CUSTOMER CARE REGISTRY

TEAM ID : PNT2022TMID04893

BATCH NUMBER : B3-3M5E

DOMAIN : CLOUD APPLICATION DEVELOPMENT

TEAM MEMBERS :

Team Leader	**AARTHY R**
Team Member 1	**ANUSREE BS**
Team Member 2	**GAYATHRI A**
Team Member 3	**GOWSALYA M**

1.INTRODUCTION

1.1PROJECT OVERVIEW

Customer care and customer service together help create a positive customer experience, or the overall impression a person has when interacting with your company. Both are vital, but there are subtle differences in how they are implemented. High-quality customer care is proactive. The needs of customers throughout the buyer's journey are anticipated, making customers feel supported. That, in turn, helps create an emotional connection between the customer and the company. Customer service is reactive. Here, the focus is on helping customers solve problems or answer questions before purchase, either in a self-serve fashion or via the customer support team. Customer care is more than just providing great customer service. It's a proactive approach to providing information, tools, and services to customers at each point they interact with a brand. If a company neglects customer care, it can negatively impact the customer service experience. For example, when a website chatbot can't provide key information about a product, customers are more likely to get frustrated and reach out to a customer service agent for help. Consumer expectations are extremely high, putting increased pressure on companies to improve their customer relationships. This can lead to lost information when the same person reaches out via multiple channels. When a customer service agent doesn't know the whole story and the customer has to repeatedly share the problem, it leaves both people frustrated. They can register for an account. After the login, they can create a complaint with a description of the problem they are facing. Each user will be assigned an agent. They can view the status of their complaint.

- Customers get the insights they need to make an informed purchase.
- Customer satisfaction can increase and customer loyalty can

improve.

- Customer service agents spend less time on routine tasks and answering commonly asked questions, enabling agents to do more meaningful task.

1.2 PURPOSE

There are two sides to customer service objectives. First, there are the goals and KPIs customer service teams attempt to achieve. Then, there's customer service resume objectives. It's important to understand the connection between the two: Writing a strong customer service resume objective starts with understanding the objectives of the field and its depth and possibilities. To provide insight into both levels of customer service objectives. The prime objective of customer service is to answer customer questions quickly and effectively, resolve issues with empathy and care, document pain points to share with internal teams, nurture relationships, and improve brand credibility. Great customer service can make people loyal to your brand, products, and services for years to come.

A strong customer service resume objective underscores your skills and experiences in contributing to customer service's overall goals and objectives. Meeting key customer service KPIs doesn't just involve answering phones and emails. It's a whole world of solutions development, intuition, empathy, brand management, time management-and the soft skills that help connect people and create trust. I guide my team toward giving the best service possible. Sometimes, we're not delivering good news. But the objective is to do that with compassion and empathy and in a way that we give the customer constructive next steps to move forward. We also know that as a newer, younger brand, customers may be wary of our credibility. It usually takes a few consistently excellent customer experiences to feel connected and loyal to the brand.

2.LITERATURE SURVEY

2.1 EXISTING PROBLEM

A strong customer problem statement should provide a detailed description of your customer's current situation. Consider how they feel, the financial and emotional impact of their current situation, and any other important details about their thoughts or feelings.

Customer Satisfaction is an attitude that is decided based on the experience obtained. Satisfaction is an assessment of the characteristics or privileges of a product or service, or the product itself, that provides a level of consumer pleasure with regard to meeting consumer consumption needs. Customer Satisfaction is the customer's response to the evaluation of perception of differences in initial expectations prior to purchase (or other performance standards) and the actual performance of the product as perceived after wearing or consuming the product in question.

The level of complaint is how high the complaint or delivery of dissatisfaction, discomfort, irritation, and anger over the service of the service or product. The dimension or indicator of complaint level is the high level of complaint. Product Quality affects Customer Satisfaction, where the dimensions or indicators of Product Quality are quality products, in accordance with the price offered, and ease of use affects the dimensions or indicators of Customer Satisfaction in relation to subscription decisions.

2.2 REFERENCES

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2.3 PROBLEM STATEMENT DEFINITION

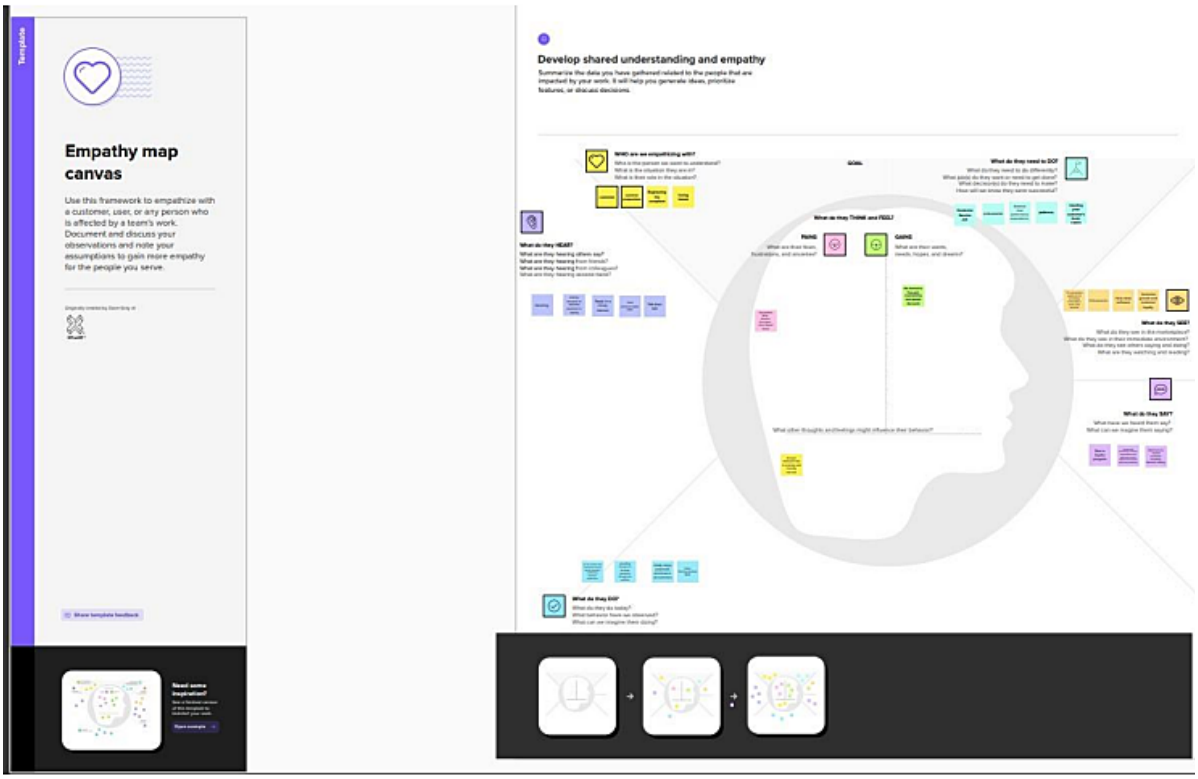
A customer problem statement outlines problems that your customers face. It helps you figure out how your product or service will solve this problem for them. The statement helps you understand the experience you want to offer your customers. It can also help you understand a new audience when creating a new product or service. A well-articulated customer problem statement allows you and your team to find the ideal solution for the challenges your customers face.

Throughout the process, you'll also be able to empathize with your customers, which helps you better understand how they perceive your product or service. A Customer Problem Statement is a detailed description of an issue that needs to be addressed. This document thoroughly elaborates on the problem that your product or your service solves for your particular customers. It takes into consideration your customer's unique pain points and how your product goals about solving their situation. A customer problem statement helps you and your team understand the detailed experience you are attempting to transform by analyzing and empathizing with your customers.

