

IBM-Project-24264-1659940810

CUSTOMER CARE REGISTRY

TEAM DETAILS:

TEAM ID: PNT2022TMID20125

COLLEGE NAME: NATIONAL ENGINEERING COLLEGE KOVILPATTI.

DEPARTMENT: COMPUTER SCIENCE AND ENGINEERING

TEAM MEMBERS:

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1. INTRODUCTION

The customer care registry is a system that stores and organizes customer contact information. It provides customer service representatives with a central location to find customer contact information, track customer interactions, and resolve customer inquiries.

The registry can also be used to generate reports on customer service activity, identify trends, and measure customer satisfaction.

The customer care registry is a secure online database that stores and organizes customer information. This information can include contact information, customer service requests, and account details.

The registry helps customer service representatives quickly and easily locate and retrieve customer information.

In addition, the registry can be used to track customer service interactions and measure customer satisfaction.

Customer Service is normally integral to a company's customer value proposition.

PURPOSE OF THE PROJECT:

A customer care registry is a system used by businesses to track and manage customer information.

This information can include contact information, purchase history, and other data that can be used to improve customer service and support.

The customer care registry is a record of all customers who have contacted a company for customer service.

This registry can be used to track customer service interactions, measure customer satisfaction, and improve customer service operations.

2.LITERATURE SURVEY

S.NO	Author	Title	Publish Date	Findings
1	Olutayo Boyinbode , Akure	E- Customer Care Service System for Benin Electricity Distribution Company	April 2015	Face to face customer contact is time consuming, since the consumers have to be physically present for both parties to meet before solution can be proffered. Telephone communication with BEDC enables the customers to call and make enquiries and receive responses about information or services required. The BEDC existing customer service system is saddled with limitations such as poor customer services and relations, high response time. This paper aims to eliminate these weaknesses by automating the process through an e-Customer Care Service System by which customer makes an enquiries and complaints on the services delivered by the company.

S.NO	Author	Title	Publish Date	Findings
2	D Riananingrum, R R S Hari, F Nursaori and WA Astuti	Integrated Information System for Customer Care	January 2021	The application of customer Facing and Ecosystem Facing is implied as computerization of customer data. The goal is to understand customers' needs and expectations to establish good relationships with customers. This study aims to determine Customer Facing and Ecosystem Facing services in the digital transformation business. The research method used a descriptive research method with a qualitative approach. Customer Facing and Ecosystem Facing is a technology that can increase the production process for business.

S.NO	Author	Title	Publish Date	Findings
3	Khalid Rababah, Haslina Mohd, and Huda Ibrahim	Customer Relationship Management (CRM) Processes from Theory to Practice: The Pre-implementation Plan of CRM System	April 2011	This paper provides an extensive review of the literature regarding the CRM processes. This review aims to increase the understanding of the different perspectives and the various types and levels of CRM processes. This paper reveals that there are four major perspectives of CRM processes which are customer facing level processes, customer oriented processes, cross functional CRM processes, and CRM macro-level processes.

S.NO	Author	Title	Publish Date	Findings
4	Mutegyeki, Walter	A mobile based customer communication management tool to improve customer care services in micro finance institutions	May 2016	This report document describes project design and development of a digital customer care communication solution that encompasses all major communication channels that will enable microfinance bank customers to conveniently communicate with their banks and also enable banks to manage and evaluate customer care and service delivery. The project followed a software development process that included software requirements specifications and requirements engineering, software design and development, verification & validation which constituted of dynamic testing of each individual core modules.

S.NO	Author	Title	Publish Date	Findings
5	Zain Raza, Syed M. Raza, Hamid Ahmed, Faizan Faisal, Malik	Customer Care Application	April 2016	This project, Customer Care Application includes a Desktop based Admin Panel, a Web application and an Android Application that help people in a number of complaint related tasks like submitting their product complaints, checking a complaint status and status of warranty online with ease.

References

- 1.Help desk
- 2.Live chat box support

PROBLEM STATEMENT DEFINITION:

The statement of the problem is the focal point of your research. This statement is an accurate, concise, and specific statement that clearly states the problem the research project sets out to solve. It is used to focus and guide your research.

A problem statement is a concise description of the issues that need to be addressed by a problem-solving team and should be presented to them (or created by them) before they try to solve the problem.

Often, problem statements are used as part of a business case or during the initial phases of a project.

Defining the problem :

Website isn't Showing or Running	
Why this happens?	This issue often happens when the Web Browser is not compatible.
Who does the problem affect?	The user and the users who are using theWebsite
What is the issue?	This issue can be related to theincompatibility of the Browser
What is the solution?	To check and download the compatible version of the Website

3. IDEATION AND PROPOSED SOLUTION:

EMPATHY MAP CANVAS:

The empathy map is an effective method for understanding your customer's needs and how to better appeal to them.

It allows you to place yourself in your target customer's shoes, understand their challenges and needs, and find ways to address them better.

Creating an empathy map requires you to consider the following: What does your customer think?

What does your customer feel?

What does your customer see?

What does your customer say?

What does your customer do?

What does your customer hear?

After you've answered these questions, you'll better understand your customer, allowing you to better connect with them.

Competitive Analysis Competitive analysis is evaluating your competition and understanding its strengths and weaknesses.

This allows you to identify areas where you can improve and capitalize on your weaknesses.

When conducting a competitive analysis, consider the following: What is your competition doing well?

What is your competition doing poorly?

What are your competition's strengths? What are your competition's weaknesses?

What are your competition's opportunities?

What is your competition?



IDEATION AND BRAINSTORMING:

Ideation is the process of coming up with new ideas, and brainstorming is a technique often used during ideation to generate a large number of ideas.

