

SRI RAMAKRISHNA INSTITUTE OF TECHNOLOGY

(An Autonomous Institution)

COIMBATORE-10

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DEPARTMENT OF INFORMATION TECHNOLOGY

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CUSTOMER CARE REGISTRY

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PACHAPALAYAM - PERUR CHETTIPALAYAM

COIMBATORE -10

Department of Information Technology

Certificate

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ABSTRACT

This Application has been developed to help the customer in processing their complaints. The customers can raise the ticket with a detailed description of the issue. An Agent will be assigned to the Customer to solve the problem. Whenever the agent is assigned to a customer they will be notified with an email alert. Customers can view the status of the ticket till the service is provided.

Admin : The main role and responsibility of the admin are to take care of the whole process. Starting from Admin login followed by the agent creation and assigning the customer's complaints. Finally, He will be able to track the work assigned to the agent and a notification will be sent to the customer.

User : They can register for an account. After the login, they can create the complaint with a description of the problem they are facing. Each user will be assigned with an agent. They can view the status of their complaint.

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ABBREVIATIONS & ACRONYMS

Abbreviation	Expansion
HTML	Hypertext Markup Language
CSS	Cascading Style Sheets
PYTHON	Python
DB	DataBase

CHAPTER 1 - INTRODUCTION

Customer Care Registry is the interface between the user, agent and admin. The customer care registry's primary goal is to decrease human effort and speed up the process. The project will fix the problem for the user. As a result, the administrator will find it simple to assign the agent to the user.

1.1 PROBLEM STATEMENT

Customer facing difficulties while raising an issue or a complaint. If a customer raise a complaint, he/she does not aware about the status of the complaint that whether the complaint is closed or processing. The Status will be updated only when the complaint is fixed or solved.

1.2 PURPOSE

The main purpose of Customer Care Registry is to make the complaints transparent.

1.3 SCOPE

The scope of a Customer Care Registry is to to help the customer in processing their complaints in a transparent manner.

CHAPTER 2 - SYSTEM REQUIREMENTS

2.1 MODERN BROWSER

The project was made using JS with the latest ES5 features. Most modern browsers will support ES5 features. Google Chrome, Mozilla Firefox, Safari, Microsoft Edge are some examples of modern browsers. The browser acts as a platform for the web application. The web application has a user-friendly interface.

2.2 HTML

HTML is the standard markup language for creating web pages. It tells the browser how to display the content. We have used HTML5 for the front-end of our application.

2.3 CSS

CSS is used to style a HTML document. It describes how HTML elements should be displayed. CSS3 introduced several new features like variables, flexbox, grid, etc that make it easier to create front-end for websites quickly and keep the code structured well.

2.4 PYTHON

Python is a simple, general purpose, high level, and object-oriented programming language. Python is the best language for scripting and quick application development because of its syntax, dynamic typing, and nature as an interpreted language.

CHAPTER 3 - SYSTEM ARCHITECTURE

3.1 PYTHON

Python supports a variety of programming patterns, including imperative, functional, and object-oriented programming patterns. Python is not designed to be used for a certain task, like web programming. Because it can be utilized with online, enterprise, 3D CAD, etc. It is known as a multipurpose programming language. Python makes development and debugging quick.

The endpoints are as follows:

End Point	HTTP Method	Purpose	Returned data
/tickets	GET	To get list of all Tickets	get list /error message
/tickets	POST	To add a Ticket	Newly created Ticket/error message
/tickets	PATCH	To update a Ticket	Updated details of Ticket/error message
/tickets	DELETE	To delete a Ticket defined by the id	Confirmation message/error message
/ticket/<id>	GET	To get particular Ticket	Ticket Detail
/tickets/set-agent/<ticket_id>/<agent_id>	POST	To set agent to the ticket	Confirmation message/error message

3.2 SCHEMATA

User:

Id: Integer

Name: String

Email: String

Role: String

Created At: Date time

User Authentication:

User Id: Integer

Password: String

Secret Key: String

Tickets:

Id: Integer

Ticket Id: String

User Id: Integer

Agent Id: Integer

Priority: String

Status: String

Created At: Date time

Ticket Details:

Ticket Id: Integer

Short Description: String

Issue: String

3.3 FRONT-END

Since only HTML is added, there is very little rendering time as Browsers are made to render HTML very quickly. This rendering time is not noticeable at all even on older devices.

