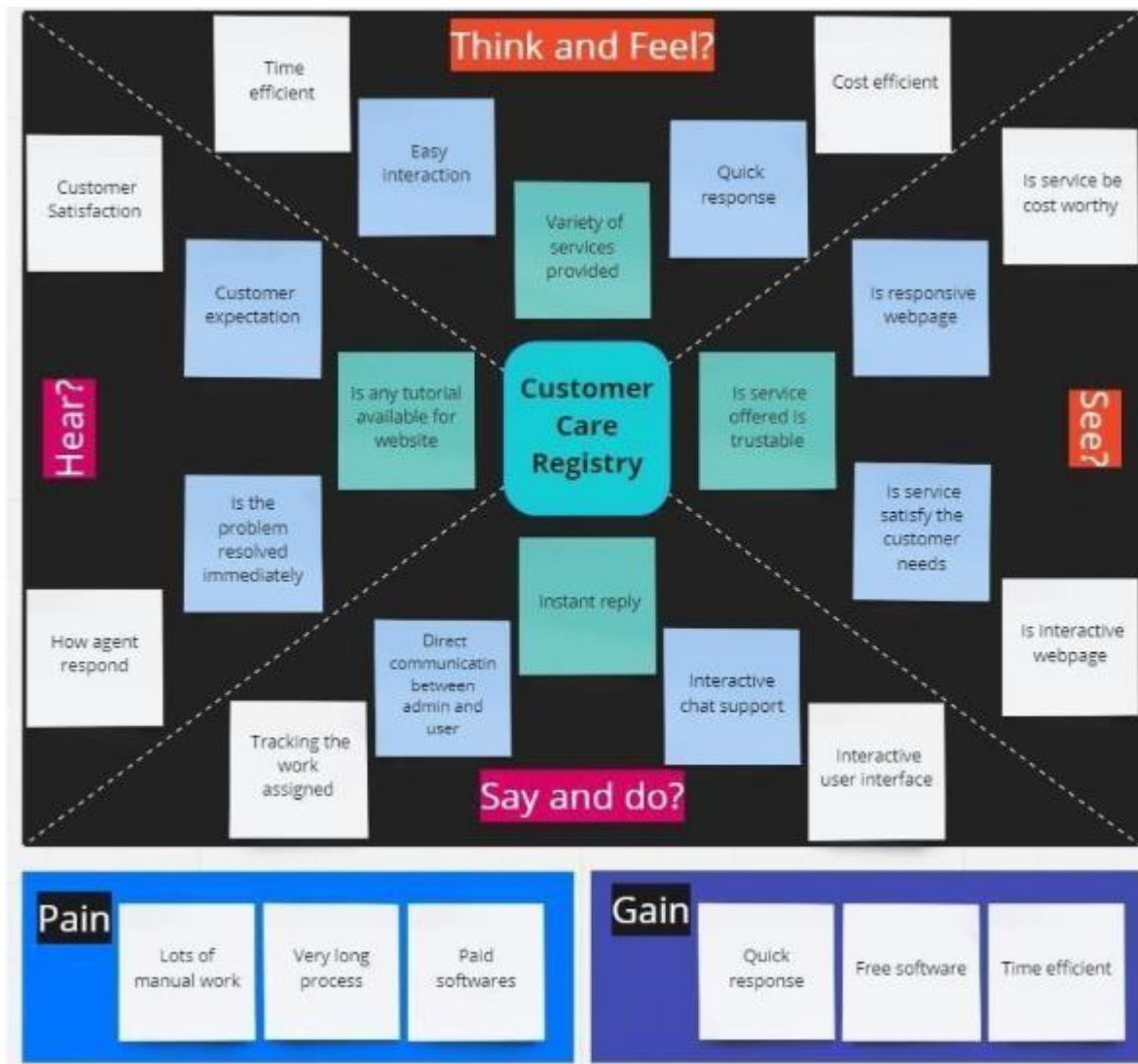
Ideation & Brainstorming

Ideation and the practise of brainstorming, a particular method for coming up with fresh ideas, are frequently closely related. The main distinction between ideation and brainstorming is that whereas brainstorming is nearly often done in groups, ideation is typically seen as being more of a solitary endeavour. A group of people are frequently gathered for a brainstorming session to generate either fresh, general ideas or solutions to specific problems or circumstances.

On instance, a large firm that has discovered it is the target of a significant lawsuit might wish to consult with its top executives to come up with ideas for how to

publicly respond to the case being filed.

In a brainstorming session, participants are encouraged to freely share any ideas that may come to mind. According to the theory, by coming up with a lot of ideas, the brainstorming group is more likely to find a workable solution to the problem they are trying to solve.

With the creation of various brainstorming software tools, such Brightidea and Idea wake, the distinction between ideation and brainstorming has gotten a little bit more hazy. These software applications are made to inspire staff members to come up with fresh suggestions for enhancing business operations and, eventually, bottom-line profitability. The applications frequently mix the ideation and brainstorming processes in that they can be used by individual employees, but businesses can replicate brainstorming sessions by having multiple employees use the software to produce fresh ideas for a particular problem.

Brainstorm & idea prioritization

Use this template in your own brainstorming sessions so your team can unleash their imagination and start shaping concepts even if you're not sitting in the same room.

- **10 minutes** to prepare
- **1 hour** to collaborate
- **2-8 people** recommended

Share template feedback

Before you collaborate

A little bit of preparation goes a long way with this session. Here's what you need to do to get going.

🕐 10 minutes

A **Team gathering**
Define who should participate in the session and send an invite. Share relevant information or pre-work ahead.

B **Set the goal**
Think about the problem you'll be focusing on solving in the brainstorming session.

C **Learn how to use the facilitation tools**
Use the Facilitation Superpowers to run a happy and productive session.

Open article →

---

1. Define your problem statement

What problem are you trying to solve? Frame your problem as a How Might We statement. This will be the focus of your brainstorm.

🕐 5 minutes

PROBLEM

How might we can solve the issue given by the customer?

Key rules of brainstorming
To run a smooth and productive session

- Stay in topic.
- Defer judgment.
- Go for volume.
- Encourage wild ideas.
- Listen to others.
- If possible, be visual.

SASIDHARAN S

address your customer business	always keep personalized message	open & make personal
old business connect	win customer loyalty	reward loyal customers
provide fast	convenient customer support	offer new level of support

RAGUL R

engagement on social media	customers generic robo replies	provide web help options
offer 24/7 customer support	make an irresistible offer	offer a content
engagement everywhere	offers bulletproof	provide a [personal]

NITHISH V

free return shipping	customers want rewards	make feedback easy
actively ask customers	share feedback and email dept	reply to all feedback
both positive and negative	focus on common complaints	focus on provide solution

GOWSEELAN K

remember the name of person	ease experience	offer live support
make tempting offers	business feedback	create memorable customer experience
customers business interaction	buyer and customer loyalty	showcase take care customer loyalty

Person 5

Person 6

Person 7

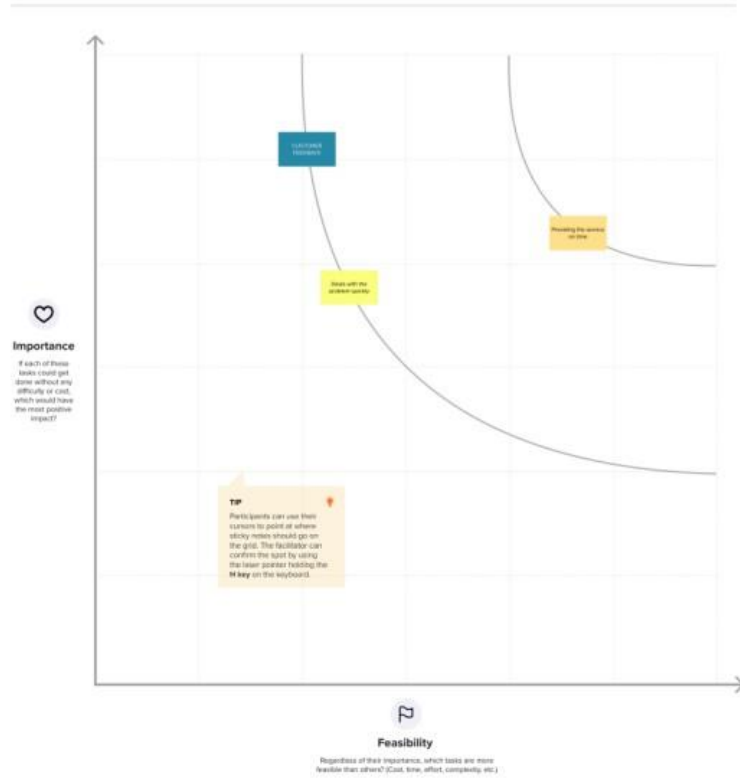## Person 8

4

Prioritize

Your team should all be on the same page about what's important moving forward. Place your ideas on this grid to determine which ideas are important and which are feasible.

🕐 20 minutes

Importance

If each of these tasks could get done without any difficulty or cost, which would have the most positive impact?

TIP

Participants can use their cursors to point at where sticky notes should go on the grid. The facilitator can confirm the spot by using the laser pointer holding the **H key** on the keyboard.

Feasibility

Regardless of their importance, which tasks are more feasible than others? (Cost, time, effort, complexity, etc.)

After you collaborate

You can export the mural as an image or pdf to share with members of your company who might find it helpful.
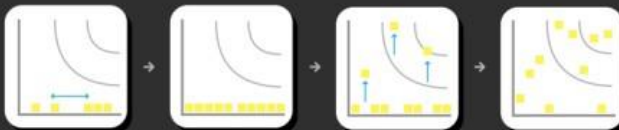
Quick add-ons

Share the mural
Share a view link to the mural with stakeholders to keep them in the loop about the outcomes of the session.