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 endeavor. A group of people are frequently gathered for a brainstorming session to generate either fresh, general ideas or solutions to specific problems or circumstances.

Templates

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

2 hours to collaborate

2-4 people recommended

Share template feedback

2

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

Team gathering

Everyone who should participate in the session should send an invite. Share essential information or pre-work ahead.

Set the goal

Think about the problem you're focusing on solving in the brainstorming session.

Learn how to use the facilitation tools

Use the Facilitation Improvers to run a happy and productive session.

Open article

How can you help us (your problem statement)?

Key rules of brainstorming

To run an smooth and productive session

Stay to topic

Encourage wild ideas

Defer judgement

Listen to others

Use lots of voices

If possible, be visual

3

Brainstorm

Write down any ideas that come to mind that address your problem statement.

10 minutes

Tip

You can collect a sticky note and write your problem statement (or even start drawing)

Any R

Stuck/Unknown R

Yatta! Wow! X

Archived

Need some inspiration?

Get a random selection of ideas to inspire your work.

Open inspiration

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.

30 minutes

Importance

Feasibility

Tip

Remember that you can use these ideas to create a plan for your project. You can use the ideas to create a plan for your project. You can use the ideas to create a plan for your project.

5

Group ideas

Take turns sharing your ideas while clustering similar or related notes as you go. In the last 10 minutes, give each cluster a sentence that labels it. If a cluster is bigger than six sticky notes, try and see if you can break it up into smaller sub-groups.

30 minutes

CUSTOMER

CHATBOX

FEEDBACKS

INFORMATION

SECURITY

SERVICES

Tip

Add a sentence that helps to group ideas. You can use the ideas to create a plan for your project. You can use the ideas to create a plan for your project. You can use the ideas to create a plan for your project.

6

After you collaborate

You can export the mind as an image or pdf to share with members of your company who might find it helpful.

Quick add-ons

Share the mind

Export a copy of the mind as a PDF or PNG to share with members of your company who might find it helpful.

Report the mind

Export a copy of the mind as a PDF or PNG to share with members of your company who might find it helpful.

Keep moving forward

Strategy Worksheet

Customer experience journey map

Strengths, weaknesses, opportunities & threats

Share template feedback

3

Group ideas

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30 minutes

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PROPOSED SOLUTION:

The proposed solution is to require all users of the site to sign up for an account in order to access any content.

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	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)	<ul style="list-style-type: none">● 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 grunt work and more time on actually resolving critical customer issues

PROBLEM SOLUTION FIT:

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.

4.

Problem-Solution fit canvas 2.0

<p>1. CUSTOMER SEGMENT(S) CS</p> <p>Whose your customer?</p> <p>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.</p>	<p>6. CUSTOMER CC</p> <p>What constraints prevent your customers from <u>accessing</u> or limit their choices of solutions? <u>spending power</u>, budget, no cost, network connection, available devices.</p> <p>1) This application will be supported by almost all the devices. 2) The solution we propose will have an alert via email feature, <u>if</u> expense exceed the given limit. 3) This solution also provides insights in a graphical way.</p>	<p>5. AVAILABLE SOLUTIONS AS</p> <p>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? <u>pen and paper</u> is an alternative to digital notetaking</p> <p>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</p>
<p>2. JOBS-TO-BE-DONE / PROBLEMS J&P</p> <p>Which jobs-to-be-done (or problems) do you address for your customers? There could be more than one; explore different sides.</p> <p>1) The application <u>allow</u> the customers to find the solution for their queries. 2) They <u>will</u> be able to categorize their expenses. 3) They will be also given option for the general <u>questions</u>. 4) They also get the free solution where we provide our agents.</p>	<p>9. PROBLEM ROOT CAUSE RC</p> <p>What is the real reason that this problem exists? What is the back story behind the need to do this job? <u>customers</u> have to do it because of the change in regulations.</p> <p>1) Lot of customers don't know the guidelines for their problems. 2) Some customers have of lack of <u>knowledge</u>. 3) Not knowing the answer to a question. 4) Not reading the guidelines properly</p>	<p>7. BEHAVIOUR BE</p> <p>What does your customer do to address the problem and get the job done? <u>directly related</u>: find the right solar panel installer, calculate usage and benefits, indirectly associated: customers spend free time on volunteering work (i.e. Greenpeace)</p> <p>1) Make sure he/she reads the guidelines properly. 2) Make sure they find a proper solution <u>for</u> their queries.</p>
<p>3. TRIGGERS TR</p> <p>What triggers customers to act? <u>Up</u>: seeing their <u>guidelines</u>, installing solar panels, reading about a more efficient solution in the news.</p> <p>1) Customers can know to solve their solutions.</p> <p>4. EMOTIONS: BEFORE / AFTER EM</p> <p>How do customers feel when they have a problem or a job and afterwards? <u>lost</u>, <u>frustrated</u> → confident, in control - see it in your communication strategy & design.</p> <p>1) Customers can get the from the help desk.</p>	<p>10. YOUR SOLUTION SL</p> <p>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 <u>business case</u>.</p> <p>1) To design a personal help desk using flask. 2) To provide insights on their queries in a graphical way.</p>	<p>8. CHANNELS of BEHAVIOUR CH</p> <p>8.1 ONLINE: What kind of actions do customers take online? Extract online channels from #7.</p> <p>1) All their data are secured and being updated to cloud storage</p> <p>8.2 OFFLINE: What kind of actions do customers take offline? Extract offline channels from #7 and use them for customer development.</p> <p>1) Make sure they find the best solutions for their complaints.</p>

REQUIREMENT ANALYSIS

The process of studying user requirements and defining system functionality.