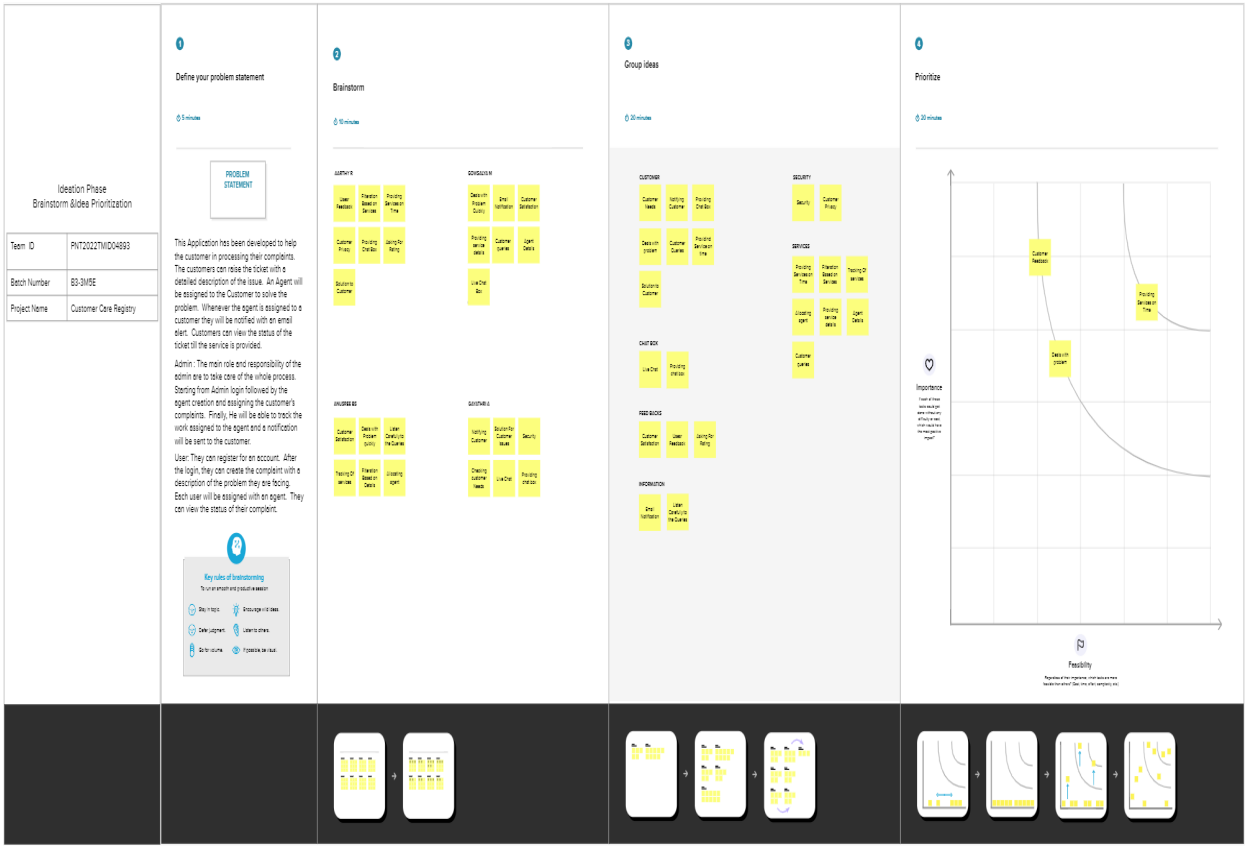
The customer problem statement is a critical component of a project. It benefits everyone involved with the project because it helps people understand why they're working on the project, providing clarity on the reasons behind the product or service. Team members will consider how your customers will be impacted by your project, what their thoughts and needs are, and thus come up with truly effective and valuable ways to improve their experience.

3.IDEATION & PROPOSED SOLUTION

3.1 EMPATHY MAP CANVAS



3.2 IDEATION & BRAINSTORMING



3.3 PROPOSED SOLUTION

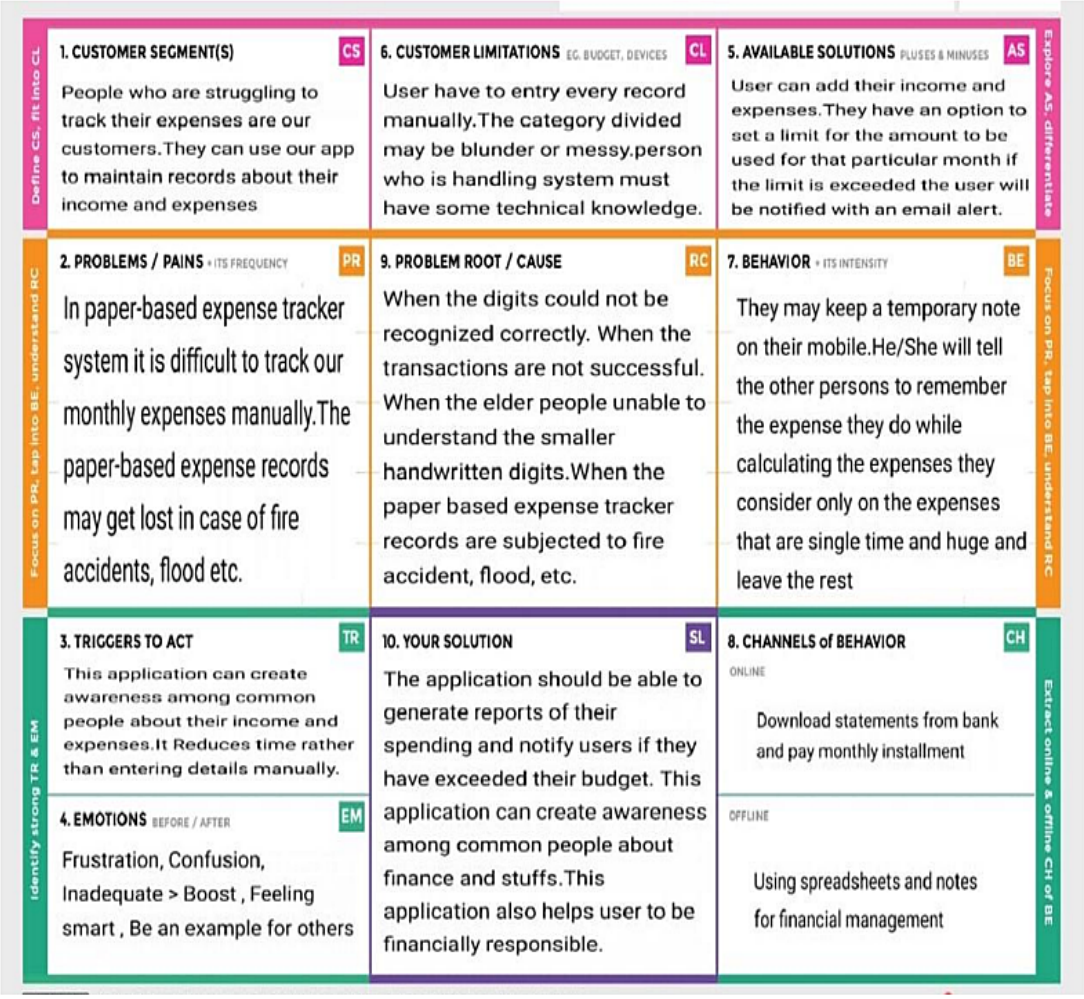
S.NO.	PARAMETER	DESCRIPTION
01	Problem Statement (Problem to be solved)	To solve customer issues using Cloud Application Development.
02	Idea / Solution description	Assigned Agent routing can be solved by directly routing to the specific agent about theissue using the specific Email. Automated Ticket 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	Novelty / Uniqueness	Assigned Agent Routing, Automated Ticket Closure, Status Shown to the Customer, and Backup data in case of failures.