We have also minimized animation in our application due to which it performs quite quickly.

3.3.1 HTML

HTML is the language in which most websites are written. HTML is used to create pages and make them functional. "Hypertext" refers to links that connect web pages to one another, either within a single website or between websites. Links are a fundamental aspect of the Web. By uploading content to the Internet and linking it to pages created by other people, you become an active participant in the World Wide Web.

CHAPTER 4 - OVERALL DESCRIPTION

4.1 WORKING MODULE

Customer Care Registry will help the admin to maintain and assign. It consists of two modules

- Login page
- Admin page
- Agent page
- User Page

4.1.1 Login

The admin can login to the system using a provided unique username and password.

4.1.2 Dashboard

- The admin can view the list of all tickets.
- The admin can handle any type of tickets inside the list.
- The admin can update the status of the ticket.
- The admin can assign an agent for every ticket.
- The admin can log out by selecting the logout button.

4.2 TECHNOLOGIES USED

- Python

4.3 TOOLS USED

4.3.1 FLASK

Flask is a web framework that provides libraries to build lightweight web applications in python.

4.3.2 VSCODE

Visual Studio Code is a streamlined code editor with support for development operations like task running, and version control. It aims to provide just the tools a developer needs for a quick code-build-debug cycle and leaves more complex workflows to fuller featured IDEs, such as Visual Studio IDE.

4.4 PRODUCT PERSPECTIVE

The Customer Care Registry system acts as an interface between the admin , agent and user.

4.5 SYSTEM FUNCTIONS

- Add tickets to list
- Categorize ticket in list by admin
- Assigning agent by admin
- Delete ticket from list
- Update status of the ticket

4.6 CONSTRAINTS

4.6.1 Quality

The project needs to be of high quality with assured data integrity and intuitive UI.

4.6.2 Time

The project has to be completed within the agreed upon timeline of a month spanning Aug 5 to oct 15th.

4.6.3 Cost

The project is to be delivered on a budget of exactly ₹ 0 as the payment is delivered in terms of exposure for the developers and the organization.

4.6.4 Scope

The scope of the project has been well defined. The end product should allow the administrator of the list to add, remove and update tickets in the list and should allow the addition and deletion of tickets.

CHAPTER 5 - UML DIAGRAMS

5.1 USE CASE DIAGRAM

- **Login:** The admin can login to the system using provided a username and password.
- **Add ticket:** The admin can add the ticket for the user.
- **Assign agent:** The admin can select and assign the agent.
- **View ticket:** The admin can view the tickets..
- **Update ticket:** The admin can update the status of the ticket .
- **Delete ticket:** The admin can delete tickets present in the list.
- **Log out:** The admin can log out by selecting the logout button.

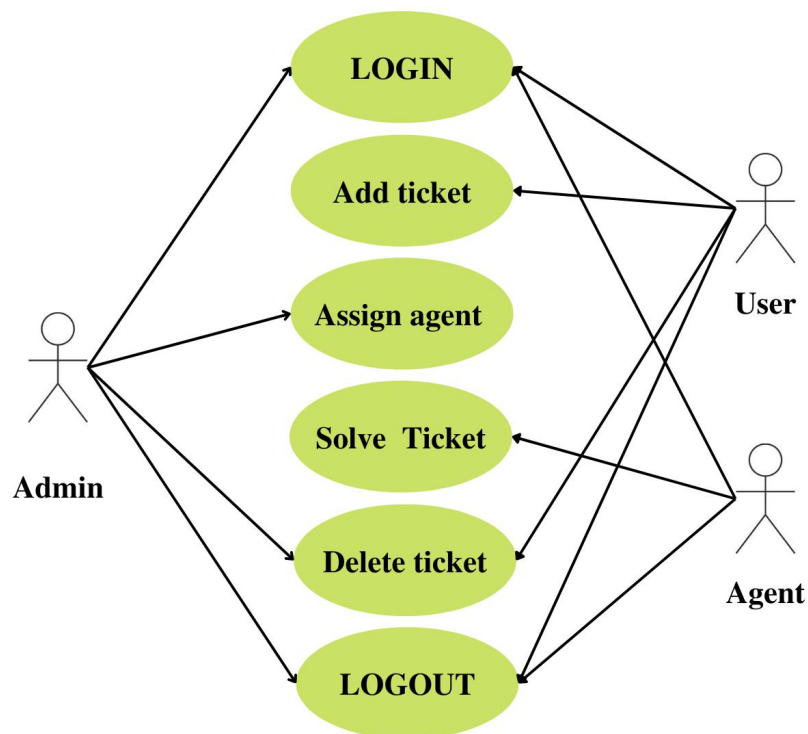
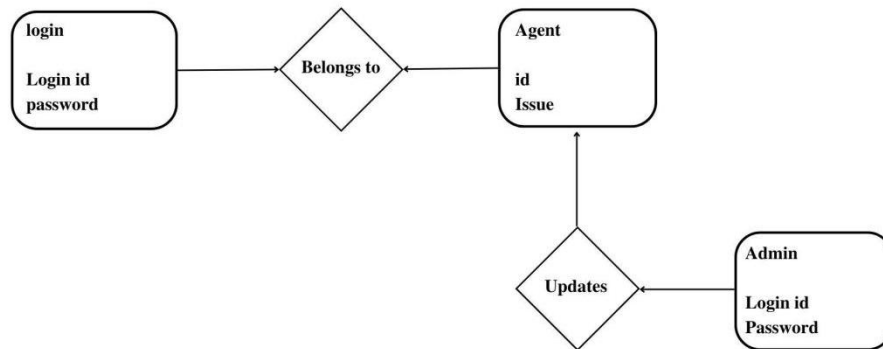