Requirement Analysis:

- > Serves as a foundation for test plans and project plan
- > Serves as an agreement between the developer and the customer
- > Process to make stated and unstated requirements clear
- > Process to validate requirements for completeness, ambiguity, and feasibility.

FUNCTIONAL REQUIREMENTS:

Functional requirements describe the behaviour of a system. They are used to define what a system is supposed to do.

NON-FUNCTIONAL REQUIREMENTS:

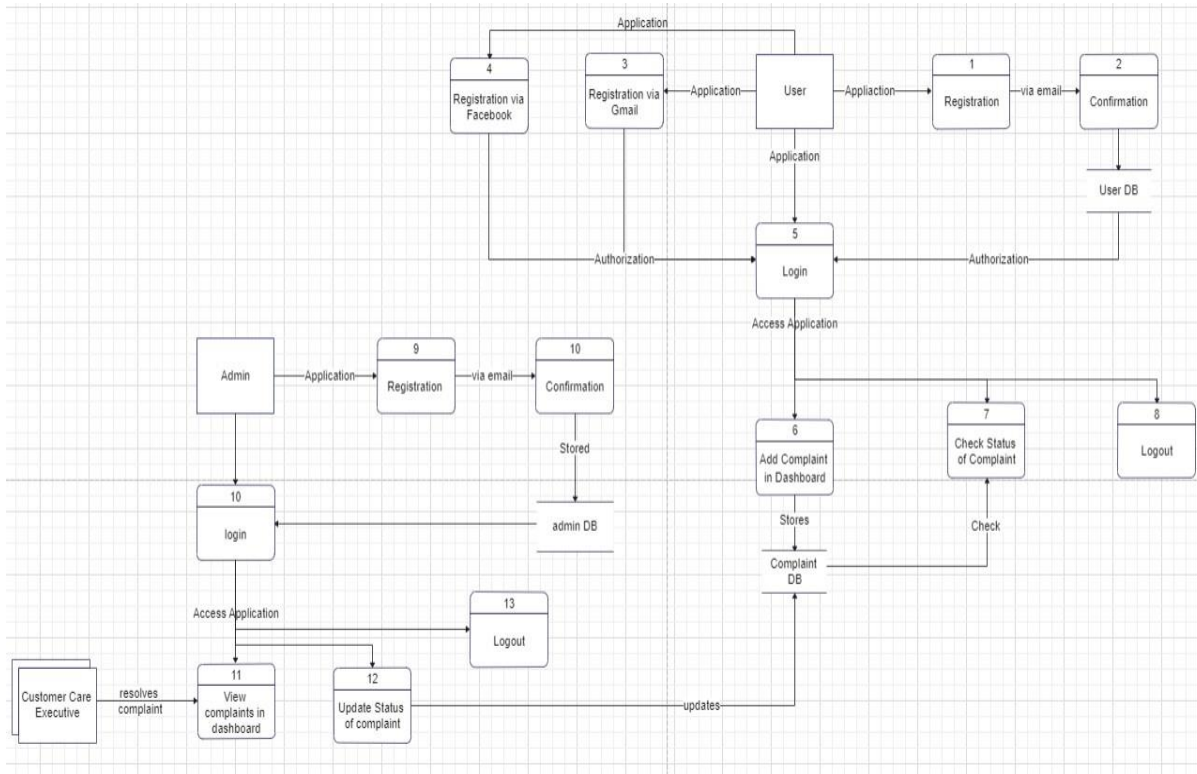
Non-functional requirements are requirements that specify criteria that can be used to judge the operation of a system, rather than specific behaviours.

These criteria include:

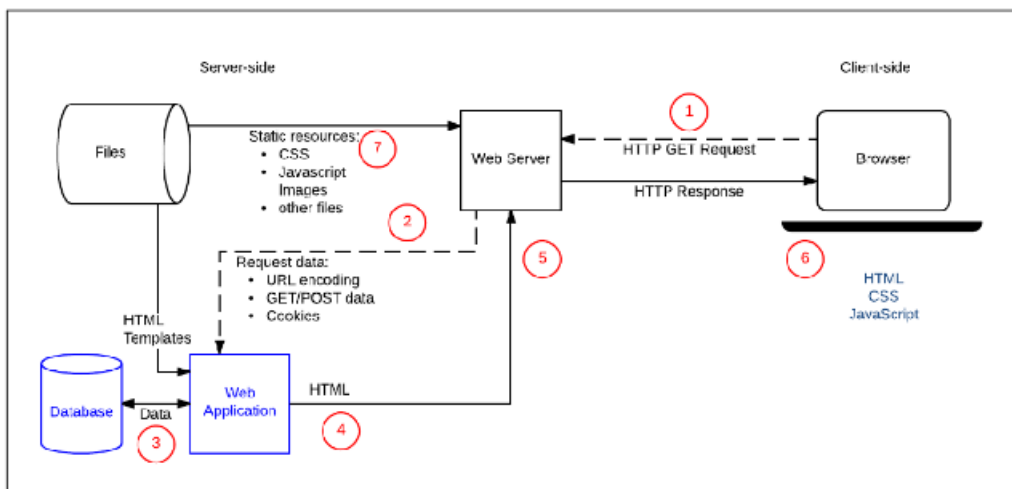
- performance (e.g. response time, throughput)
- security (e.g. confidentiality, integrity)
- safety (e.g. avoiding damage to people or property)
- usability (e.g. easy to use, user-friendly)
- maintainability (e.g. easily changed, easily tested) - etc.