Export the mural
Export a copy of the mural as a PNG or PDF to attach to emails, include in slides, or save in your drive.

Keep moving forward

Strategy blueprint
Define the components of a new idea or strategy.
Open the template →

Customer experience journey map
Understand customer needs, motivations, and obstacles for an experience.
Open the template →

Strengths, weaknesses, opportunities & threats
Identify strengths, weaknesses, opportunities, and threats (SWOT) to develop a plan.
Open the template →

☐ Share template feedback

Proposed Solution

S.NO.	PARAMETER	DESCRIPTION
01	Problem Statement (Problem to be solved)	To solve customer issues using Cloud Application Development.
02	Idea / Solution description	Assigned Agent routing can be solved by directly routing to the specific agent about the issue using the specific Email. Automated Ticket closure by using daily sync of the daily database. Status Shown to the Customer can display the status of the ticket to the customer. Regular data retrieval in the form of retrieving lost data.
03	Idea / Solution description	Assigned Agent Routing, Automated Ticket Closure, Status Shown to the Customer, and Backup data in case of failures.
04	Social Impact / Customer Satisfaction	Customer Satisfaction, Customer can track their status and Easy agent communication.
05	Business Model (Revenue Model)	● Key Partners are Third-party applications, agents, and customers. ● Activities held as Customer Service, System Maintenance. ● Key Resources support Engineers, Multi-channel. ● Customer Relationship have 24/7 Email Support, Knowledge-based channel. ● Cost Structure expresses Cloud Platform, Offices
06	Scalability of the Solution	The real goal of scaling customer service is providing an environment that will allow your customer service specialists to be as efficient as possible. An environment where they will be able to spend less time on grunt work and more time on actually resolving critical customer issues

Problem Solution fit

1. Problem-Solution Fit - this occurs when you have evidence that customers care about certain jobs, pains, and gains. At this stage you've proved the existence of a problem and have designed a value proposition that addresses your customers' jobs, pains and gains. Unfortunately you still do not have clear evidence that your customer really care enough about your value proposition enough to buy it.

Problem-Solution fit canvas 2.0

1. CUSTOMER SEGMENT(S) (CS)
Who is your customer?

1) Customers who are not able to solve them Own complaints of what they are facing.
2) Customers who do not know the solution of their questions they get.

6. CUSTOMER (CC)
When constrains prevent your customer from taking action or limit their choices of solutions? i.e. spending power, budget, no cash, network connection, available devices.

1) This application will be supported by almost all the devices.
2) The solution we propose will have an alert via email feature, if expense exceed the given limit.
3) This solution also provides insights in a graphical way.

5. AVAILABLE SOLUTIONS (AS)
Which solutions are available to the customers when they face the problem or need to get the job done? What have they tried in the past? What pros & cons do these solutions have? i.e. pen and paper is an alternative to digital notetaking

1) By reading the guidelines properly.
2) offer a solution and give options whenever possible.
3) Address to issue within the company.
4) By communicating properly

Explore AS.
Define CS, fit into

2. JOBS-TO-BE-DONE / PROBLEMS (J&P)
Which jobs-to-be-done (or problems) do you address for your customer? There could be more than one; explore different sides.

1) The application allow the customers to find the solution for their queries.
2) They will able to categorize their expenses.
3) They will be also given option for the general questions.
4) They also get the free solution where we provide our agents.

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? i.e. customers have to do it because of the change in regulations.

1) Lot of customers don't know the guidelines for their problems.
2) Some customers have of lack of knowledge.
3) Not knowing the answer to a question.
4) not reading the guidelines properly

7. BEHAVIOUR (BE)
What does your customer do to address the problem and get the job done? i.e. directly related: find the right solar panel installer, calculate usage and benefits; indirectly associated: customers spend free time on volunteering work (i.e. Greenpeace)

1) Make sure he/she reads the guidelines properly.
2) Make sure they find a proper solution fot their queries.

Focus on J&P, tap into BE, understand

3. TRIGGERS (TR)
What triggers customers to act? i.e. seeing their neighbour installing solar panels, reading about a more efficient solution in the news.

1) Customers can know to solve their solutions.

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.
If you are working on a new business proposition, then keep it blank until you fill in the canvas and come up with a solution that fits within customer limitations, solves a problem and matches customer behaviour.

1) To design a personal help desk using flask.
2) To provide insights on their queries in a graphical way.

8. CHANNELS of BEHAVIOUR (CH)
8.1 ONLINE
What kind of actions do customers take online? Extract online channels from #7.

1) All their data are secured and being updated to cloud storage

8.2 OFFLINE
What kind of actions do customers take offline? Extract offline channels from #7 and use them for customer development.

1) Make sure they find the best solutions for their complaints.

4. EMOTIONS: BEFORE / AFTER (EM)
How do customers feel when they face a problem or a job and afterwards? i.e. lost, insecure → confident, in control - use it in your communication strategy & design.

1) Customers can get the from the help desk.

Identify strong TR & EM
Extract online & offline CH of BE

4.REQUIREMENT ANALYSIS

What is Requirement Analysis: It is the process of determining user expectations for a system under consideration.

These should be quantifiable and detailed.

Requirement Analysis:

> *Serves as a foundation for test plans and project plan*

> *Serves as an agreement between developer and customer*

> *Process to make stated and unstated requirements clear*

> *Process to validate requirement for completeness, ambiguity and feasibility.*

Functional requirement

Functional requirements specify what a system should be able to do through computations, technical details, data manipulation and processing, and other specialised functions. Use cases, which are used to represent behavioural requirements, explain all the instances in which the system makes use of the functional requirements. Non-functional requirements, commonly referred to as "quality requirements," which place restrictions on the design or execution, support functional requirements (such as performance requirements, security, or reliability). Non-functional requirements often take the form "system shall be," while functional needs are typically articulated in the form "system must do." While non-functional needs are defined in the system architecture, the plan for

accomplishing functional requirements is detailed in the system design.

Functional requirements, as used in requirements engineering, outline specified outcomes of a system.

☞ **Functional requirements** are product features or functions that developers must implement to enable users to accomplish their tasks. So, it's important to make them clear both for the development team and the stakeholders. Generally, functional requirements describe system behaviour under specific conditions. For example:

☞ *The system sends an approval request after the user enters personal information.*

☞ *A search feature allows a user to hunt among various invoices if they want to credit an issued invoice.*

☞ *The system sends a confirmation email when a new user account is created.*

<u>Non-functional requirements</u>

In general, non-functional requirements outline what a system is supposed to be rather than what it should be able to perform. Functional requirements are typically expressed as "system shall do," an individual action or component of the system, maybe explicitly in terms of a mathematical function, or as a black box description of an input, output, process, and control functional model, also known as an IPO Model. Non-functional requirements, on the other hand, have the form of "system shall be," which refers to a general characteristic of the system as a whole or of a particular aspect rather than a specific function. The overall characteristics of the system frequently determine whether a development project is a success or a failure.

Non-functional requirements are frequently referred to as a product's "quality traits" in error.

> ➤ *Non-functional **requirements,** not related to the system functionality, rather define how the system should perform. Some examples are:*
> ➤ *The website pages should load in 3 seconds with the total number of simultaneous users <5 thousand.*
> ➤ *The system should be able to handle 20 million users without performance deterioration.*
> ➤ *Here's a brief comparison and then we'll proceed to a more in-depth explanation of each group.*