S.NO.	PARAMETER	DESCRIPTION
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

S.NO.	PARAMETER	DESCRIPTION
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 gruntwork and more time on actually resolving critical customer issues

3.4 PROBLEM SOLUTION FIT

PROJECT DESIGN PHASE I:



4. REQUIREMENT ANALYSIS

4.1 FUNCTIONAL REQUIREMENT

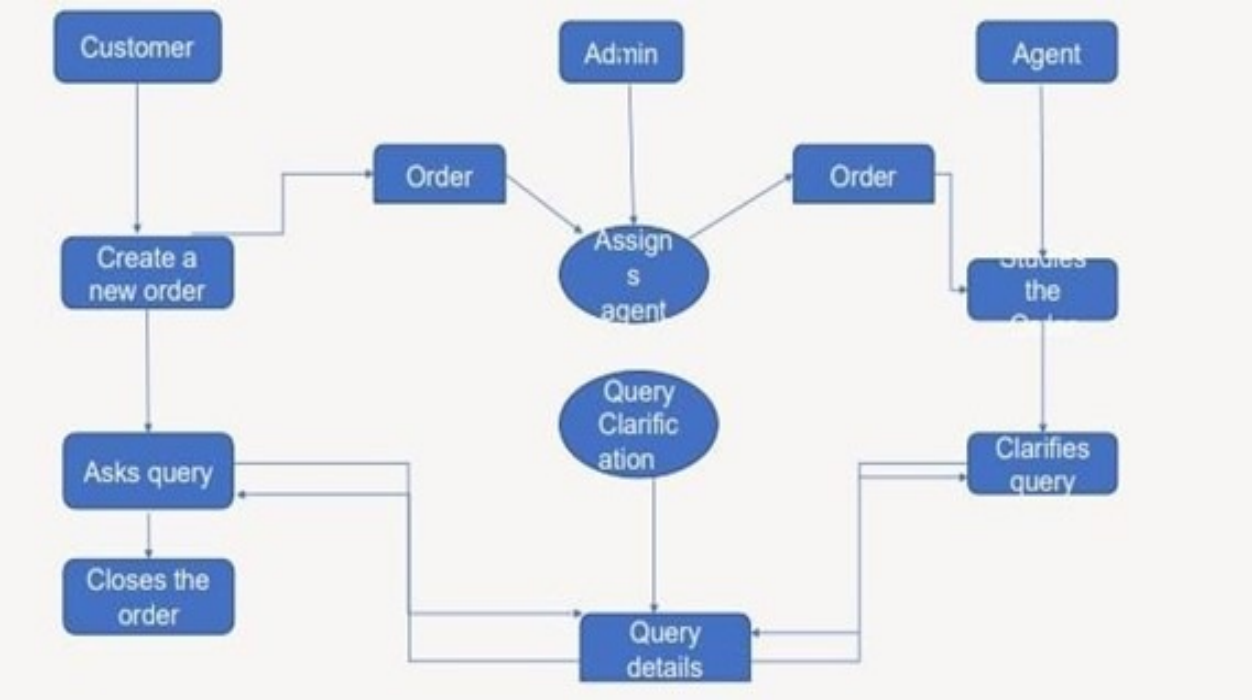
FR No	Functional Requirement(Epic)	Sub Requirement(Story/ Sub-Task)
1	User Reqistration	Registration through Form Registration through Gmail Registration through Google
2	User Confirmation	Confirmation via Email Confirmation via OTP
3	User Loqin	Login via Google Login with Email id and Password
4	Admin Loqin	Login via Google Login with Email id and Password
5	Query Form	Description of the issues Contact information
6	E-mail	Loqin alertness
7	Feedback	Customer feedback

4.2 NON-FUNCTIONAL REQUIREMENT

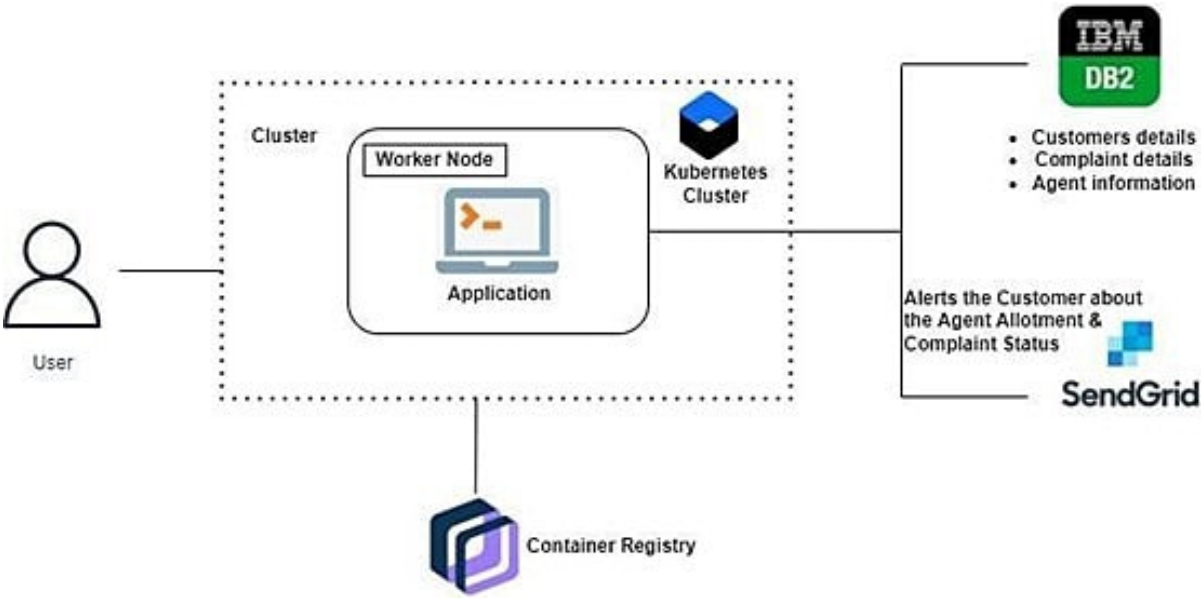
FR No	Functional Requirement(Epic)	Sub Requirement(Story/ Sub-Task)
1	User Reqistration	Registration through Form Registration through Gmail Registration through Google
2	User Confirmation	Confirmation via Email Confirmation via OTP
3	User Loqin	Login via Google Login with Email id and Password
4	Admin Loqin	Login via Google Login with Email id and Password
5	Query Form	Description of the issues Contact information
6	E-mail	Loqin alertness
7	Feedback	Customer feedback