5.PROJECT DESIGN

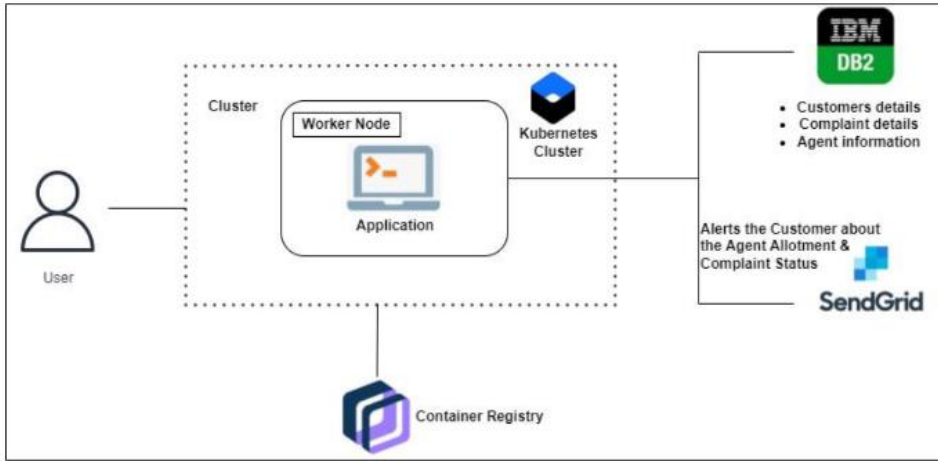
DATA FLOW DIAGRAMS:



SOLUTION AND TECHNICAL ARCHITECTURE:



TECHNICAL ARCHITECTURE



USER STORIES:

User Type	Functional Requirement (Epic)	User Story Number	User Story / Task	Acceptance criteria	Priority	Release
Customer (Web user)	Registration	USN-1	As a user, I can register for the application by entering my email, password, and confirming my password.	I can access my account / dashboard	High	Sprint-1
		USN-2	As a user, I will receive confirmation email once I have registered for the application	I can receive confirmation email & click confirm	High	Sprint-1
		USN-3	As a user, I can register for the application through Facebook	I can register & access the dashboard with Facebook Login	Low	Sprint-2
		USN-4	As a user, I can register for the application through Gmail		Medium	Sprint-2
	Login	USN-5	As a user, I can log into the application by entering email & password		High	Sprint-1
	Dashboard	USN-6	As a user, I can register the complaint in the register complaint page	I can register complaint(s)	High	Sprint-1
		USN-7	As a user, I can view the status of the complaint.	I can view status of complaint	Medium	Sprint-1
		USN-8	As a user, I can logout of the application	I can logout from the application	Low	Sprint-2
Customer Care Executive	Dashboard	USN-8	As a customer care Executive, I can resolve a complaint registered by user.	I can provide solution to a problem.	High	Sprint -1
Administrator	Registration	USN-9	As an admin, I can register for the application by entering my email, password, and confirming my password.	I can access my account / dashboard	High	Sprint-1
		USN-10	As an admin, I will receive confirmation email once I have registered for the application	I can receive confirmation email & click confirm	High	Sprint-1
	Login	USN-11	As an admin I can log into the application (admin panel) by entering email & password		High	Sprint-1
	Dashboard	USN-12	As an admin, I can update the status of the complaint to the user with the help of customer care executive.	I can satisfy the customer on his/her query.	Medium	Sprint-2
		USN-13	As an admin, I can logout from the application	I can logout from the application	Low	Sprint -2

6. PROJECT PLANNING AND 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.

SPRINT PLANNING AND ESTIMATION:

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.

7.

CUSTOMER:

Sprint	Functional Requirement (Epic)	User Story Number	User Story / Task	Story Points	Priority	Team Members
Sprint-1	Registration	USN-1	As a customer, I can register for the application by entering my email password and confirming my password.	2	High	Ajay , Yutha Mesak
Sprint-1	Registration	USN-2	As a customer, I will receive a confirmation email once I have registered for the application	1	High	Arshad
Sprint 1	Login	USN-3	As a customer, I can log in to the application by entering the correct email and password.	1	High	Gokulakrishnan
Sprint 2	Dashboard	USN-4	As a customer, I can see all the tickets raised by me.	3	High	Ajay, Yutha Mesak
Sprint-3	Ticket Creation	USN-5	As a customer, I can create a new ticket with a detailed description of my query.	2	Medium	Gokulakrishnan
Sprint-3	Forgot Password	USN-6	As a customer, I can reset my password if I forgot my old password.	2	Medium	Arshad
Sprint 4	Address Tickets	USN-7	As a customer, I can have conversations with the assigned agent and get my queries clarified.	3	High	Gokulakrishnan
Sprint 4	Ticket Status	USN-8	As a customer, I can see the current status of my ticket and its details.	2	Medium	Ajay, Yutha Mesak

AGENT:

Sprint	Functional Requirement (Epic)	User Story Number	User Story / Task	Story Points	Priority	Team Members
Sprint-3	Login	USN-1	As an agent, I can log in to the application by entering the correct email and password.	2	High	Ajay , Yutha Mesak
Sprint-3	Dashboard	USN-2	As an agent, I can see all the tickets assigned to me by the admin	1	High	Gokulakrishnan
Sprint 3	Address Tickets	USN-3	As an agent, I get to have conversations with the customer and clear their requests..	1	High	Arshad
Sprint 4	Forgot Password	USN-4	As an agent, I can reset my password if I forgot my old password.	2	High	Ajay, Yutha Mesak

ADMIN:

Sprint	Functional Requirement (Epic)	User Story Number	User Story / Task	Story Points	Priority	Team Members
Sprint-1	Login	USN-1	As an admin, I can log in to the application by entering the correct email and password.	2	High	Ajay , Yutha Mesak
Sprint-1	Dashboard	USN-2	As an admin, I can see all the tickets raised by the users in the entire system.	1	High	Arshad
Sprint-2	Agent Creation	USN-3	As an admin, I can create an agent to clarify the tickets or queries raised by the customer	2	High	Gokulakrishnan
Sprint 2	Assigning agent	USN-3	As an admin, I can assign an agent for each Ticket raised by the customer.	1	High	Gokulakrishnan
Sprint 4	Forgot Password	USN-4	As an admin, I can reset my password if I forgot my old password.	2	High	Ajay, Yutha Mesak

Project Tracker, Velocity & Burndown Chart: (4 Marks)

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	7	6 Days	24 Oct 2022	29 Oct 2022	7	29 Oct 2022
Sprint-2	6	6 Days	31 Oct 2022	05 Nov 2022	6	05 Nov 2022
Sprint-3	8	6 Days	07 Nov 2022	12 Nov 2022	8	12 Nov 2022
Sprint-4	9	6 Days	14 Nov 2022	19 Nov 2022	9	19 Nov 2022

7. CODING AND SOLUTIONING

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

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

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

DATABASE SCHEMA:

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**.

8.TESTING

Test case ID	Feature Type	Component	Test Scenario	Pre-Requisite	Steps To Execute
LoginPage_TC_OO1	Functional	Home Page	Verify user is able to see the Login/Signup popup when user clicked on My account button	HTML,CSS,FLASK	1.Enter URL and click go 2.Click on My Account dropdown button 3.Verify login/Singup popup displayed or not
LoginPage_TC_OO2	UI	Home Page	Verify the UI elements in Login/Signup popup	HTML,CSS,FLASK	1.Enter URL and click go 2.Verify login/Singup popup with below UI elements: a.email text box b.password text box c.Login button d.New customer? Create account link
LoginPage_TC_OO3	UI	User Login Page	To check if the user is able to view his/her login page	HTML,CSS,FLASK	1.Enter URL and click go 2.Verify login/Singup popup with below UI elements: a.email text box b.password text box c.Login button d.New customer? Create account link

Test case ID	Feature Type	Component	Test Scenario	Pre-Requisite	Steps To Execute
LoginPage_TC_OO4	Functional	User Login page	Verify user is able to log into application with Valid credentials	HTML,CSS,FLASK	1.Enter URL and click go 2.Enter Valid username/email in Email text box 3.Enter valid password in password text box 4.Click on login button
LoginPage_TC_OO5	Functional	User Login page	Verify user is able to log into application with InValid credentials	Unregistered Username and password	1.Enter URL and click go 2.Click on My Account dropdown button 3.Enter InValid username/email in Email text box 4.Enter valid password in password text box 5 Click on login button
LoginPage_TC_OO6	UI	Admin Login page	Verify if the admin is able to view his/her login page	HTML,CSS,FLASK	1.Enter URL and click go 2.Verify login/Singup popup with below UI elements: a.email text box b.password text box
LoginPage_TC_OO7	Functional	AdminLogin Page	Verify if the admin is able to log into application with the valid credentials	Admin Username and Password	1.Enter URL and click go 2.Enter Valid username/email in Email text box 3.Enter valid password in password text box 4.Click on login button

Test case ID	Feature Type	Component	Test Scenario	Pre-Requisite	Steps To Execute
LoginPage_TC_OO4	Functional	User Login page	Verify user is able to log into application with Valid credentials	HTML,CSS,FLASK	1.Enter URL and click go 2.Enter Valid username/email in Email text box 3.Enter valid password in password text box 4.Click on login button
LoginPage_TC_OO5	Functional	User Login page	Verify user is able to log into application with InValid credentials	Unregistered Username and password	1.Enter URL and click go 2.Click on My Account dropdown button 3.Enter InValid username/email in Email text box 4.Enter valid password in password text box 5 Click on login button
LoginPage_TC_OO6	UI	Admin Login page	Verify if the admin is able to view his/her login page	HTML,CSS,FLASK	1.Enter URL and click go 2.Verify login/Singup popup with below UI elements: a.email text box b.password text box
LoginPage_TC_OO7	Functional	AdminLogin Page	Verify if the admin is able to log into application with the valid credentials	Admin Username and Password	1.Enter URL and click go 2.Enter Valid username/email in Email text box 3.Enter valid password in password text box 4.Click on login button

Test Data	Expected Result	Actual Result	Status	Comments	Executed By
Username: user password: user123	User should navigate to user account homepage	Working as expected	Pass	Successfully Implemented.	Yutha Mesak
Username: user password: user123	Application should show 'Incorrect email or password ' validation message.	Working as expected	Pass	Successfully Implemented.	AJAY R
NIL	Application should show below UI elements	Working as expected	Pass	Successfully Implemented.	Gokulakrishnan M
Username:admin12@gmail.compassword:Admin	Application should show Login Successfull as the validation message	As Expected	Pass	Implementation as Expected	Arshad Parvez

Test case ID	Feature Type	Component	Test Scenario	Pre-Requisite	Steps To Execute
LoginPage_TC_008	Functional	Admin LoginPage	Verify if the admin is able to log into application with Invalid credentials	Random Username and password	1.Enter URL and click go 2.Enter Valid username/email in Email text box 3.Enter valid password in password text box 4.Click on login button
LoginPage_TC_009	UI	Admin Dashboard	Verify if the landing page is visible	HTML,FLASK,CSS	
LoginPage_TC_0010	Functional	User Register Page	ID sent to Customers email address	A valid email-id/username and password	1.Enter URL and go 2.Click Register 3.Enter the Credentials asked. 4.Click on Register
LoginPage_TC_0011	UI	Agent Login Page	To check if the Agent is able to view his/her login page	HTML,CSS,FLASK	1.Enter URL and click go 2.Verify login/Singup popup with below UI elements: a.email text box b.password text box