5.   *PROJECT DESIGN*

Data Flow Diagrams

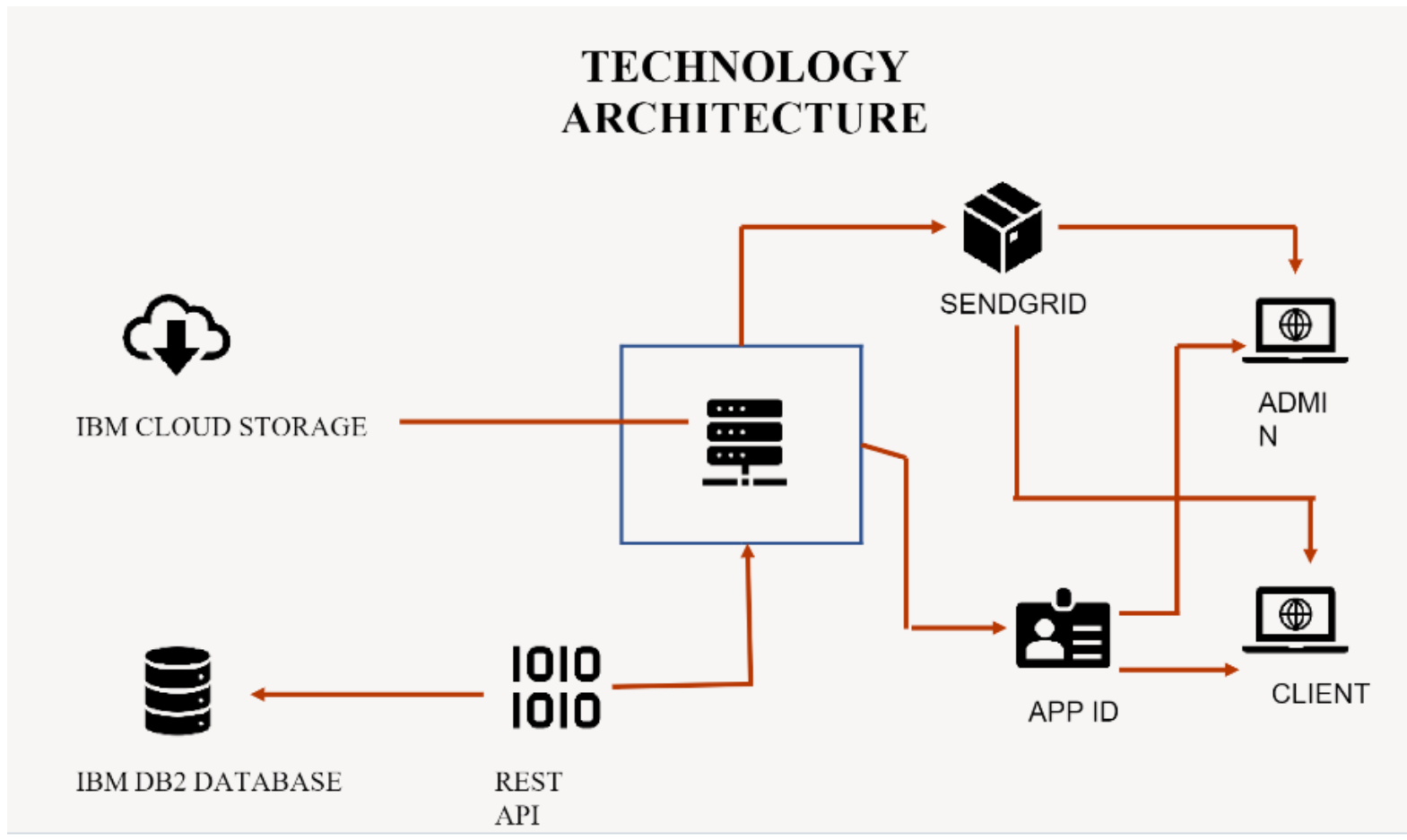Project Design Phase-II
Data Flow Diagram & User Stories
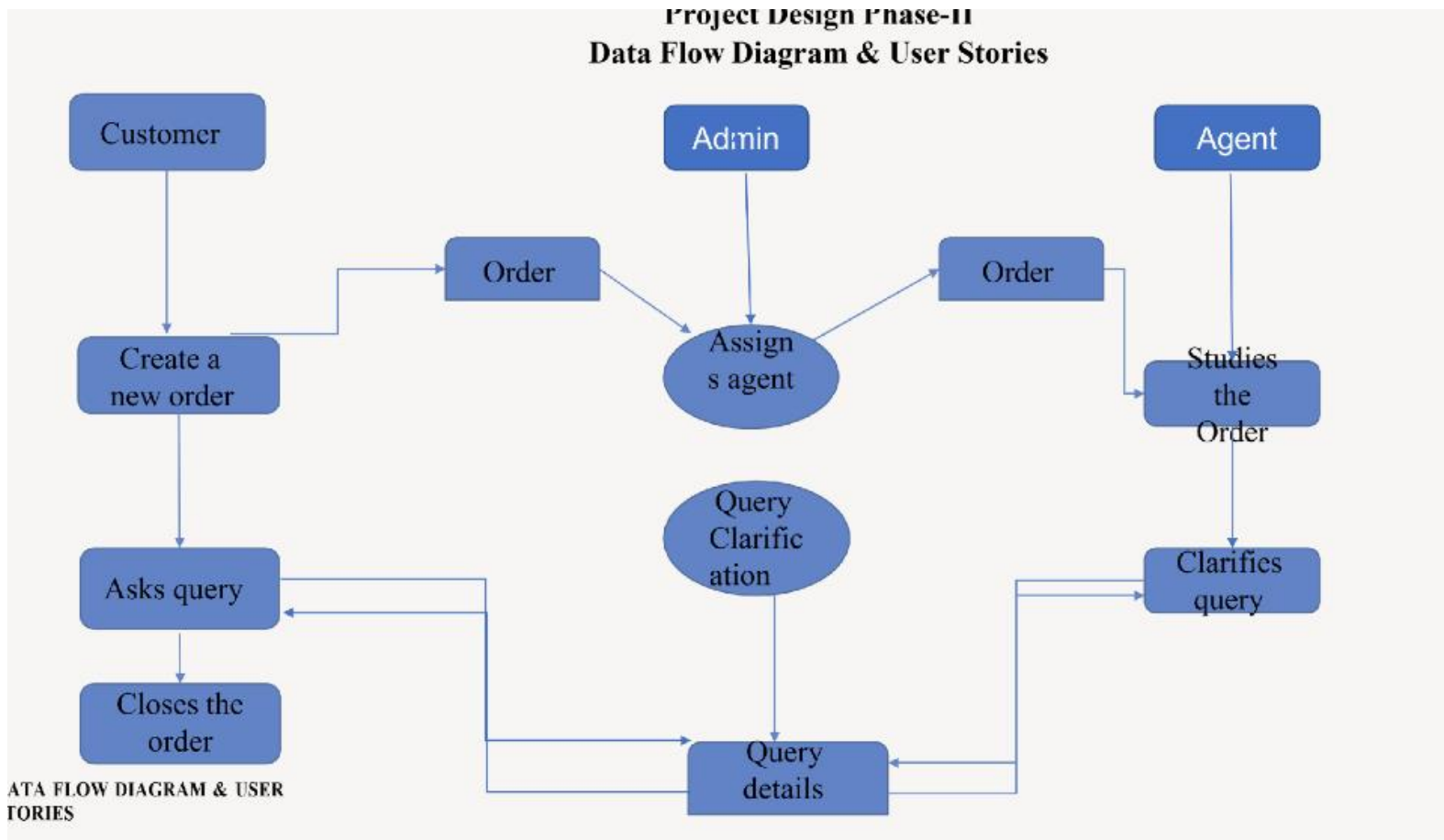
Solution & Technical Architecture

TECHNOLOGY ARCHITECTURE

TECHNOLOGY ARCHITECTURE

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 / ReactJs etc.
2.	Application Logic-1	Logic for a process in the application	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 etc
6.	Cloud Database	Database Service on Cloud	IBM DB2, IBM Cloudant etc.
7.	File Storage	File storage requirements	IBM Block Storage or Other Storage Serviceor Local Filesystem
11.	Infrastructure (Server / Cloud)	Application Deployment on Local System / Cloud Local Server Configuration: Cloud Server Configuration :	Local, Cloud Foundry, Kubernetes, etc.

USER STORIES

User Stories

Use the below template to list all the user stories for the product.

User Type	Functional Requirement (Epic)	User Story Number	User Story / Task	Acceptance criteria	Priority	Release
Customer (Mobile user)	Registration	USN-1	As a customer, I can register for the application by entering my email, password, 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 description of my query	I can ask my query	Medium	Sprint-2
	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 reset my password by this option incase I forgot my old password.	I get access to my account again	Medium	Sprint-4
	Order details	USN-7	As a Customer ,I can see the current stats of order.	I get abetter understanding	Medium	Sprint-4
Agent (web user)	Login	USN-1	As an agent I can login to the application by entering Correct email and password.	I can access my account / dashboard.	High	Sprint-3
	Dashboard	USN-2	As an 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 column	USN-3	As an agent, I get to have conversations with the customer and clear his/er dobuts	I can clarify the issues.	High	Sprint-3
	Forgot password	USN-4	As an agent I can reset my password by this option in case I forgot my old password.	I get access to my account again.	Medium	Sprint-4

Admin (Mobile user)	Login	USN-1	As a admin, I can login to the appliaction by entering Correct email and password	I can access my account/dashboard	High	Sprint-1
	Dashboard	USN-2	As an admin I can see all the orders raised in the entire system and lot more	I can assign agents by seeing those order.	High	Sprint-1
	Agent creation	USN-3	As an admin I can create an agent for clarifying the customers queries	I can create agents.	High	Sprint-2
	Assignment agent	USN-4	As an 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

6. PROJECT PLANNING & SCHEDULING

'Project Planning and Scheduling', though separate, are two sides of the same coin in project management. Fundamentally, 'Project planning' is all about choosing and designing effective policies and methodologies to attain project objectives. While 'Project scheduling' is a procedure of assigning tasks to get them completed by allocating appropriate resources within an estimated budget and time-frame.

The basis of project planning is the entire project. Unlikely, project scheduling focuses only on the project-related tasks, the project start/end dates and project dependencies. Thus, a 'project plan' is a comprehensive document that contains the project aims, scope, costing, risks, and schedule. And a project schedule includes the estimated dates and sequential project tasks to be executed.

Project Planning

The project planning phase refers to:

- *Developing a project to make it ready for investment*
- *Determines the jobs/tasks required to attain project objectives*

Sprint Planning & Estimation

What is sprint planning?

⇨ *Sprint planning is an event in scrum that kicks off the sprint.*

⇨ *The purpose of sprint planning is to define what can be delivered in the sprint and how that work will be achieved.*

⇨ *Sprint planning is done in collaboration with the whole scrum team.*

⇨ In scrum, the sprint is a set period of time where all the work is done.

⇨ However, before you can leap into action you have to set up the sprint.