5. PROJECT DESIGN

5.1 DATA FLOW DIAGRAMS



5.2 SOLUTION AND TECHNICAL ARCHITECTURE



5.3 USER STORIES

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 & SCHEDULE

6.1 SPRINT PLANNING &ESTIMATION

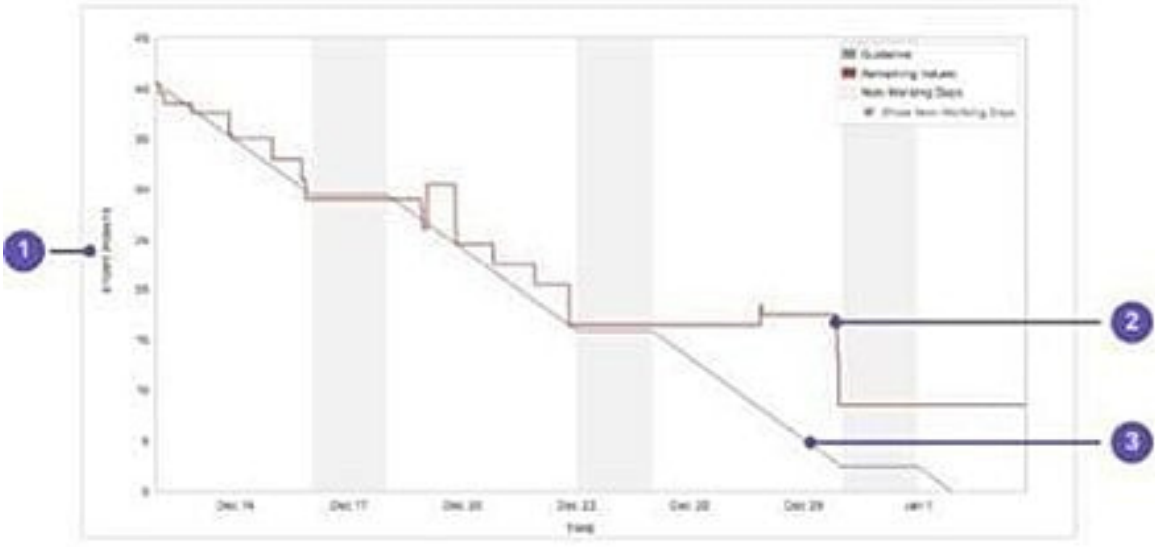
Sprint	Functional Requirement (Epic)	User Story Number	User Story / Task	Story Points	Priority	Team Members
Sprint-1	User Panel	USN-1	The user will login into the website and go through the services available on the webpage.	20	Medium	Gayathri A Gowsalya M
Sprint-2	Agent Panel	USN-2	The role of the agent is to check out the complaint tickets and to contact the user and solve the complaint they raise.	20	High	Aarthy R Anusree BS
Sprint-3	Admin Panel	USN-3	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 experience and manage the agent and complaint tickets.	20	High	Aarthy R
Sprint-4	Chat Bot	USN-4	The user can directly talk to Chatbot regarding the services. Get the recommendations based on information provided by the user.	20	High	Anusree BS
Sprint-5	Final Delivery	USN-5	Container of applications using docker kubernetes and deployment the application. Create the documentation and final submit the application	20	High	Aarthy R Anusree BS Gayathri A Gowsalya M

6.2 SPRINT DELIVERY SCHEDULE

Sprint	Total Story Points	Duration	Sprint Start Date	Sprint End Date (Planned)	Story Points Completed (as on Planned End Date)	Sprint Release Date (Actual)
Sprint-1	10	6 Days	24 Oct 2022	29 Oct 2022	10	29 Oct 2022
Sprint-2	6	6 Days	31 Oct 2022	05 Nov 2022	7	05 Nov 2022
Sprint-3	6	3 Days	07 Nov 2022	09 Nov 2022	6	09 Nov 2022
Sprint-4	5	3 Days	09 Nov 2022	12 Nov 2022	5	12 Nov 2022
Sprint-5	8	6 Days	13 Nov 2022	19 Nov 2022	8	19 Nov 2022

6.3 REPORTS FROM JIRA

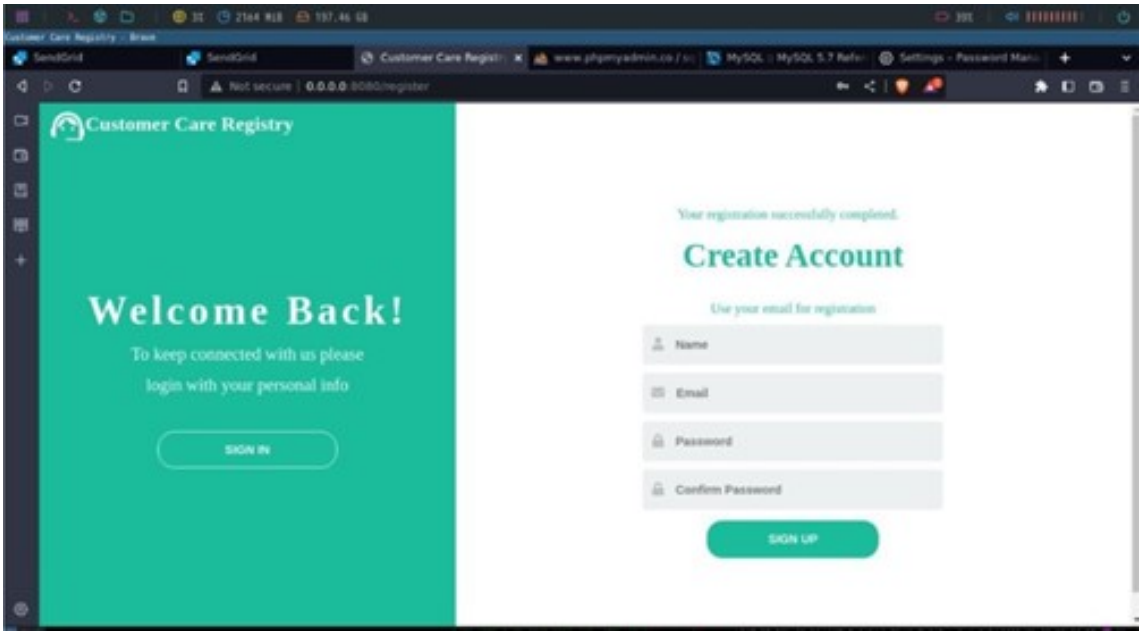
~~CCR-3~~ The user will login into the website and go throug...	DONE	
~~CCR-4~~ The role of the agent is to check out the complaint...	DONE	
~~CCR-5~~ The role of the admin is to check out the database...	DONE	
~~CCR-6~~ he user can directly talk to Chatbot regarding the ...	DONE	
~~CCR-7~~ Container of applications using docker kubernetes...	DONE	