Fig: 5.1 Use case diagram

5.2 ER DIAGRAM



5.2 ER diagram

5.3 CLASS DIAGRAM

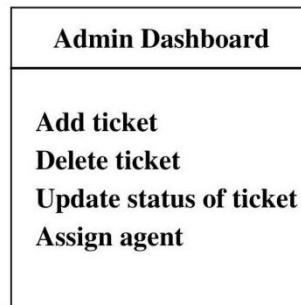


Fig 5.3 Class diagram

5.4 DATA FLOW DIAGRAMS



Fig 5.4 User data flow

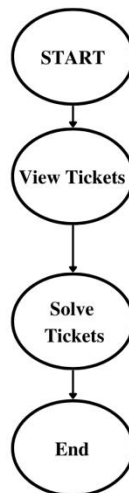


Fig 5.5 Update data flow

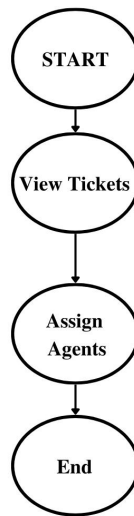


Fig 5.6 Agent data flow

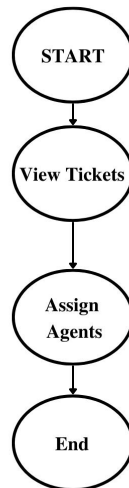
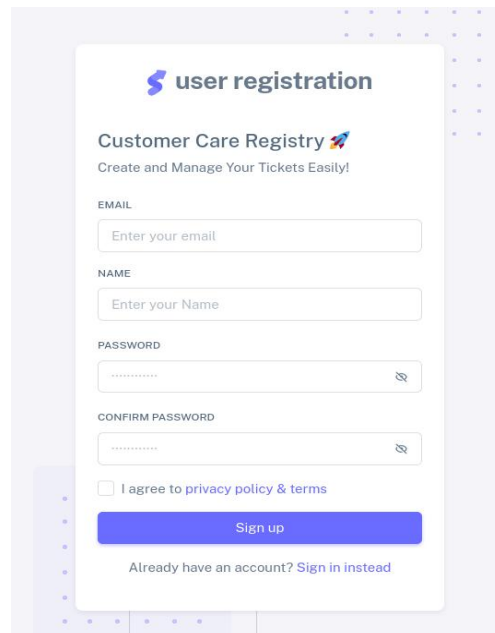


Fig 5.7 Admin Data flow

CHAPTER 6 - OUTPUT



The image shows a user registration form titled "user registration" with a logo. Below the title is "Customer Care Registry" with a rocket icon and the tagline "Create and Manage Your Tickets Easily!". The form has four input fields: "EMAIL" (placeholder: "Enter your email"), "NAME" (placeholder: "Enter your Name"), "PASSWORD" (placeholder: "*****" with an eye icon), and "CONFIRM PASSWORD" (placeholder: "*****" with an eye icon). Below these is a checkbox for "I agree to privacy policy & terms". A blue "Sign up" button is at the bottom, followed by the text "Already have an account? Sign in instead".