⇨ You need to decide on how long the time box is going to be, the sprint goal, and where you're going *to start.*

⇨ *The sprint planning session kicks off the sprint by setting the agenda and focus. If done correctly, it also creates an environment where the team is motivated, challenged, and can be successful.*

⇨ *Bad sprint plans can derail the team by setting unrealistic expectations.*

Sprint 1

- ⚐ *HOMEPAGE*
- ⚐ *LOGIN PAGE(CUSTOMER)*
- ⚐ *ADMIN PAGE(CUSTOMER_LIST)*
- ⚐ *AGENT LOGIN PAGE*

HOMEPAGE :

Verify user is able to see the Login/Signup pop-up when user clicked on My account button

Steps To Execute :

1.Enter URL and click go

2.Scroll down

3.Verify login/Singup

pop-up displayed or not

Actual Result : Working as expected

status : PASS

LOGIN PAGE(CUSTOMER) :

Verify user is able to see the User home page when user finish on submitting Credentials

Steps To Execute :

1.Enter URL(http://169.51.204.215:30106/) and click go

2. To the User Login page and submit Your Credentials

Actual Result : USER Home Page pop-up should display

status : PASS

Verify user is able to see the ADMIN home page when user finish on submitting Credentials

Steps To Execute :

1.Enter URL(http://169.51.204.215:30106/) and click go

2. To the User Login page and submit Your Credentials

Actual Result : ADMIN Home Page pop-up should display

status : PASS

On delete Button the user Credentials will be delected

Steps To Execute :

1.Enter URL(http://169.51.204.215:30106/) and click go

2. To the User Login page and submit Your Credentials

Actual Result :

ADMIN Home Page pop-up should display Acceptance Testing

status : PASS

Sprint 2

- ✓ *HOMEPAGE*
- ✓ *AGENT HOMEPAGE*
- ✓ *CUSTOMER HOMEPAGE*
- ✓ *ADMIN (AGENT LIST)*
- ✓ *WEBCHAT*

HOMEPAGE :

Verify user is able to see the Login/Signup pop-up when user clicked on My account button

Steps To Execute :

1.Enter URL and click go

2.Scroll down

3.Verify login/Singup

pop-up displayed or not

Actual Result : Working as expected

status : PASS

AGENT LOGIN PAGE :

On delete Button the user Credentials will be delected

Steps To Execute :

1.Enter URL(http://169.51.204.215:30106/) and click go

2. To the User Login page and submit Your Credentials

Actual Result :

ADMIN Home Page pop-up should display Acceptance Testing

status : PASS

LOGIN PAGE(CUSTOMER) :

Verify the User has No Complaint

Steps To Execute :

1.Enter URL(http://169.51.204.215:30106/) and click go

2. To the User Login page and submit Your Credentials

Actual Result :No Complaint should shown

status : PASS

ADMIN PAGE(CUSTOMER_LIST)

Verify the overall Delect the database for User

Steps To Execute :

1.Enter URL(http://169.51.204.215:30106/) and click go

2. To the User Login page and submit Your Credentials

Actual Result : Delect the overall Agent database delect

status : PASS

WEBCHAT

A chatbot is a support system for your customer service. Using artificial intelligence and natural language processing, your chatbot can simulate conversation with a user through messaging applications, websites, mobile apps and more, giving them accurate and relevant information. By powering your AI

chatbot with Watson Assistant, you can avoid the difficulties associated with traditional chatbot building platforms and build a tool that will improve your customer support.

<u>Sprint 3</u>

✓ *HOMEPAGE*

✓ *CUSTOMER COMPLAINT_PAGE*

✓ *CUSTOMER HOMEPAGE*

✓ *ADMIN PAGE(COMPLAINT_LIST)*

✓ *AGENT ALLOTMENT*

<div align="center">

HOMEPAGE :

</div>

Verify user is able to see the Login/Signup pop-up when user clicked on My account button

Steps To Execute :

1.Enter URL and click go

2.Scroll down

3.Verify login/Singup

pop-up displayed or not

Actual Result : Working as expected

status : PASS

<div align="center">

CUSTOMER COMPLAINT_PAGE

</div>

Verify user is able to see the User home page when user finish on submitting Credentials

Steps To Execute :

1.Enter URL(http://169.51.204.215:30106/) and click go

2. To the User Login page and submit Your Credentials

Actual Result : USER Home Page pop-up should display

status : PASS

<center>*ADMIN PAGE(CUSTOMER_LIST)*</center>

Verify user is able to see the ADMIN home page when user finish on submitting Credentials

Steps To Execute :

1.Enter URL(http://169.51.204.215:30106/) and click go

2. To the User Login pageand submit Your Credentials

Actual Result : ADMIN Home Page pop-up should display

status : PASS

<center>*AGENT LOGIN PAGE :*</center>

On delete Button the user Credentials will be delected

Steps To Execute :

1.Enter URL(http://169.51.204.215:30106/) and click go

2. To the User Login page and submit Your Credentials

Actual Result :

ADMIN Home Page pop-up should display Acceptance Testing

status : PASS

Sprint 4

✓ *Testing the user and Admin login page*

✓ *Testing the sign in and sign up*

✓*Testing the all page*

status : PASS

Reports from JIRA :

Jira's value proposition heavily relies on its reporting capabilities. By delivering critical insights in real time, reporting elevates the value of your Jira deployment and empowers your team to take informed decisions that improve output and performance. It is crucial to evaluate each project's status in order to accomplish objectives and control workloads. Jira reports can aid teams in quickly identifying and resolving performance, bandwidth, and workflow obstacles, enabling them to stay on top of both short-term and long-term projects.

It's crucial to note that Jira provides a variety of tools and reports to assist you in getting a clear picture of your team's progress, each with unique advantages, restrictions, and applications. Each team or organisation should utilise the reports and resources that
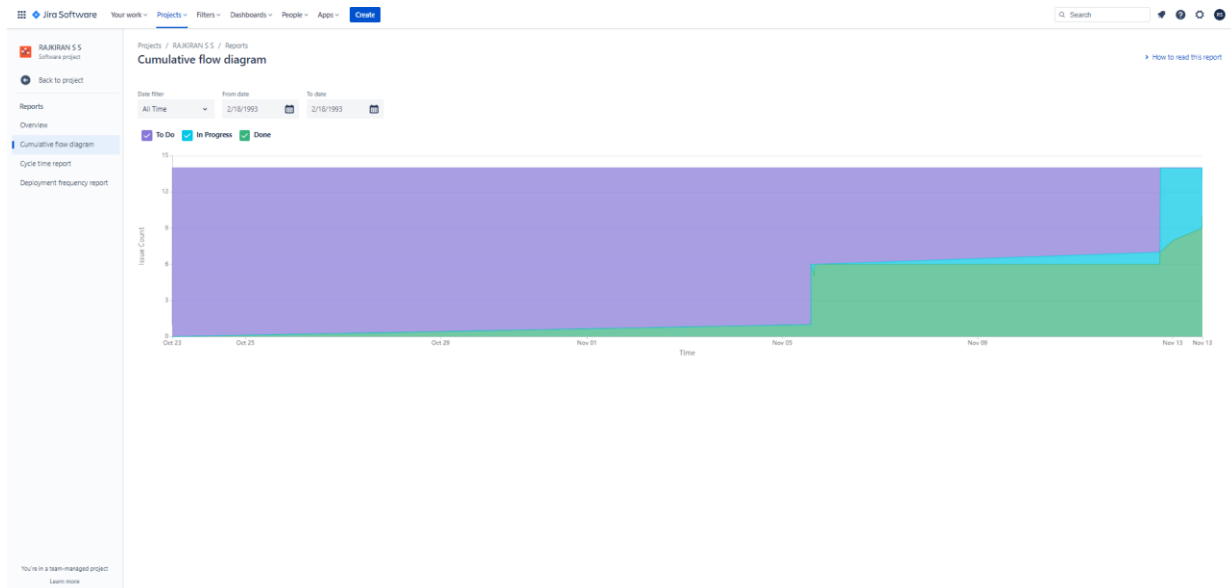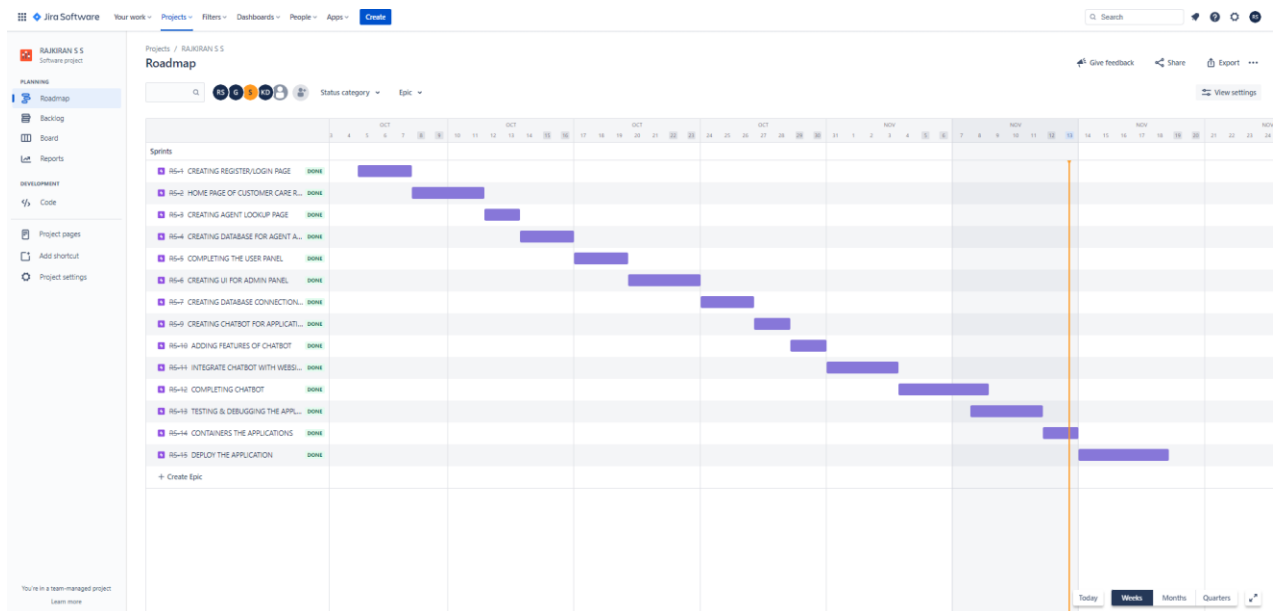
7.CODING & SOLUTIONING

College graduates with prior programming expertise or technical degrees are recruited and transitioned into professional positions with Alabama firms and organisations through the highly competitive CodingSolutions job accelerator and talent refinement programme at no cost to the graduates. We provide a pool of varied, well-trained, techs-savvy individuals that wants to launch and advance their career in Alabama.