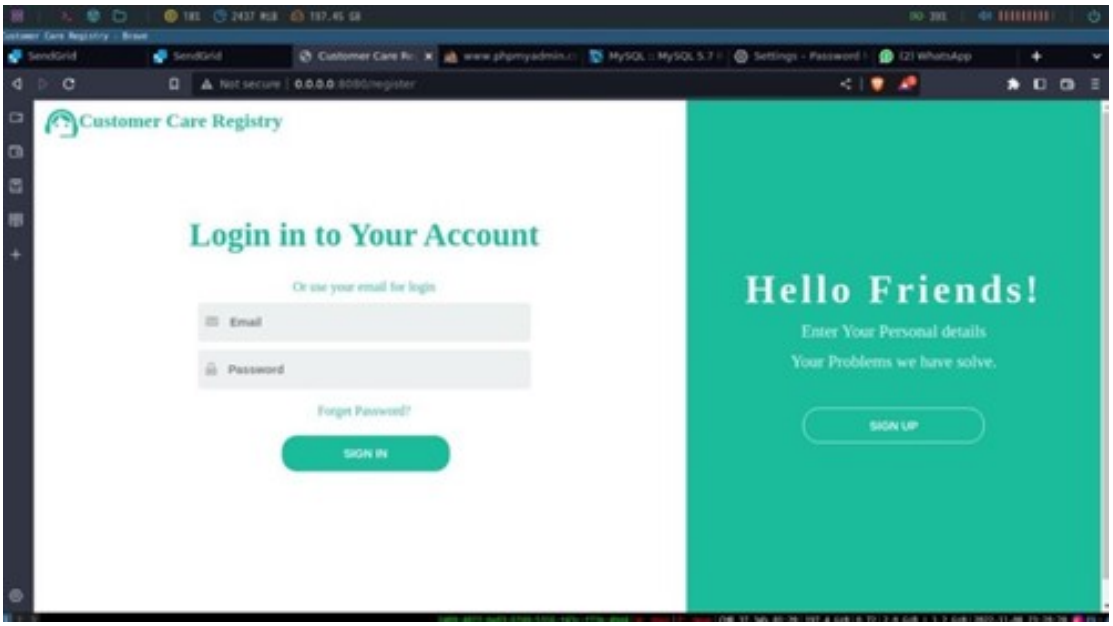


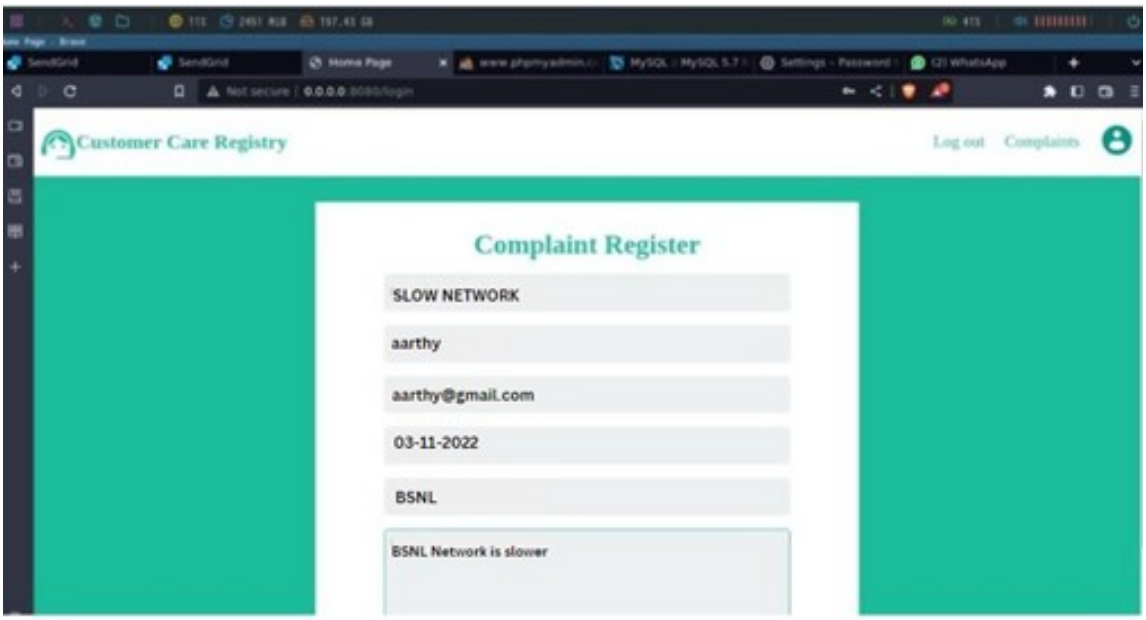
Burndown Graph

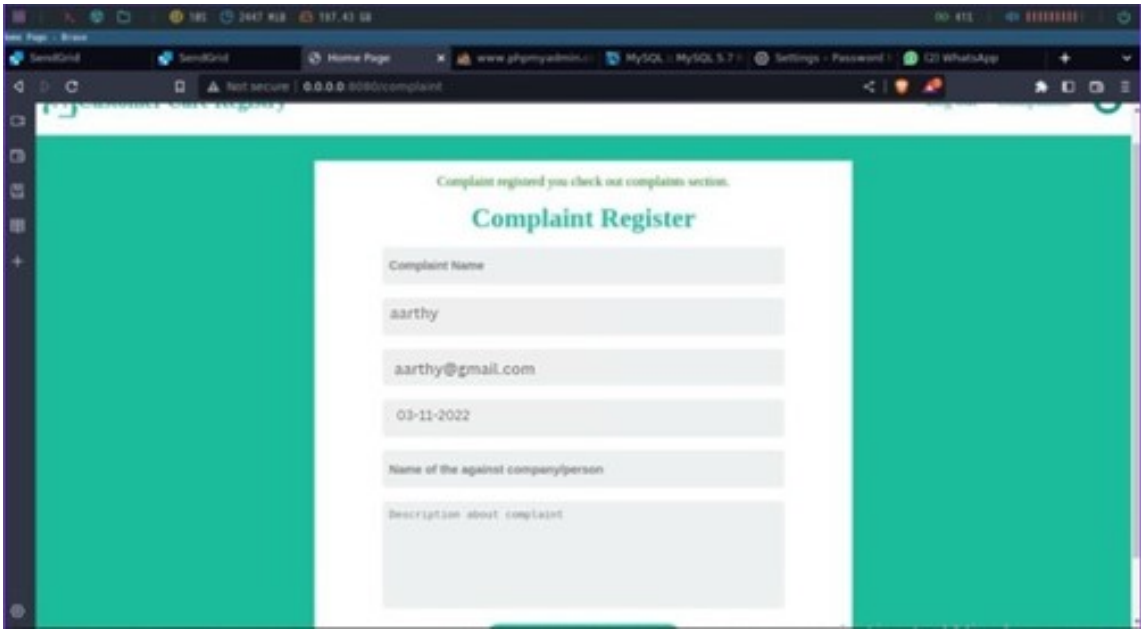
7.CODING & SOLUTIONING

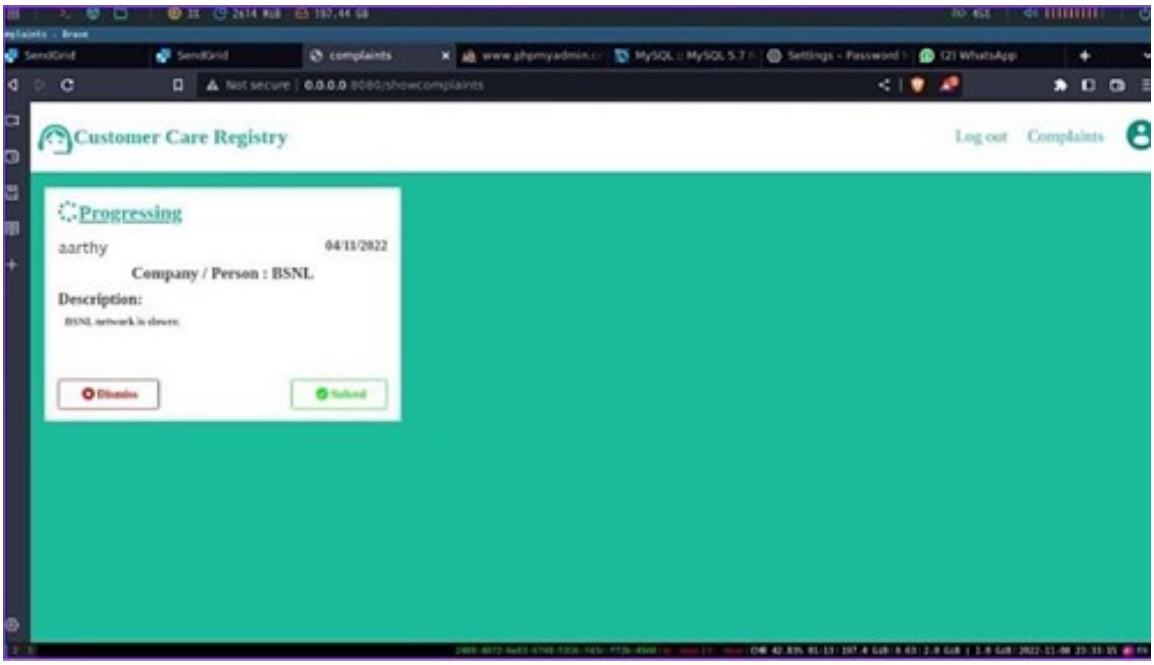
7.1 FEATURE 1



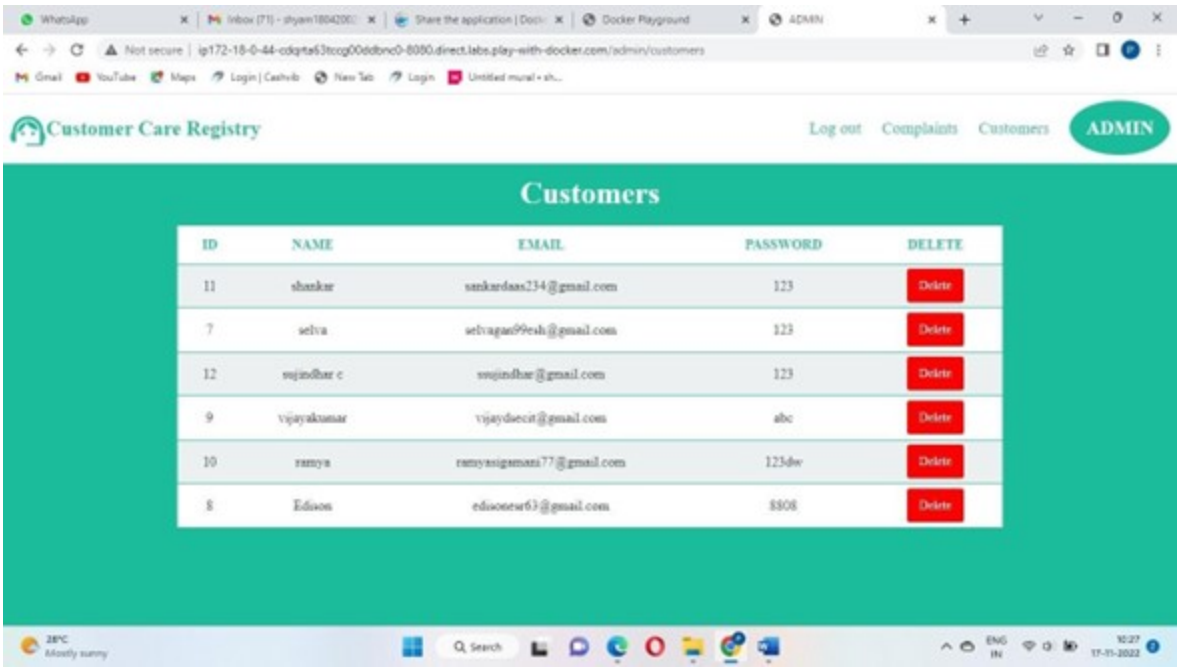



Customer Care Registry
Log out
Complaints
Complaint Register
SLOW NETWORK
aarthy
aarthy@gmail.com
03-11-2022
BSNL
BSNL Network is slower


Complaint registerd you check out complaints section.
Complaint Register
Complaint Name
aarthy
aarthy@gmail.com
03-11-2022
Name of the against company/person
Description about complaint


Customer Care Registry
Log out
Complaints
Progressing
aarthy
04/11/2022
Company / Person : BSNL
Description:
BSNL network is slower.
Dismiss
Solved

7.2 FEATURE 2


Customer Care Registry
Log out
Complaints
Customers
ADMIN
Customers
ID
NAME
EMAIL
PASSWORD
DELETE
11
shankar
sankardass234@gmail.com
123
Delete
7
selva
selvagan99esh@gmail.com
123
Delete
12
sujindhar c
soujindhar@gmail.com
123
Delete
9
vijayakumar
vijaydsecit@gmail.com
abc
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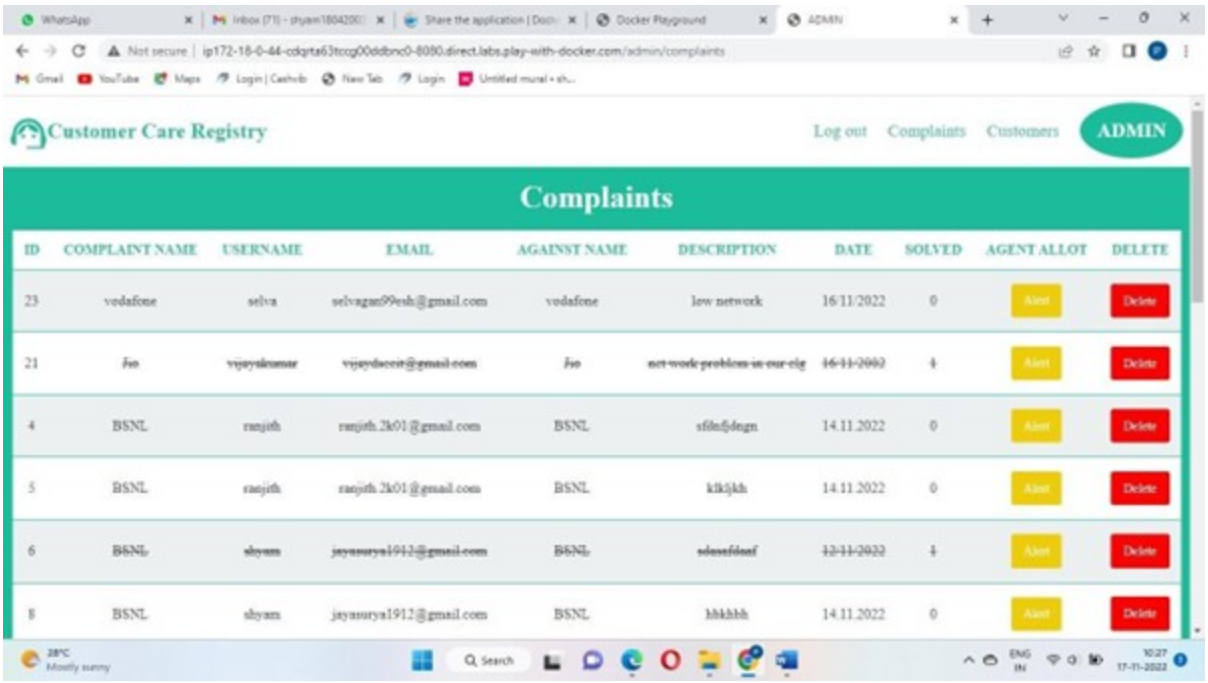
10
ramya
ramyasigamani77@gmail.com
123dw
Delete
8
Edison
edisonesr63@gmail.com
8808
Delete



7.3 DATABASE SCHEMA

Table definition

COMPLAINTS

No statistics available.

Name	Data type	Nullable	Length	Scale
ID	INTEGER	N		0
USERNAME	VARCHAR	N	150	0
EMAIL	VARCHAR	N	150	0