Fig 6.1 User Registration page

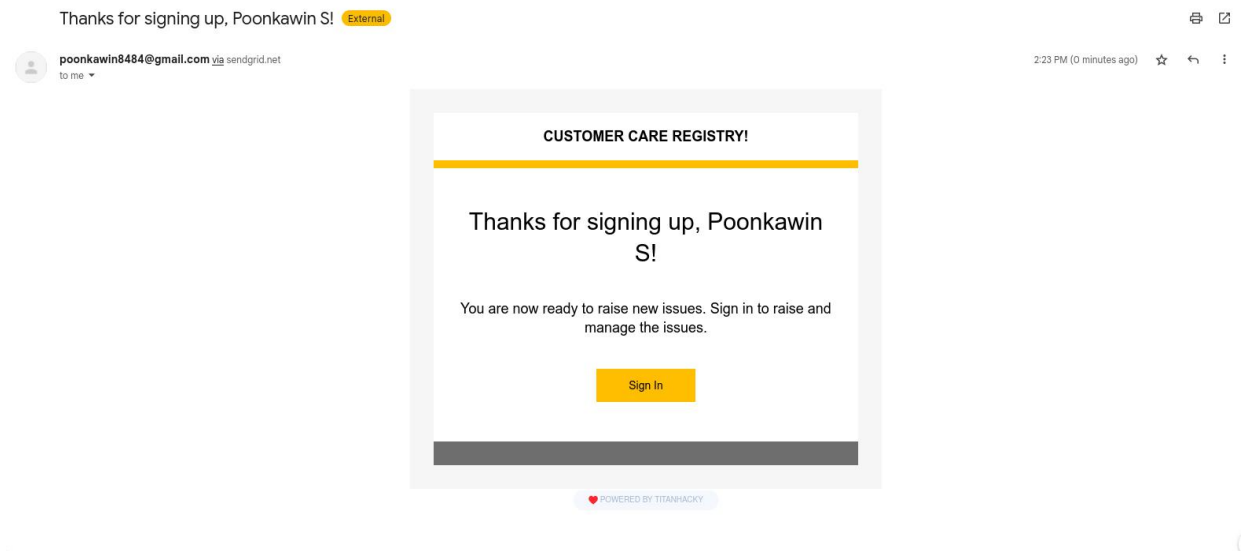


Fig 6.2 Registration Mail

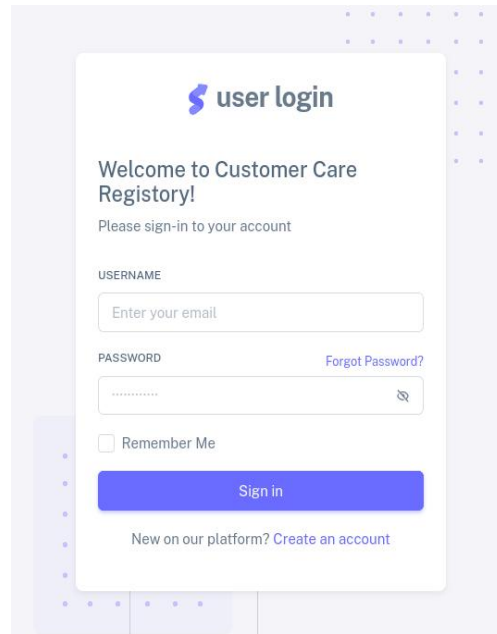


Fig 6.3 Login Page

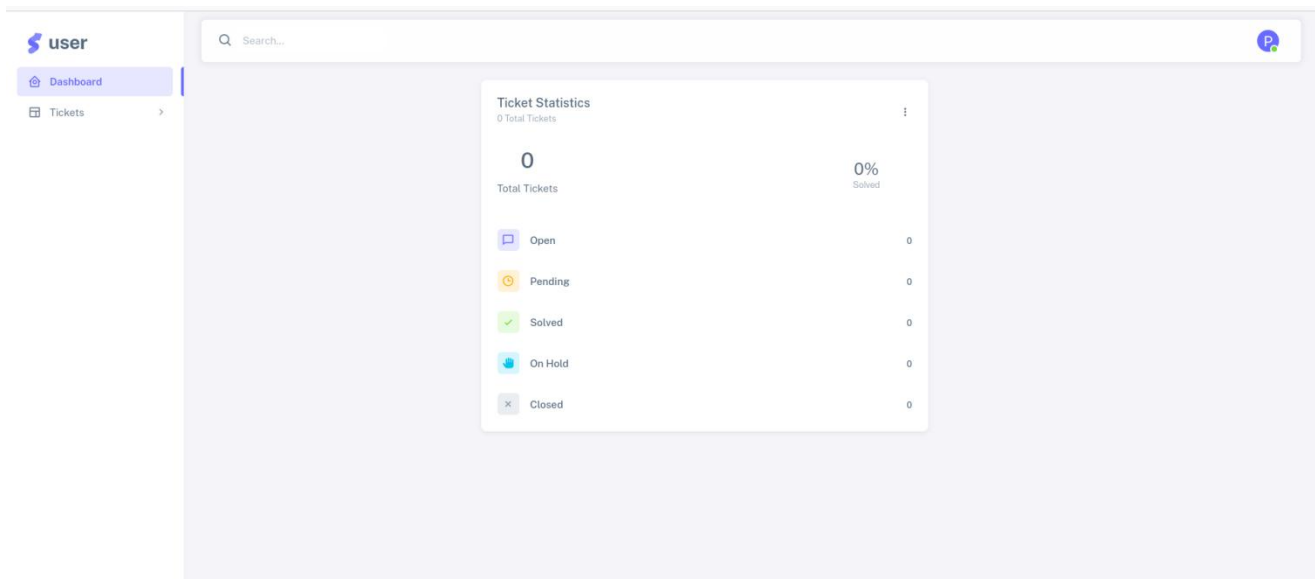


Fig 6.4 User Dashboard

user

Dashboard

Tickets

Search...

P

Tickets/Create New

Create Issue

Default label

SHORT DESCRIPTION

DETAILED ISSUE

Raise Issue

Fig 6.5 Create ticket

user

Dashboard

Tickets

All

Open

Pending

On Hold

Solved

Closed

Search...

P

Tickets

Create New

Raised new Ticket

DESCRIPTION	ISSUE	CREATED ON	VIEW
Information Security	There is a security issue on the website. My password was leaked from this website.	07-11-2022	View