The mission of veteran- and woman-owned CodingSolutions is to mobilise the next generation of IT talent and provide them the tools and resources they require to make your business successful. Innovative talent is necessary for innovative technologies. We wish to provide CodingSolutions prospects to assist you expand

your Alabama team.

Our applicants are swiftly hired at the top of the list by growing businesses for lucrative, long-term positions.

Features

7 main types of customer needs :

- ✓ Friendliness
- ✓ Empathy
- ✓ Fairness
- ✓ Control
- ✓ Alternatives
- ✓ Information
- ✓ Time

1. Friendliness

This is the most basic customer need that's associated with things like courtesy and politeness. Friendly agents are a top indicator of a good customer experience, according to the customers surveyed in our 2021 Trends Report.

2. Empathy

Customers need to know the organization understands and appreciates their needs and circumstances. In fact, 49% surveyed in our 2021 Trends Report said they want agents to be empathetic.

3. Fairness

Customers must feel that they're getting adequate attention and fair and reasonable answers.

4. Control

Customers want to feel like they have an influence on the outcome. You can empower your customers by listening to their feedback and using it to improve.

5. Alternatives

Customers want choice and flexibility from customer service; they want to know there is a range of options available to satisfy them. In fact, high-performing companies are more likely to provide customers with a choice of customer service channels. 50% of high performers have adopted an omnichannel support strategy, compared to 18% of their lower-performing peers.

6. Information

Customers want to know about products and services in a pertinent and time-sensitive manner; too much information and selling can be off-putting for them. A knowledge base is a great way to provide existing customers with the information they need, when they need it. And high-performing CX teams are more likely to offer a knowledge base, according to our research.

7. Time

Customers' time is valuable, and organizations need to treat it as such. 73% of customers said resolving their issues quickly is the top component of a good customer experience. To deliver on that expectation, CX teams need customer service software that arms them with tools to respond to customers quickly and effectively.

<u>*Database Schema :*</u>

A database schema defines how data is organized within a relational database; this is inclusive of logical constraints such as, table names, fields, data types, and the relationships between these entities. Schemas commonly use visual representations to communicate the architecture of the database, becoming the foundation for an organization's data management discipline. This process of database schema design is also known as **data modeling**.

These data models serve a variety of roles, such as database users, database administrators, and programmers. For example, it can help database administrators manage normalization processes to avoid data duplication. Alternatively, it can enable analysts to navigate these data structures to conduct reporting or other valuable business analyses. These diagrams act as valuable documentation within the database management system (DBMS), ensuring alignment across various stakeholders.

Types of database schemas

Database schema types

- *Although the term "schema" is used in a wide variety of contexts, it most frequently refers to three distinct types of schema: conceptual database schemas, logical database schemas, and physical database schemas.*

- *Conceptual schemas provide a broad overview of the system's contents, organisational structure, and business rules. Typically, conceptual models are developed as a part of obtaining the initial project requirements.*

- *Comparatively speaking, logical database schemas are less abstract than conceptual schemas. Table names, field names, entity relationships, and integrity constraints—i.e., any regulations governing the database—are all well defined schema objects with information. They normally don't have any technical requirements, though.*

- *The technical details that the logical database schema lacks are provided by physical database schemas.*

8.   *TESTING :*

Test cases :

TEST CASES

Test case ID	Feature Type	Component	Test Scenario	Steps To Execute	Test Data	Expected Result	Actual Result	Status	Comments	TC for Automation(Y/N)	BUG ID	Executed By
LoginPage_TC_OO1	Functional	Home Page	Verify user is able to see the Login/Signup popup when user clicked on My account button	1.Enter URL and click go 2.Scroll down 3.Verify login/Signup popup displayed or not	http://169.51.204.215:30106/	Login/Signup popup should display	Working as expected	PASS	Successfull	Y		GURURAJAN KAMALESUWARAN
LoginPage_TC_OO2	UI	Home Page	Verify the UI elements in Login/Signup popup	1.Enter URL and click go 2.Click on Signup button for User 3.Verify login/Signup popup with below UI elements: a.id text box b.password text box c.Login button d.New customer? Create account link e.Last password? Recovery password link	http://169.51.204.215:30106/	Application should show below UI elements: a.email text box b.password text box c.Login button with orange colour d.New customer? Create account link e.Last password? Recovery password link	Working as expected	PASS	Successful	Y		RAJKIRAN S S SRIGOVINDH
LoginPage_TC_OO3	Functional	Home page	Verify user is able to log into application with Valid credentials	1.Enter URL(https://shopenzer.com /) and click go 2.Click on My Account dropdown button 3. Enter Valid ID in ID text box 4.Enter valid password in password text box 5.Click on login button	ID: 5342 password: Testing123	User should navigate to user account homepage	Working as expected	PASS	Successful	Y		RAJKIRAN S S SRIGOVINDH

Test case ID	Feature Type	Component	Test Scenario	Steps To Execute	Test Data	Expected Result	Actual Result	Status	Comments	TC for Automation(Y/N)	BUG ID	Executed By
LoginPage_TC_OO4	Functional	Login page	Verify user is able to log into application with InValid credentials	1.Enter URL(http://169.51.204.215:30106/) and click go 2.Click on My Account dropdown button 3.Enter InValid ID in ID text box 4.Enter valid password in password text box 5.Click on login button	ID: 5342 password: Testing123	Application should show 'Incorrect email or password ' validation message.	Working as expected	PASS	Successful	Y		RAJKIRAN S S
LoginPage_TC_OO5	Functional	Login page	Verify user is able to log into application with InValid credentials	1.Enter URL(http://169.51.204.215:30106/) and click go 2.Click on My Account dropdown button 3.Enter InValid ID in ID text box 4.Enter Invalid password in password text box 5.Click on login button	ID: 5342 password: Testing12367868 6786876876	Application should show 'Incorrect email or password ' validation message.	Working as expected	PASS	Successful	Y		KAMALESUWARAN D
LoginPage_TC_OO6	Functional	Login page	Verify user is able to log into application with InValid credentials	1.Enter URL(http://169.51.204.215:30106/) and click go 2.Click on My Account dropdown button 3.Enter InValid ID in ID text box 4.Enter Invalid password in password text box 5.Click on login button	ID: 5342 password: Testing123	Application should show 'Incorrect email or password ' validation message.	Working as expected	PASS	Successful	Y		SRIGOVINDH

										Y		
LoginPage_TC_OO7	Functional	Login page	Verify User is able to log into application with Valid Credentials	1.Enter URL(http://169.51.204.215:30106/) and click go 2.Click on My Account dropdown button 3.Enter InValid ID in ID text box 4.Enter Invalid password in password text box 5.Click on login button	ID: 5434 password: Testing123	Application should show 'correct email or password' validation message.	Working as expected	PASS	Successful			GURURAJAN KAMALESUWARAN
LoginPage_TC_OO8	Functional	Login page for ADMIN	Verify User is able to log into application with Valid Credentials	1.Enter URL(http://169.51.204.215:30106/) and click go 2.Click on My Account dropdown button 3.Enter Valid ID in ID text box 4.Enter valid password in password text box 5.Click on login button	ID: 1111 password: 5678	Application should show 'correct email or password' validation message.	Working as expected	PASS	Successful	Y		RAJKIRAN S S
LoginPage_TC_OO9	UI	ADMIN PAGE	Verify all the Customer database is visible	1.Enter URL(http://169.51.204.215:30106/) and click go 2.Click on My Account dropdown button 3.Enter InValid ID in ID text box 4.Enter Invalid password in password text box 5.Click on login button	http://169.51.204.215:30106/	Customer database is visible	Working as expected	PASS	Successful	Y		RAJKIRAN S S

TEST CASES 5

LoginPage_TC_O10	Functional	USER REGISTER	Verify Id sent to customer email address	1.Enter URL(http://169.51.204.215:30106/) and click go 1.Register the account by giving credentials 2. Click on button Submit	http://169.51.204.215:30106/	Email sent successfully	Working as expected	PASS	Successful	Y		RAJKIRAN S S
LoginPage_TC_O11	Functional	AGENT REGISTER	Verify AGENT is able to log into application with Valid Credentials	1.Enter URL(http://169.51.204.215:30106/) and click go 2.Click on My Account dropdown button 3.Enter InValid ID in ID text box 4.Enter Invalid password in password text box 5.Click on login button	ID: 5342 password: Testing123	ID sent successfully	Application should show 'correct email or password' validation message.	PASS	Successful	Y		SRIGOVINDH
LoginPage_TC_O12	Functional	Login page for ADMIN	Verify User is able to log into application with InValid Credentials	1.Enter URL(http://169.51.204.215:30106/) and click go 2.Click on My Account dropdown button 3.Enter InValid ID in ID text box 4.Enter Invalid password in password text box 5.Click on login button	ID: 1111 password: 5678	Application should show 'Incorrect ID or password' validation message.	Working as expected	PASS	Successful	Y		RAJKIRAN S S
LoginPage_TC_O13	UI	Home page for Agent	Verify user is able to see the agent home page when user finish on submitting Credentials	1. Enter URL(http://169.51.204.215:30106/) and click go 2.To the Agent Login page and submit Your Credentials	ID: 1111 password: 5678	AGENT Home Page popup should display	Working as expected	PASS	Successful	Y		SRIGOVINDH