AGAINST_PERSON	VARCHAR	N	150	0
DES	VARCHAR	N	150	0

Table definition

COMPLAINTS

No statistics available.

Name	Data type	Nullable	Length	Scale
AGAINST_PERSON	VARCHAR	N	150	0
DES	VARCHAR	N	150	0
DATE	VARCHAR	N	150	0
SOLVED	VARCHAR	N	150	0

Table definition

CUSTOMERDEATILS

No statistics available.

Name	Data type	Nullable	Length	Scale
ID	INTEGER	N		0
USERNAME	VARCHAR	N	150	0
EMAIL	VARCHAR	N	150	0
PASSWRD	VARCHAR	N	150	0

VARCHAR

8. TESTING

8.1 TEST CASES

8.1.1 FUNCTIONAL TESTING

Functional test can be defined as testing two or more modules together with the intent of finding defects, demonstrating that defects are not present, verifying that the module performs its intended functions as stated in the specification and establishing confidence that a program does what it is supposed to do.

8.1.2 WHITE BOX TESTING:

Testing based on an analysis of internal workings and structure of a piece of software. This testing can be done sing the percentage value of load and energy. The tester should know what exactly is done in the internal program. Includes techniques such as Branch Testing and Path Testing. Also known as Structural Testing and Glass Box Testing.

8.1.3 BLACK BOX TESTING:

Testing without knowledge of the internal workings of the item being tested. Tests are usually functional. This testing can be done by the user who has no knowledge of how the shortest path is found.