Fig 6.6 Raised New ticket

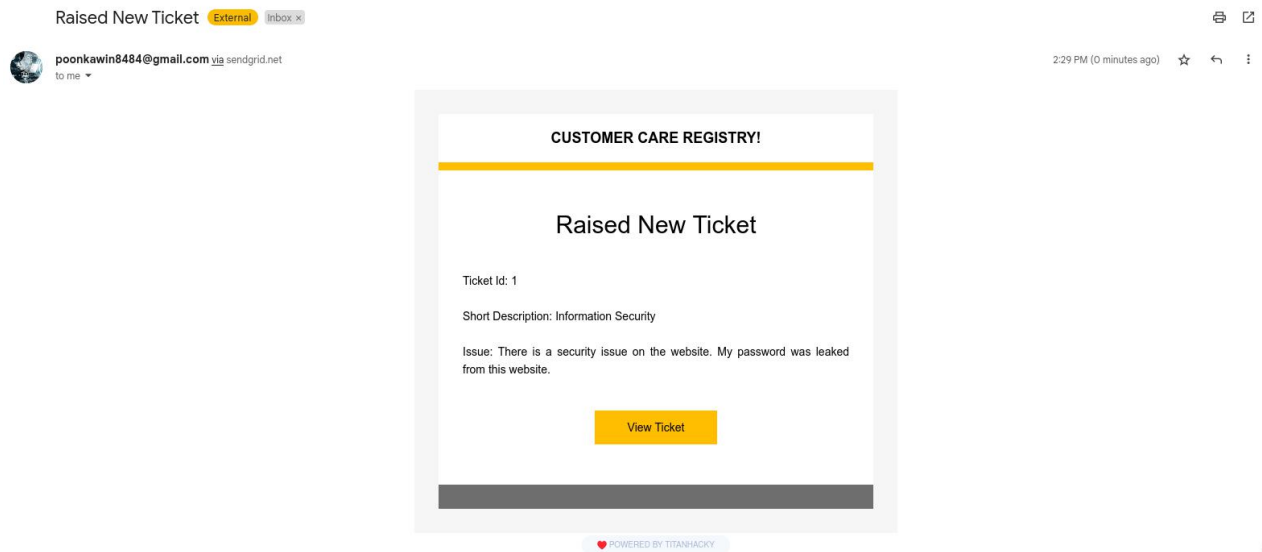


Fig 6.7 Mail for Raising New ticket

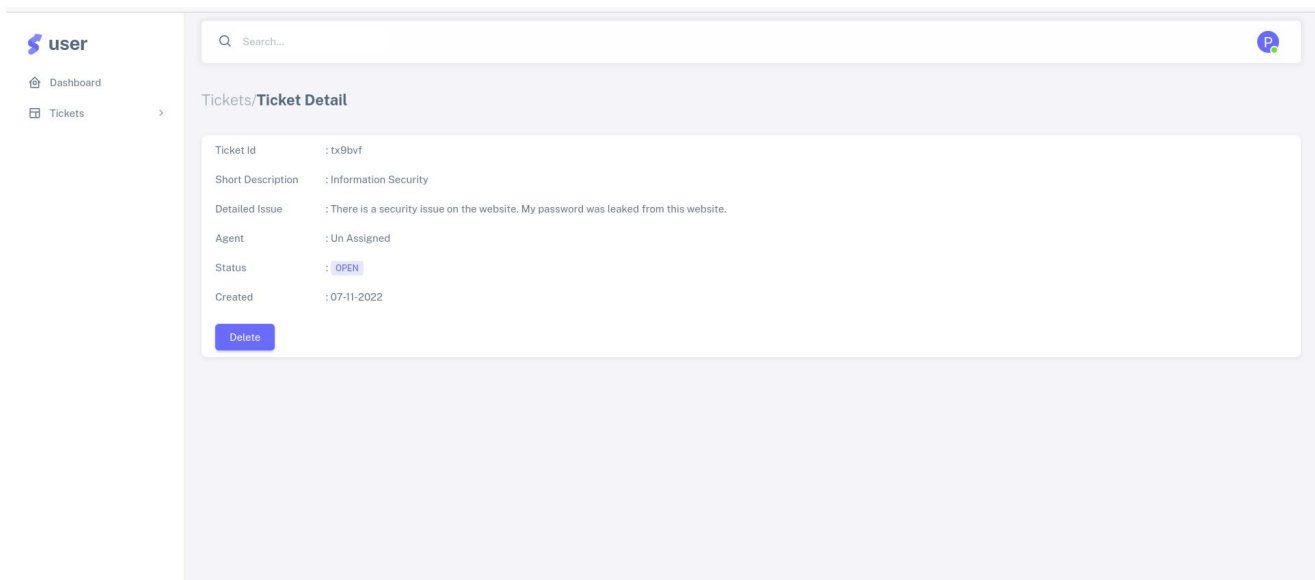


Fig 6.8 Ticket Detail

admin login

Welcome to Customer Care Registry!

Please sign-in to your account

USERNAME

PASSWORD

[Forgot Password?](#)

☐ Remember Me

Sign in

New on our platform? [Create an account](#)

admin registration

Customer Care Registry

Create and Manage Your Tickets Easily!

EMAIL

NAME

PASSWORD

CONFIRM PASSWORD

Sign up

Already have an account? [Sign in instead](#)