TEST CASES 6

Test case ID	Feature Type	Component	Test Scenario	Steps To Execute	Test Data	Expected Result	Actual Result	Status	Commnets	TC for Automation(Y/N)	BUG ID	Executed By
LoginPage_TC_O14	UI	Home page for USER	Verify user is able to see the User home page when user finish on submitting Credentials	1.Enter URL(http://169.51.204.215:30106/) and click go 2.To the User Login page and submit Your Credentials	http://169.51.204.215:30106/	USER Home Page popup should display	Working as expected	PASS	Successful	Y		RAJKIRAN SS
LoginPage_TC_O15	UI	Home page for ADMIN	Verify user is able to see the ADMIN home page when user finish on submitting Credentials	1.Enter URL(http://169.51.204.215:30106/) and click go 2.To the User Login page and submit Your Credentials	http://169.51.204.215:30106/	ADMIN Home Page popup should display	Working as expected	PASS	Successful	Y		KAMALESUWARAN D
LoginPage_TC_O16	Functional	AGENT PAGE	On delete Button the user Credentials will be deleted	1.Enter URL(http://169.51.204.215:30106/) and click go 2. To the Admin Page and delect on User Credentials	http://169.51.204.215:30106/	ADMIN Home Page popup should display	Working as expected	PASS	Successful	Y		RAJKIRAN S S

Test case ID	Feature Type	Component	Test Scenario	Steps To Execute	Test Data	Expected Result	Actual Result	Status	Commnets	TC for Automation(Y/N)	BUG ID	Executed By
User_Page_TC_O1	Functional	USER PAGE	Verify user is able to see the Show Complaint popup when user clicked on popup	1.Enter URL and click go 2.Scroll down 3.Verify login/Singup popup displayed or not	http://169.51.204.215:30106/	Show Complaint popup should display	Working as expected	PASS	Successfull	Y		KAMALESUWARAN
User_Page_TC_O2	UI	USER PAGE	Verify the User has No Complaint	Click on the Url and go to user page by giving Correct Credentials	http://169.51.204.215:30106/	No Complaint should shown	Working as expected	PASS	Successful	Y		RAJKIRAN S S
User_Page_TC_O3	UI	USER PAGE	Verify User Total Complaint is Zero	Click on the Url and go to user page by giving Correct Credentials	http://169.51.204.215:30106/	Total Number of Complaint is Zero	Working as expected	PASS	Successful	Y		SRIGOVINDH

										Y			
LoginPage_TC_OO4co	Functional	Login page	Verify user mail Id and Enter correct id in the sign in page.	1.The Id will be send in the users valid mail id. 2.Check on the users mail id. 3.Copy the valid customer Id. 4.Enter the valid customer Id in the text box.	ID: 5342 password: Testing123	Application should show successful and popup to the next page.	Working as expected	PASS	Successful				RAJKIRAN S S
Loginpage_TC_OO5	Functional	Login page.	Verify user is unable to log in as he entered mismatch password .	1.User enters the wrong password. 2.Scroll down and click on the forgot password button 3.application will popup to nxt page with text boxes a.Id b.Enter your verification number(OTP) .	ID: 5342 password: Testing12367868 6786876876	Application should enter to the forgot password page,	Working as expected	PASS	Successful	Y			KAMALESUWARAN D
Loginpage_TC_OO6	Functional	Loginpage page	Verify user is able to get the password in the email.	1.Appliacation enters to the forgot password page. 2.Enter the user Valid Id in the text box. 3.Click on send email button. 4.An email will send to the User mail. 5.An OTP will come to the given email. 6.User Enters the OTP in the log in page	ID: 5342 password: Testing123	Application should show successful and popup to the next page. .	Working as expected	PASS	Successful	Y			SRIGOVINDH

TEST CASES

Acceptance Testing
UAT Execution & Report Submission

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 (UAT).

1. Defect Analysis

This reportshows the numberof resolved or closed bugs at each severity level,and howthey were resolved

Resolution	Severity 1	Severity 2	Severity 3	Severity 4	Subtotal
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

2. Test Case Analysis

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

Section	Total Cases	Not Tested	Fail	Pass
Print Engine	10	0	0	10
Client Application	40	0	0	40
Security	5	0	0	2

Outsource Shipping	3	0	0	3
Exception Reporting	10	0	0	10
Final Report Output	4	0	0	4
Version Control	4	0	0	4

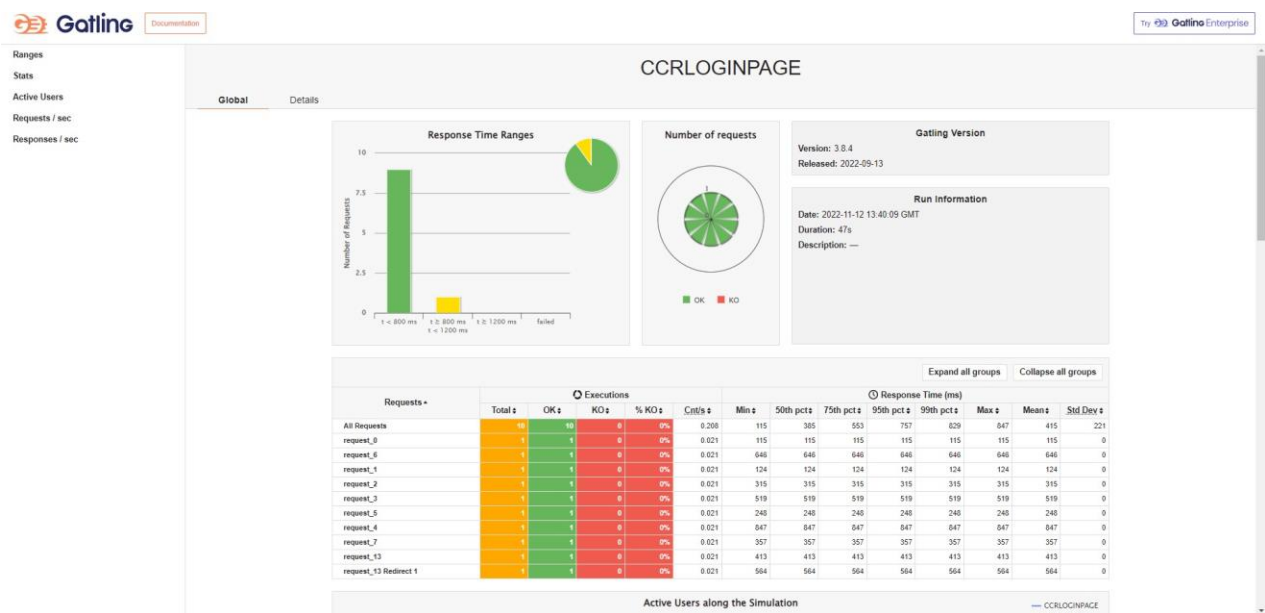**9.**   ***RESULTS :***

What Are Performance Metrics

Performance metrics are data used to track processes within a business.

This is achieved using activities, employee behavior, and productivity as key metrics.
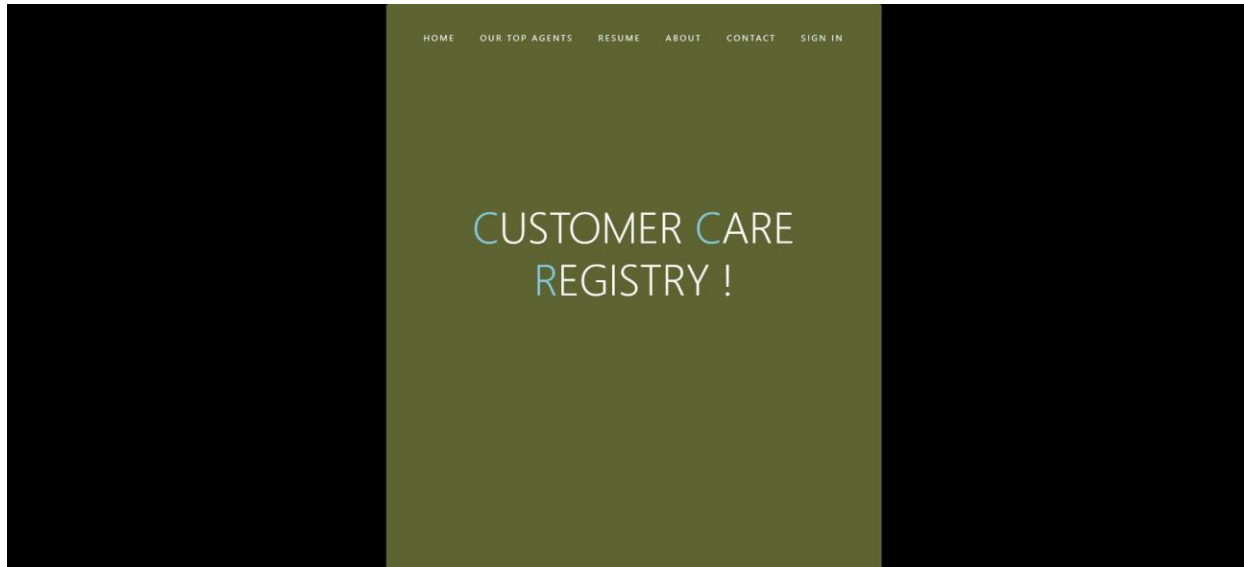
These metrics are then used by employers to evaluate performance.