Test Data	Expected Result	Actual Result	Status	Comments	Executed By
Random Username and password	ld show LoginUnsuccessfull as thevalida	As Expected	Pass	Implementation as Expected	Yutha Mesak
Username:admin12@gmail.com password:Admin1234	omers Tickets are visible in the dashboa	As Expected	Pass	Implemented as Expected	AJAY R
NIL	Email sent successfully	As Expected	Pass	Implementation Successfull	Gokulakrishnan M
NIL	The agent will be able to view his login page	As Expected	Pass	Implementation Successfull	Arshad Parvez

Test case ID	Feature Type	Component	Test Scenario	Pre-Requisite	Steps To Execute
LoginPage_TC_OO12	Functional	Agent Login Page	Agent must not be able to login into the application using invalid credentials	A valid email-id and password	1.Enter URL and click go 2.Enter Valid username/email in Email text box 3.Enter valid password in password text box 4.Click on login button 5.View the Dashboard
LoginPage_TC_OO13	UI	Agent Home Page	On submitting the credentials, Verify if the agent's home page is displayed.	HTML,FLASK,CSS	1.Enter URL and click go 2.Enter Valid username/email in Email text box 3.Enter valid password in password text box 4.Click on login button 5.View the Dashboard
LoginPage_TC_OO14	UI	Home Page for user	On submitting the credentials, Verify if the user's home page is displayed.	HTML,FLASK,CSS	1.Enter URL and click go 2.Enter Valid username/email in Email text box 3.Enter valid password in password text box 4.Click on login button 5.View the Dashboard

Test Data	Expected Result	Actual Result	Status	Comments	Executed By
Username:agent Password:123456	The Agent's Dashboard should be displayed	As Expected	Pass	Implementation Successfull	Yutha Mesak
Username:agent Password:123456	The Agent's Dashboard should be displayed	As Expected	Pass	Implementation Successfull	AJAY R
Username:user password:user123	The user's Dashboard should be displayed	As Expected	Pass	Implementation Successfull	Gokulakrishnan M

9. RESULTS

PERFORMANCE METRICS:

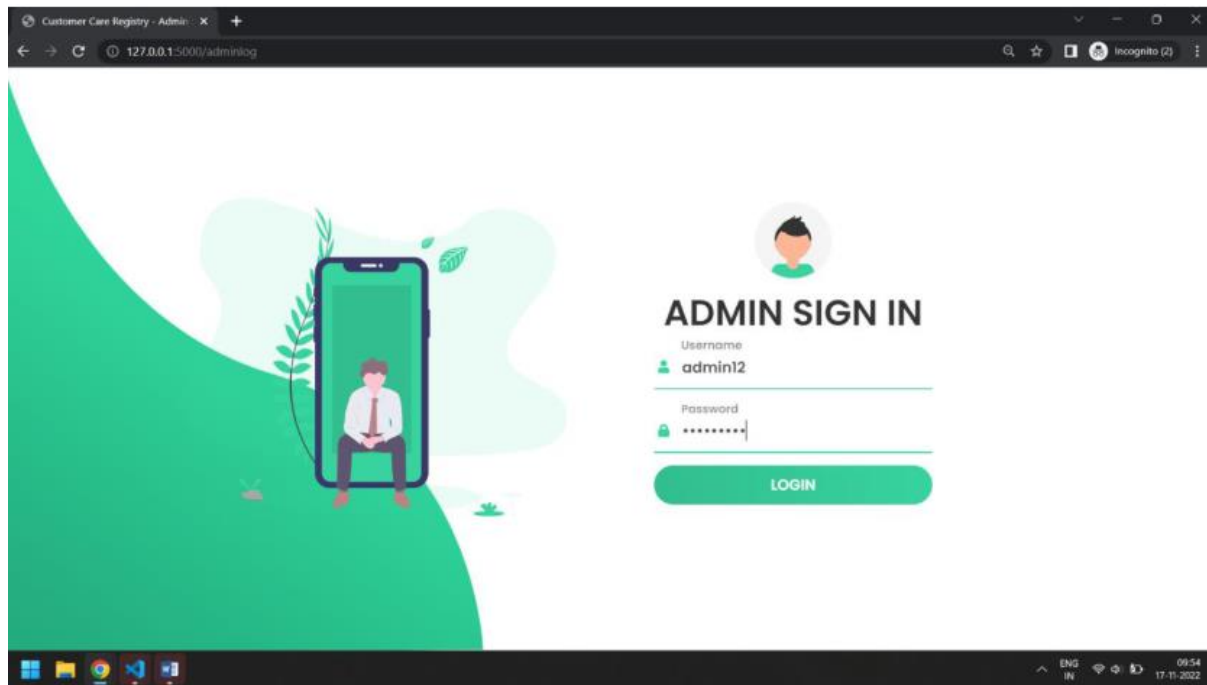
Performance metrics are data used to track processes within a business.