Fig 6.9 Admin Login

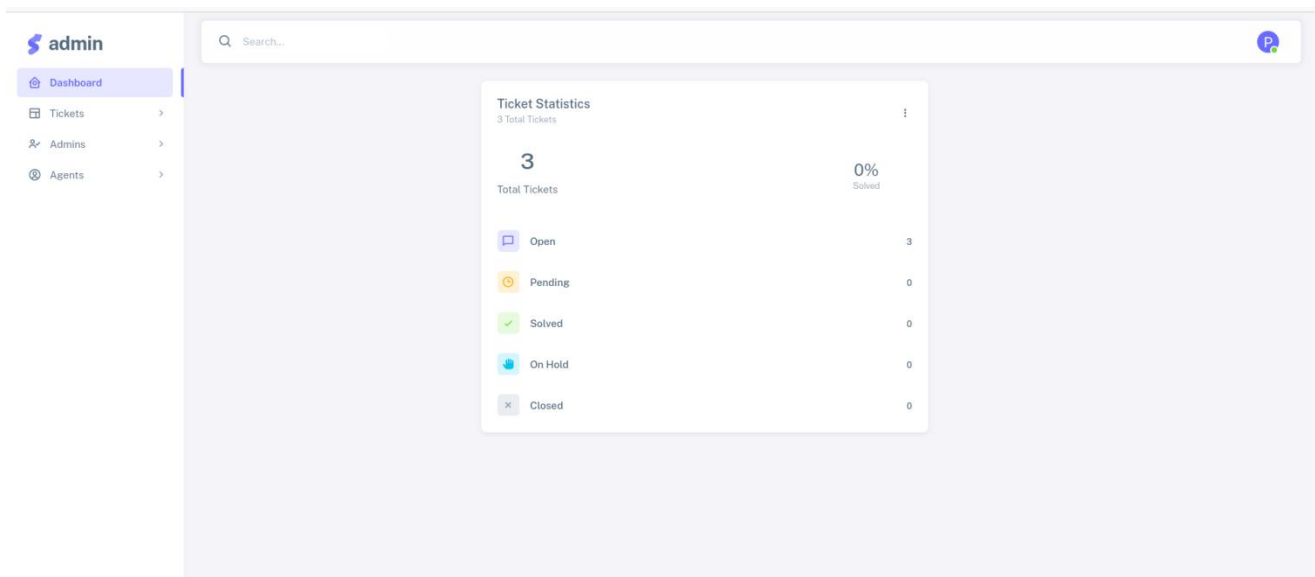


Fig 6.10 Admin Dashboard

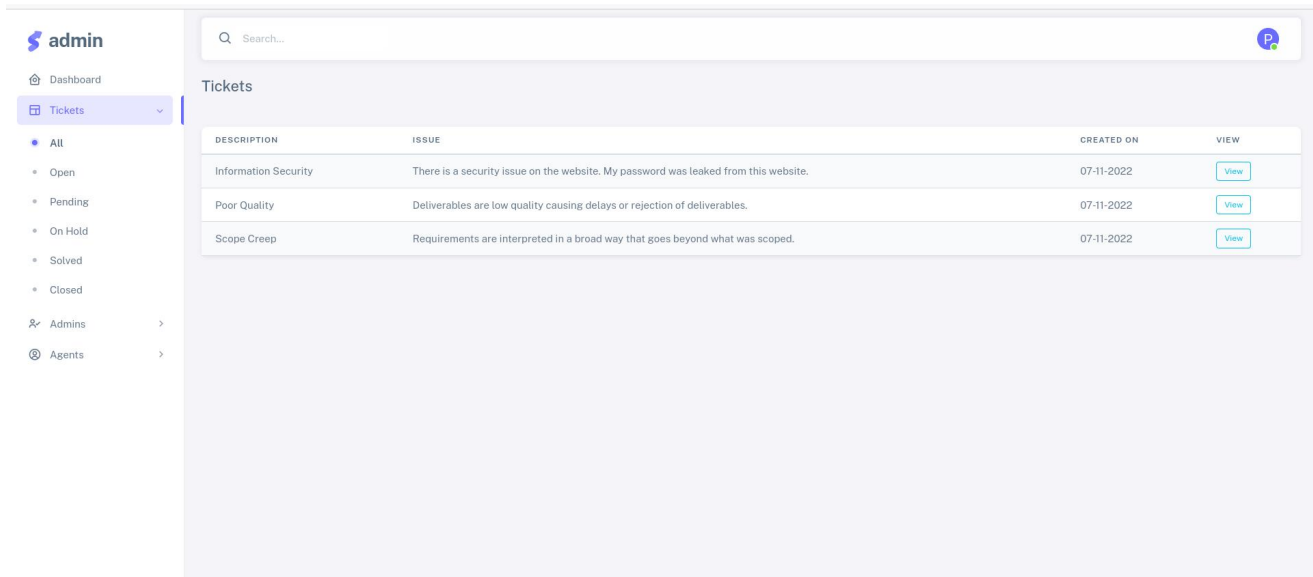