This is in relation to an established goal such as employee productivity or sales objective
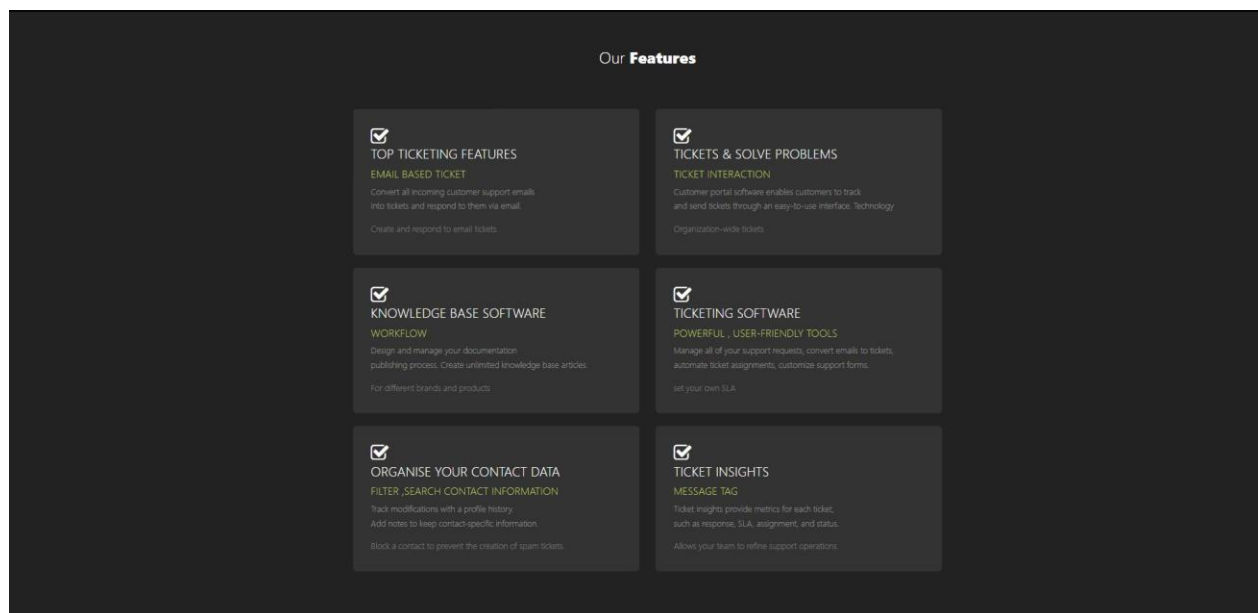

<u>*output screen :*</u>

<u>*Home screen*</u>

CUSTOMER CARE REGISTRY !

User And Agent (Sign in or Sign up) page

TEAM ID : PNT2022TMID37544 BATCH ID : B1-1M3E

Get your **Account** Now!

Get your **User Account!**

SIGN IN

SIGN UP

Get your **Agent Account!**

SIGN IN

SIGN UP

Our **Top Agents**

Our Top Agents

Our Feature

My Services

My **Services**

Get started in minutes

Start supporting your customers in no time without requiring an expensive onboarding plan or excessive hand-holding.

Keep your team on the same page

Enable 1:1 or group discussions and collaborate within your team or across other teams from within Freshdesk.

Increase your capabilities

Boost your support strategy by integrating with 650+ apps on the Marketplace and resolve tickets more efficiently.

Get **In Touch**

Get In Touch

Your Name

Your Email

Write a Message

SEND MESSAGE

My Contact Details

EMAIL
sbmdemo8@yahoo.com

PHONE
+91 XXXXXXXXX

ADDRESS
89 , OMR ROAD
PADUR
India, TAMIL NADU

Customer Register

REGISTER PAGE FOR CUSTOMER

Name

Enter Name

Email address

Enter email

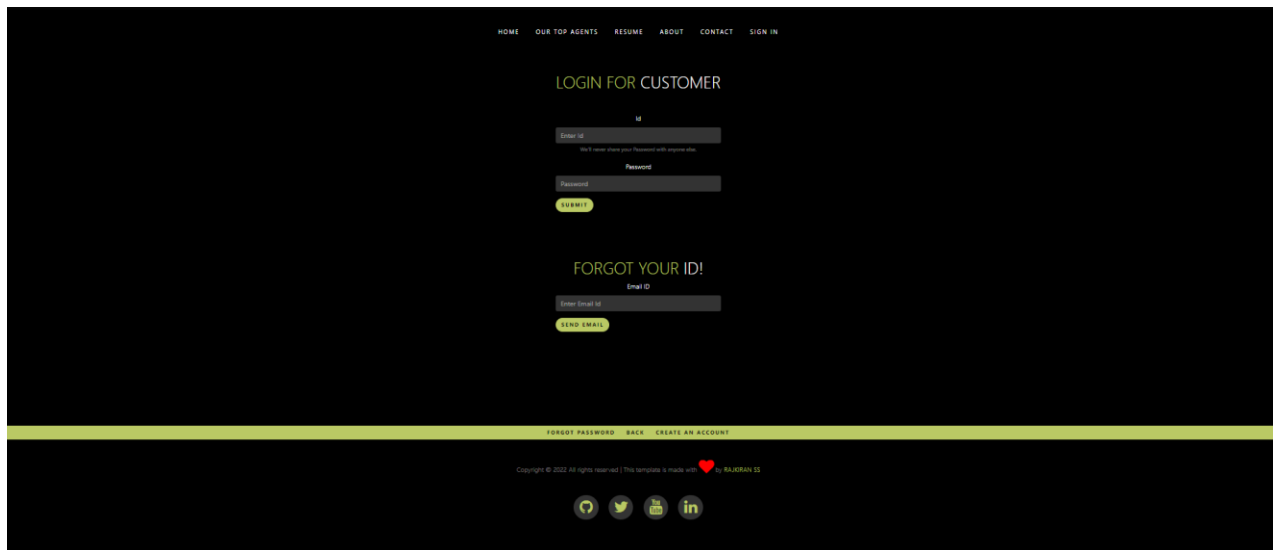We'll never share your email with anyone else.

Password

Password

Phone Number

Enter phone Number

SUBMIT

BACK

Customer LOGIN

10.   ADVANTAGES & 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.

Disadvantage :

The Consumer Protection Act in India has numerous restrictions and drawbacks,

which are listed in this article.

1. *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.*

2. *This act does not apply to mandatory services, such as water supply, that are provided by state agencies.*

3. *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.*

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

11.   CONCLUSION

It is a web-enabled project.

➤ *With this project the details about the product will be given to the customers in detail with in a short span of time.*