8.2 USER ACCEPTANCE TESTING

Acceptance testing can be defined in many ways, but a simple definition is the succeeds when the software functions in a manner that can be reasonable expected by the customer. After the acceptance test has been conducted, one of the two possible conditions exists. This is to fine whether the inputs are accepted by the database or other validations. For example accept only numbers in the numeric field, date format data in the date field. Also the null check for the not null fields. If any error occurs then

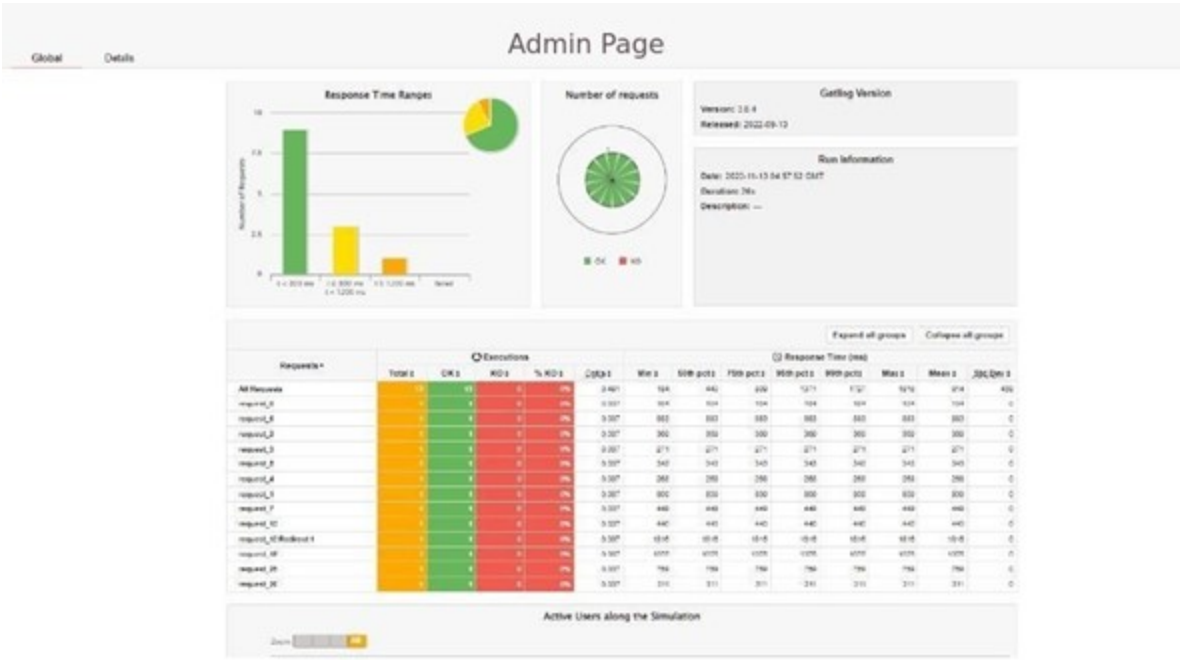
show the error messages. The function of performance characteristics to specification and is accepted. A deviation from specification is uncovered and a deficiency list is created. User Acceptance Testing is a critical phase of any project and requires significant participation by the end user. It also ensures that the system meets the functional requirements.

8.3 TEST RESULTS

A	B	C	D	E	F	G	H	I
Sprint 1 UI/UX								
Testcase	Type	Component	Scenario	Step to execute	Expected result	Actual result	Status	Executed by
1	UI	login/signup page	clicking on site link	click in site link	login/signup page loads	page load	PASS	Aarthy
2	Functional	login/signup page	login in to user acco	enter credentials	login to home page	home page loads	PASS	
3	Functional	login/signup page	signup a user	enter user details	login to home page	home page loads	PASS	
4	Functional	home page	logout of the home p	logout the user	back to login page	login page loads	PASS	
5	Functional	login/signup page	login with unregister	redirect to signup pa	back to signup page	signup page loads	PASS	
6	Functional	login/signup page	signup a existing em	use a existing user (	back to sign up page	signup page loads	PASS	
7	Functional	wrong password	sign in with wrong pa	login with wrong pas	back to sign up page	signup page loads	PASS	
8	Functional	wrong email	signin with wring em	login with wrong em	back to signup page	signup page loads	PASS	
Spirnt 2 db2								
1	Functional	complaint page	display registerd cor	click on complaint ta	complaint list down	complaint list dow	PASS	
2	Functional	complaint page	clicking on solve	click on solve buttor	solve the complaint	complete the com	PASS	
3	Functional	complaint page	click on the dismiss	click dismiss button	delete the complaint	deletes the compl	PASS	
4	Functional	complaint page	fill up the complaint f	click submit	create the complaint	create a new com	PASS	

9. RESULTS

9.1 PERFORMANCE METRICES




Global
Details
Complaint page
Response Time Ranges
Number of requests
Gatling Version
Run Information
Expand all groups
Collapse all groups


Global
Details
Complaint form
Response Time Ranges
Number of requests
Gatling Version
Run Information
Expand all groups
Collapse all groups

10. ADVANTAGES &DISADVANTAGES

Advantage

- Flow sheet is a powerful tool to monitor clinical data and track trends
- Provides a dashboard of who needs what
- Provides total population data reporting with no chart abstraction
- Generates revenue (it shows when services are needed) Provides outreach information at fingertips
- Improves team-based care
- Smaller software package than EHRs
- Creating loyal customers through good customer service can provide businesses with lucrative long-term relationships.
- Customer loyalty. Loyal customers have many benefits for businesses
- **Disadvantage**
- Disease-specific, not longitudinal
- Does not include information necessary for billing Requires hardware, software and maintenance
- Requires data entry and data maintenance
- Parallel documentation system (i.e., some information has to be entered in two systems)
- Can’t stand alone, must have an additional documentation system.
- Experience burnout and stress. Working as a customer service representative requires you to maintain a friendly demeanour at all times, regardless of how customers act or how you personally feel

11. CONCLUSION

Companies today are modernizing customer care, using advanced AI to ensure a positivecustomer experience startingfrom the first interaction and throughout the buyer's journey. To properly manage customer care, companies must understand how they are succeeding and what needs improvement. This requires establishing key performance indicators (KPIs) for customer service and creating a system of gathering metrics across channels. In conclusion, customer care, involves the use of basic ethics and any company who wants to have success and grow, needsto remember, that in order to do so, it must beginwith establishing a code of ethics in regards to how each employee is to handle the dealing with customers. Customers are at the heart of the company and its growth or decline. Customer care involves, the treatment, care, loyalty, trust the employee should extend to the consumer, as well in life. This concept can be applied to so much more than just customer care.People need to treat otherswith respect and kindness; people should try to take others into consideration when making any decision. If more people were to practice this policy, chances are the world would be a better, more understanding place for all to exist. Thereby, the customer care registry would be far helpful and approachable. It offers easy tracking, recording and notification than any other means.

12. FUTURE SCOPE

The current state of customercare registery, in so many companies, lookssomething like this:

- Customer acquisition is prioritised over retention
- Customer service investment projects are sidelined.
- Departmental efficiency is of highestpriority.
- Businesses see employees in the customer service department as short-term anddisposable. They are there to fulfil a specific, repetitive, purpose.
- Employees are considered unskilled and leadershire accordingly.
- New agents view customer service as a ‘last resort’ or ‘short term’ job. Peopleoften see careers in customersupport as unambitious.
- Agent training rarelygoes beyond productand people skills.

In the next 3-5 years, we expect to see these **future customer care registrytrends**:

- The shift from a primarily 'cost centre' to primarily 'growthcentre' worldview.
- The job desk for a customer care registry director will focus more on leadership,innovation, and ability to drive company-wide improvement.