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

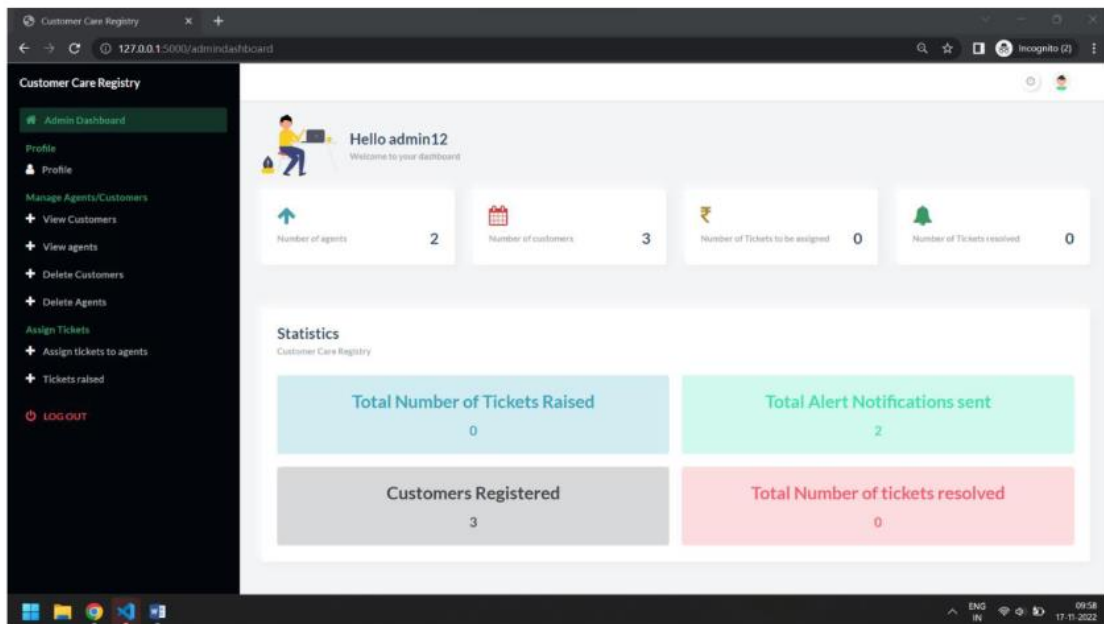
This is in relation to an established goal such as employee productivity or sales objective.



OUTPUT SCREENS:



ADMIN DASHBOARD:



USER SIGNUP:

Customer Care Registry - User Sign Up

127.0.0.1:5000/Userreg

USER SIGN UP

Username
user

Email address
user@gmail.com

Password

[Already a member?](#)

REGISTER

Customer Care Registry - User Sign Up

127.0.0.1:5000/Userregister

USER SIGN UP

You have successfully registered !