➤ *Queries regarding the product or the services will also be clarified.*

➤ *It provides more knowledge about the various technologies.*

12. FUTURE SCOPE

FUTURE IMPROVEMENT

13.APPENDIX

SOURCE CODE :

```
from flask import Flask,render_template,request,url_for,session,redirect
from flask_mysqldb import MySQL
from sendmail import
sendemail,forget_password_mail,updated_password_mail,solve_mail
import json
import ibm_db
import re
from random import randint
from datetime import date
app = Flask(__name__)
# http://remotemysql.com/
# dsn_hostname = "b0aebb68-94fa-46ec-a1fc-
1c999edb6187.c3n41cmd0nqnrk39u98g.databases.appdomain.cloud"
# dsn_uid = "dmt13873"
# dsn_pwd = "740yZ1Yq8Uj2E4qm"
# dsn_database = 'bludb'
# dsn_port = 31249
conn = ibm_db.connect("DATABASE=bludb;HOSTNAME=b0aebb68-94fa-
46ec-a1fc-
1c999edb6187.c3n41cmd0nqnrk39u98g.databases.appdomain.cloud;PORT=3124
9;SECURITY=SSL;SSLServerCertificate=src/DigiCertGlobalRootCA.crt;UID=d
mt13873;PWD=740yZ1Yq8Uj2E4qm","","") # type: ignore
print(conn)
print("connection successful...")
# database configuration
# app.config['MYSQL_HOST'] = 'sql12.freesqldatabase.com'
# app.config['MYSQL_USER'] = 'sql12552843'
# app.config['MYSQL_PASSWORD'] = 'zWIzHmXNi8'
# app.config['MYSQL_DB'] = 'sql12552843'
app.secret_key = "super secret key"
# mysql = MySQL(app)
@app.route('/')
def home():
today = date.today()
current_date = today.strftime('%d/%m/%Y')
if "google_token" in session:
session["current_date"] = current_date
```

```python
return render_template('home.html')
if "username" in session:
session["current_date"] = current_date
return render_template('home.html')
return render_template('index.html')
# manually registration
@app.route('/register',methods=["POST"])
def register():
if request.method == 'POST':
name = request.form['uname']
 mail = request.form['mail']
pwd = request.form['pwd']
cpwd = request.form['confirmpwd']
if not re.match(r'[^@]+@[^@]+\.[^@]+', mail):
msg = 'Invalid email address !'
return render_template('index.html',signupmsg=msg)
if pwd != cpwd:
msg = 'Please enter correct confirm password'
return render_template('index.html',signupmsg=msg)
# check account is exists or not
# cursor = mysql.connection.cursor()
rCheckQuery = ''
result = ibm_db.exec_immediate(conn,f"SELECT * FROM customerdeatils
WHERE email LIKE '{mail}'")
# cursor.execute('SELECT * FROM customerdeatils WHERE email LIKE
% s',[mail])
# existing_user = cursor.fetchone()
# cursor.close()
existing_user = ibm_db.fetch_row(result)
#exits
if existing_user:
msg = 'Account already exists please login.'
return render_template('index.html',signupmsg = msg)
# not exists
# cursor = mysql.connection.cursor()
 # cursor.execute('INSERT INTO customerdeatils VALUES(null,% s,% s,%
s)',(name,mail,pwd))
# mysql.connection.commit()
# cursor.close()
regInsertQuery = f"INSERT INTO customerdeatils
(username,email,passwrd) VALUES('{name}','{mail}','{pwd}')"
insertflag = ibm_db.exec_immediate(conn,regInsertQuery)
msg = 'Your registration successfully completed.'
# send mail
```

```python
sendemail(mail,'Account_creation')
return render_template('index.html',signupmsg = msg)
# admin page
@app.route('/admin/<which>')
def admin(which):
if which == 'customers':
# cursor = mysql.connection.cursor()
result = ibm_db.exec_immediate(conn,'SELECT * FROM customerdeatils')
data = []
while ibm_db.fetch_row(result):
temp =
[ibm_db.result(result,0),ibm_db.result(result,1),ibm_db.result(result,2),ibm_db.re
sult(result,3)]
data.append(temp)
return render_template('admin.html',customers=data,complaints=None)
if which == 'complaints':
# cursor = mysql.connection.cursor()
 result = ibm_db.exec_immediate(conn,'SELECT * FROM complaints')
data = []
while ibm_db.fetch_row(result):
temp =
[ibm_db.result(result,0),ibm_db.result(result,1),ibm_db.result(result,2),ibm_db.re
sult(result,3),ibm_db.result(result,4),ibm_db.result(result,5)]
data.append(temp)
return render_template('admin.html',customers=None,complaints=data)
# admin delete
@app.route('/Delete/<type>/<id>')
def Delete(type,id):
if type == 'customers':
# cursor = mysql.connection.cursor()
result = ibm_db.exec(conn,f'DELETE FROM customerdeatils WHERE id =
"{id}"')
# mysql.connection.commit()
# cursor.close()
return redirect(url_for('admin',which='customers'))
if type == 'complaints':
# cursor = mysql.connection.cursor()
result = ibm_db.exec_immediate(conn,f'DELETE FROM complaints
WHERE id = {id}')
# mysql.connection.commit()
# cursor.close()
return redirect(url_for('admin',which='complaints'))
# manually login
@app.route('/login',methods=['POST','GET'])
```

```python
def login():
    if request.method == 'POST':
        mail = request.form['mail1']
        password = request.form['pwd1']
        # login is admin or not
        if mail == "admin" and password == 'admin@1810':
            return redirect(url_for('admin',which='customers'))
        # check account is exists or not
        # cursor = mysql.connection.cursor()
        query = "SELECT * FROM customerdeatils WHERE email=? AND
        passwrd=?"
        stmt = ibm_db.prepare(conn, query) # type:ignore
        ibm_db.bind_param(stmt,1,mail) # type:ignore
        ibm_db.bind_param(stmt,2,password) # type:ignore
        ibm_db.execute(stmt) # type:ignore
        user = ibm_db.fetch_assoc(stmt) # type:ignore
        print(user,password)
        #exists
        if user:
            session["username"] = user['USERNAME']
            session['mail'] = mail
            return
            render_template('home.html',username=session["username"],mail=session["mail"
            ])
        else:
            msg = 'mail or password is not valid.'
            return render_template('index.html',signinmsg=msg)
    if request.method == "GET":
        return redirect(url_for('home'))
# logout method
@app.route('/logout')
def logout():
    if "username" in session:
        session.pop("username")
        if "google_token" in session:
            session.pop("google_token")
            session.pop("mail")
    if "mail" in session:
        session.pop("mail")
    return redirect(url_for('home'))
# complaint register
@app.route('/complaint',methods=['POST'])
def complaint():
    if request.method == 'POST':
```

```python
complaint_name = request.form['complaint_name']
name = request.form['name']
mail = request.form['email']
against_person = request.form['against_person']
date = request.form["date"]
des = request.form['complaint_des']
# cursor = mysql.connection.cursor()
 if not name == session["username"] or not mail == session["mail"]:
msg = "please don't change username and mail."
return render_template('home.html',msg=msg)
result = ibm_db.exec_immediate(conn,f"INSERT INTO complaints
(username,email,against_person,des,date,solved)
VALUES('{name}','{mail}','{against_person}','{des}','{date}','{'0'}')")
# mysql.connection.commit()
# cursor.close()
sendemail(mail,'complaint_creation')
msg = 'Complaint registerd you check out complaints section.'
return render_template('home.html',msg=msg)
# show complaints and progress
@app.route('/showcomplaints')
def showcomplaints():
# cursor = mysql.connection.cursor()
# cursor.execute("SELECT * FROM complaints WHERE username= % s
AND email=% s",(session["username"],session["mail"]))
# details = cursor.fetchall()
# cursor.close()
query = "SELECT * FROM complaints WHERE username=? AND email=?"
stmt = ibm_db.prepare(conn, query) # type:ignore
ibm_db.bind_param(stmt,1,session["username"]) # type:ignore
ibm_db.bind_param(stmt,2,session['mail']) # type:ignore
ibm_db.execute(stmt)
data = []
while ibm_db.fetch_row(stmt):
temp =
[ibm_db.result(stmt,0),ibm_db.result(stmt,1),ibm_db.result(stmt,2),ibm_db.result
(stmt,3),ibm_db.result(stmt,4),ibm_db.result(stmt,5),ibm_db.result(stmt,6)]
print(temp)
data.append(temp)
return render_template('complaints.html',complaints=data)
# update complaint
@app.route('/solve',methods=["POST"])
def solve_complaint():
if request.method == "POST":
c_id = request.form['c_id']
```

```python
print(c_id)
# cursor = mysql.connection.cursor()
# cursor.execute("UPDATE complaints SET solved = % s WHERE id = %
s",('1',c_id,))
query = "UPDATE complaints SET solved = '1' WHERE id = ?"
# mysql.connection.commit()
stmt = ibm_db.prepare(conn, query) # type:ignore
ibm_db.bind_param(stmt,1,c_id) # type:ignore
ibm_db.execute(stmt)
detail = ibm_db.result(stmt,0)
print(detail)
# cursor.execute("SELECT * FROM complaints WHERE id = % s",[c_id])
query2 = "SELECT * FROM complaints WHERE id = ?"
stmt1 = ibm_db.prepare(conn, query2) # type:ignore
ibm_db.bind_param(stmt1,1,c_id) # type:ignore
ibm_db.execute(stmt1)
details = ibm_db.result(stmt1,0)
# cursor.close()
print(details)
# solve_mail(session['mail'],'user')
return redirect(url_for('showcomplaints'))
return redirect(url_for('showcomplaints'))
# # admin agent allot
# @app.route('/solve_admin',methods=["POST"])
# def solve_admin():
# if request.method == "POST":
# c_id = request.form['c_id']
# # cursor = mysql.connection.cursor()
# cursor.execute("SELECT * FROM complaints WHERE id = % s",[c_id])
# query = "SELECT * FROM complaints WHERE id = ?"
# details = cursor.fetchone()
# cursor.close()
# solve_mail(details[3],'admin')
# return redirect(url_for('admin',which='complaints'))
# return redirect(url_for('admin',which='complaints'))
# remove complaint
@app.route('/dismiss',methods=["POST"])
def dismiss_complaint():
if request.method == "POST":
 c_id = request.form["c_id"]
# cursor = mysql.connection.cursor()
# cursor.execute("DELETE FROM complaints WHERE id = % s",[c_id])
# mysql.connection.commit()
# cursor.close()
```

```python
query = "DELETE FROM complaints WHERE id = ?"
stmt = ibm_db.prepare(conn, query)
ibm_db.bind_param(stmt,1,c_id) # type:ignore
ibm_db.execute(stmt)
return redirect(url_for('showcomplaints'))
return redirect(url_for('showcomplaints'))
# send otp in user mail id
@app.route('/send_otp',methods=["POST","GET"])
def send_otp():
if request.method == "POST":
mail = request.form["mail"]
cursor = mysql.connection.cursor()
cursor.execute("SELECT * FROM customerdeatils WHERE email = %
s",[mail])
temp = cursor.fetchone()
cursor.close()
if not temp:
return render_template('forget.html',type='otp',msg1='Your account
doesn\'t exist please register')
otp = randint(10 ** 5,10**6)
forget_password_mail(mail,otp)
session["otp"] = otp
 return render_template('forget.html',type='update_password',tempmail=mail)
# forget password method
@app.route('/forgetpassword/<type>',methods=["POST","GET"])
def forgetpassword(type):
if type == 'otp':
return render_template('forget.html',type=type)
if request.method == "POST":
mail = request.form["mail"]
otp = request.form["otp"]
pwd = request.form["password"]
c_pwd = request.form["con_pwd"]
print(otp,session['otp'])
if not pwd == c_pwd:
msg = 'Please Enter Password properly'
return render_template('forget.html',type='updatePassword',msg=msg)
if not otp == str(session['otp']):
msg = "Your OTP is Incorrect."
return render_template('forget.html',type='updatePassword',msg=msg)
cursor = mysql.connection.cursor()
cursor.execute("UPDATE customerdeatils SET passwrd = % s WHERE
email = % s",(pwd,mail))
mysql.connection.commit()
```

```python
cursor.close()
msg = 'password updated successfully'
updated_password_mail(mail)
return render_template('forget.html',type='updatePassword',msg=msg)

if __name__ == '__main__':
app.run(host = '0.0.0.0',port = 8080,debug=True)
```