- Customer service will shift to become a strategic partner of marketing, sales, andproduct development. CS will help with direction, project prioritisation, and impact.
- A need for customer service leaders to take a highly strategic seat at the table.They'll need to argue for investment in talent, technology, and innovation.
- A shift in performance metrics. Forget of resolved tickets. In the future, we'll measure performance based on of customers saved from the precipice of churn.
- Acareer in customercare registry will not be a last resort. Top graduates willprioritise getting an educationin strategic customerinteraction.
- Focus on ticket deflection will reduce because brands will view each customerinteraction as an opportunity to learn, build a relationship, and grow profits. Theydeserve a well-trained, human touch.

Modern and developing technology enables this future to exist. With newtechnology, administrative tasks will tend toward zero.

- The sole purpose of the customer service is to meet the expectations of the customers so that they are satisfied with the outcome. These services are also availableto understand the queries of the customers and ensure that they enjoy acost-effective experience after purchasing any product from the respective company.

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,solv
e_mail
import json
importibm_db
import re from random
import randintfrom datetimeimport 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.appdomai
n.cloud;PORT=3124
9;SECURITY=SSL;SSLServerCertificate=src/DigiCertGlobalRoo
tCA.crt;UID=dmt13873;PWD=740yZ1Yq8Uj2E4qm","","")  # type:
ignore

print(conn)

print("connection successful...")


# databaseconfiguration

# 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
        returnrender_template(
        'home.html')
    if "username" in session:
        session["current_date"]
        = current_datereturn
        render_template('home
        .html')
    return render_template('index.html')


# manually registration
@app.route('/register',met
hods=["POST"])def
register():
    if
        request.meth
        od == 'POST':
        name =
        request.form['u
        name']

        mail =
```

```
request.for
m['mail']pwd
=
request.for
m['pwd']
cpwd = request.form['confirmpwd']
if not
   re.match(r'[^@]+@[^@]+\.[^@
   ]+', mail):msg ='Invalid email
   address !'
   return
render_template('index.html',signupm
sg=msg)if pwd != cpwd:
   msg = 'Pleaseenter correct confirm password'
   return
render_template('index.html',signupm
sg=msg)# check account is exists or
not
# cursor =
mysql.connection.cur
sor()rCheckQuery = ''
result = ibm_db.exec_immediate(conn,f"SELECT * FROM
customerdeatilsWHERE 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 pleaselogin.'

           return

        render_template('index.html',signupm

        sg = msg)# notexists


        # cursor= mysql.connection.cursor()


        # cursor.execute('INSERT INTO customerdeatils
VALUES(null,% s,% s,%s)',(name,mail,pwd))

        #

        mysql.connect

        ion.commit()#

        cursor.close()

        regInsertQuery = f"INSERT INTO customerdeatils
(username,email,passwrd) VALUES('{name}','{mail}','{pwd}')"
```

```
        insertflag =
        ibm_db.exec_immediate(conn,regInsertQ
        uery)msg = 'Your registration
        successfully completed.'
        # send mail
        sendemail(mail,'Acc
        ount_creation')


    return
render_template('index.html',signupm
sg = msg)# adminpage
@app.route('/ad
min/<which>')d
ef
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),ib
m_db.re sult(result,3)]
            data.append(temp)
```

```
        return
    render_template('admin.html',customers=data,complai
    nts=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),ib
m_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,complaint
s=data)# admin delete
@app.route('/Delet
e/<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.connect
```

```
        ion.commit()#
        cursor.close()
        return
    redirect(url_for('admin',which='custo
    mers'))if type == 'complaints':
        # cursor= mysql.connection.cursor()
        result = ibm_db.exec_immediate(conn,f'DELETE
FROM complaintsWHERE id = {id}')
#mysql.connection.commit()# cursor.close()
        return
redirect(url_for('admin',which='complai
nts'))# manually login
@app.route('/login',methods=['POST','G
ET'])

def login():
    if
        request.meth
        od == 'POST':
        mail =
        request.form['
        mail1']
        password =
        request.form['pw
```

```
d1']# login is
admin or not
if mail == "admin" and password ==
   'admin@1810': return
   redirect(url_for('admin',which='custo
   mers'))
# check account is exists or not
# cursor= mysql.connection.cursor()
query = "SELECT * FROM customerdeatils WHERE
email=? ANDpasswrd=?"
stmt = ibm_db.prepare(conn,
query) # type:ignore
ibm_db.bind_param(stmt,1,mail) #
type:ignore
ibm_db.bind_param(stmt,2,passwo
rd) # 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=sess
ion["mail"
])
        else:
            msg = 'mail or password is not valid.'
            return render_template('index.html',signinmsg=msg)

    if request.method
        == "GET": return
        redirect(url_for('h
        ome'))


#
logout
meth
od
@app.r
oute('/l
ogout')
def
```

```
logout(
):
    if
        "usernam
        e" in
        session:
        session.p
        op("usern
        ame")
    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',me
thods=['POST'])def
complaint():
    if request.method == 'POST':
        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['compla
        int_des']# cursor =
        mysql.connection.cur
        sor()

        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.connect
        ion.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('/sh
owcomplaints')
def
showcomplaints(
):
    # cursor = mysql.connection.cursor()
    # cursor.execute("SELECT * FROM complaints WHERE
username= % sAND
```

```
email=%s",(session["username"],session["mail"]))
   # details =
   cursor.fetch
   all()#
   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(stm
t,6)]
      print
      (tem
      p)
      data.
      appe
```

```
        nd(te
        mp)
    return render_template('complaints.html',complaints=data)


# update complaint
@app.route('/solve',meth
ods=["POST"])def
solve_complaint():
    if
        request.meth
        od ==
        "POST":c_id=
        request.form[
        'c_id']


        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_i
    d) # type:ignore
    ibm_db.execute(stmt1)
    details =
    ibm_db.result(st
    mt1,0)#
    cursor.close()
    print(details)
    # solve_mail(session['mail'],'user')
    return
redirect(url_for('showcompl
aints'))
```

```
    returnredirect(url_for('show
    complaints'))


# # admin agent allot
#
@app.route('/solve_admin',metho
ds=["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='complaint
s'))#     return
redirect(url_for('admin',which='complaint
s'))
# remove complaint
```

```
@app.route('/dismiss',met
hods=["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()

        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('showcompl
    aints'))
    returnredirect(url_for('show
    complaints'))
# send otp in user mail id
@app.route('/send_otp',methods=[
"POST","GET"])def send_otp():
    if  request.meth
```

```
od            ==
"POST":   mail
=
request.form[
"mail"]
cursor = mysql.connection.cursor()
cursor.execute("SELECT   *   FROM   customerdeatils
WHERE email = %s",[mail])
temp       =
cursor.fetc
hone()
cursor.clo
se()
if not temp:
   return
render_template('forget.html',type='otp',msg1='Your
accountdoesn\'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',tempmai
l=mail)          #          forget          passwordmethod
@app.route('/forgetpassword/<type>',methods=["POST","GET"
])
def
   forgetpa
   ssword(t
   ype):     if
   type    ==
   'otp':
      return
   render_template('forget.html',typ
   e=type)  if  request.method  ==
   "POST":
      mail           =
      request.form[
      "mail"]  otp  =
      request.form[
      "otp"]
      pwd                  =
      request.form["pass
      word"]    c_pwd    =
```

```
request.form["con_
pwd"]
print(otp,session['ot
p'])
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 WHEREemail = % s",(pwd,mail))
mysql.conne
ction.commit
()
cursor.close
()
msg = 'password
updated successfully'
updated_password_m
```

```
        ail(mail)
        return
        render_template('forget.html',type='updatePassword',msg=msg)


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

GitHub &Project Demo Link

GitHub link: https://github.com/IBM-EPBL/IBM-Project-7897-1658902184

Demo link:
https://drive.google.com/file/d/1ReuBIpJCRyM7G3Rg21SUKJ-uVPzy88sc/view?usp=drivesdk