Username

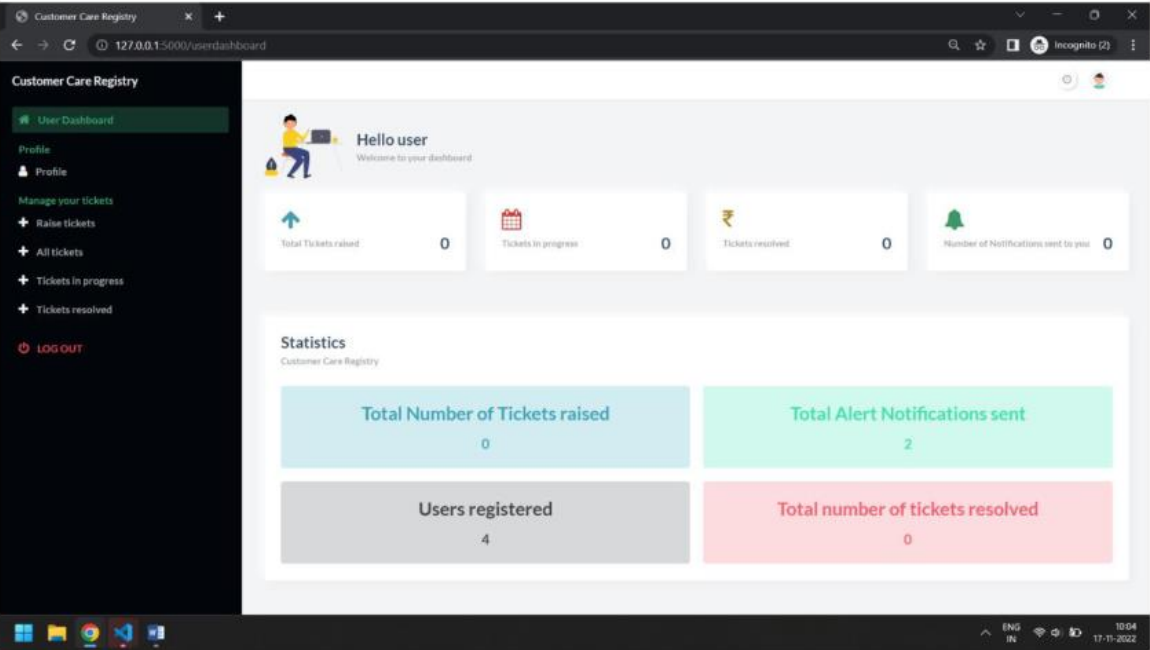
Email address

Password

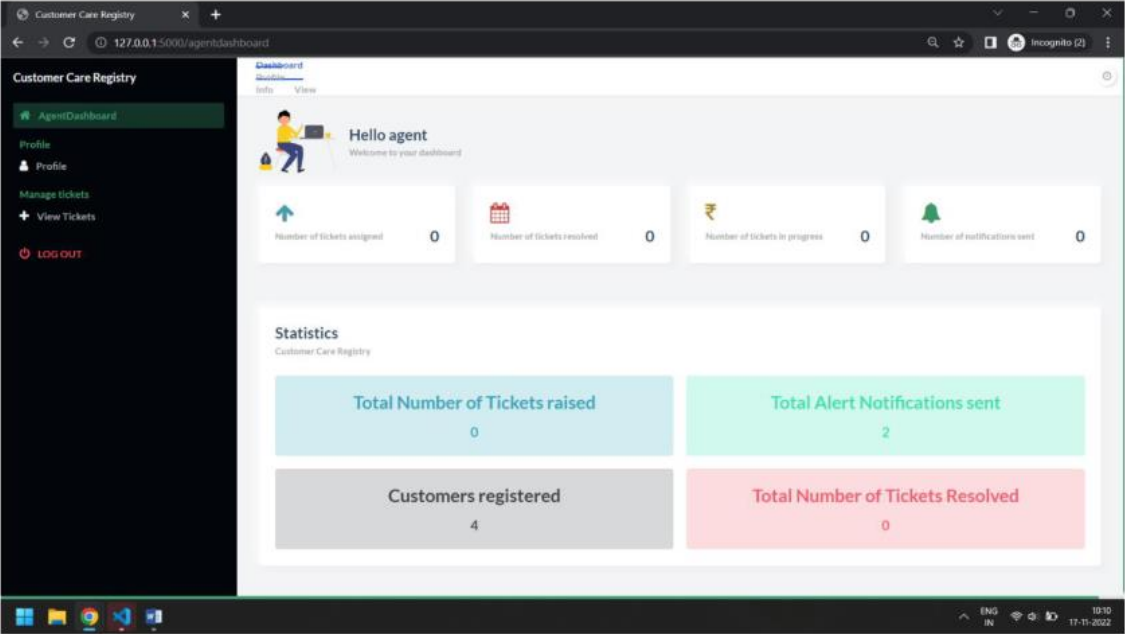
[Already a member?](#)

REGISTER

USER DASHBOARD:



AGENT DASHBOARD:



RAISE TICKET:

Customer Care Registry

User Dashboard

Profile

Manage your tickets

+ Raise tickets

+ All tickets

+ Tickets in progress

+ Tickets resolved

LOG OUT

User DashboardProfile InfoRaise Tickets

Hello user

Raise Ticket

ENTER THE BILL NUMBER

1610

TYPE YOUR ISSUE

Product was broken

SUBMIT

Customer Care Registry

User Dashboard

Profile

Manage your tickets

+ Raise tickets

+ All tickets

+ Tickets in progress

+ Tickets resolved

LOG OUT

User DashboardProfile InfoRaise Tickets

Hello user

Raise Ticket

Ticket Raised Successfully !!

ENTER THE BILL NUMBER

Enter the bill number

TYPE YOUR ISSUE

Type your Issue

SUBMIT

CUSTOMERS:

Customer Care Registry

Admin Dashboard

Profile

Profile

Manage Agents/Customers

Customers

Agents

Delete Customers

Delete Agents

Assign Tickets

Assign tickets to agents

Tickets raised

LOG OUT

Admin DashboardCustomersAgentsDelete CustomersDelete agentsAssign agents to ticketsTickets raised

Hello admin12

View All Customers

Customers

All customers registered in the application

USERNAME	EMAIL ADDRESS	TICKETS RAISED	TICKETS RESOLVED	NOTIFICATIONS SENT
gokul	gokul@gmail.com	0	0	0
gokulcj7	gokulcjgrove2016@gmail.com	0	0	1
user	user@gmail.com	0	0	0

AGENTS:

Customer Care Registry

Admin Dashboard

Profile

Profile

Manage Agents/Customers

Customers

Agents

Delete Customers

Delete Agents

Assign Tickets

Assign tickets to Agents

Tickets raised

LOG OUT

Admin DashboardCustomersAgentsDelete CustomersDelete agentsAssign agents to ticketsTickets raised

Hello admin12

View All Agents

Agents

All agents registered in the application

USERNAME	EMAIL ADDRESS	TICKETS RAISED	TICKETS RESOLVED	NOTIFICATIONS SENT
gokulcj7	gokulcj7@gmail.com	0	0	0
abc	abc@gmail.com	0	0	1
agent	agent24190@gmail.com	0	0	0

IBM WATSON ASSISTANT:

CUSTOMER CARE REGISTRY

Home

About

Services

User Sign Up/Sign In

Agent Sign Up/Sign In

Admin Sign In

Contact Us

Welcome to Customer Care Registry

This application is developed in such a way that the customers can raise tickets with a detailed description of the issue and get their issues resolved. We have an admin who can allocate each of the tickets raised to an agent and the agent can resolve the ticket.

Read More

Hi! I'm a virtual assistant. How can I help you today?

Example: Find nearby location

Example: Check account balance

Example: See how I can help

Type something...

GO

Built with IBM Watson

10. ADVANTAGES AND DISADVANTAGES:

ADVANTAGES :

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. Creating loyal customers through good customer service can therefore provide businesses with lucrative long-term relationships.

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 prioritize better customer service experiences (source: Bain & Company). Creating a better customer service experience than those offered by competitors can help businesses to start and out.

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. 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.

DISADVANTAGES:

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

Only services for which a particular payment has been made are covered under the consumer protection act.

However, it does not protect medical professionals, or hospitals, and covers cases when this act does not apply to free medical care.

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

Only two clauses related to the supply of hazardous materials are covered by this act.

Consumer redress is not given any power by the consumer protection act.

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

11.CONCLUSION

It is a web-enabled project.

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

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

It provides more knowledge about various technologies.

12. APPENDIX

GITHUB ID: IBM-Project-24264-1659940810

GITHUB LINK: <https://github.com/IBM-EPBL/IBM-Project-24264-1659940810>