Fig 6.11 All Tickets

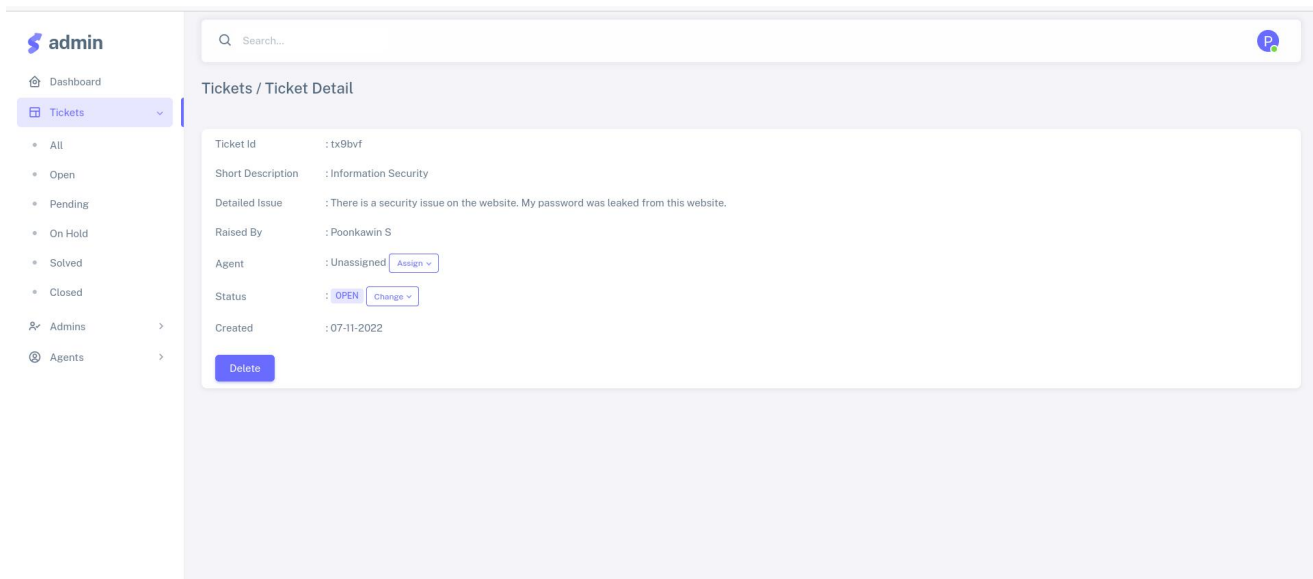


Fig 6.12 Ticket Detail

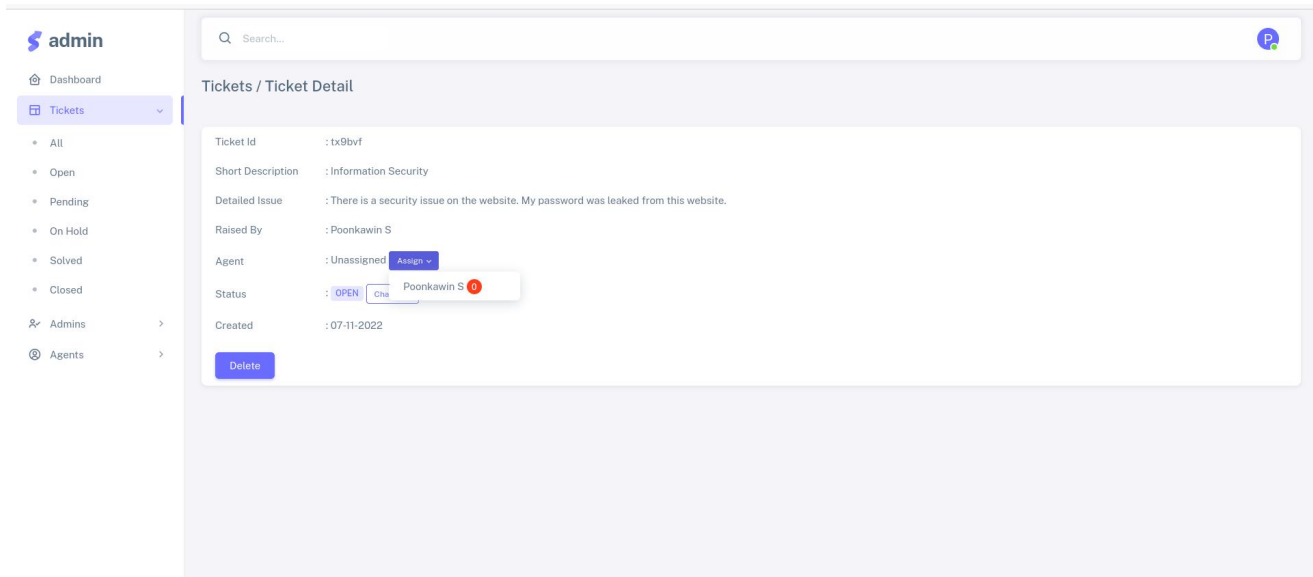


Fig 6.13 Assign Agent

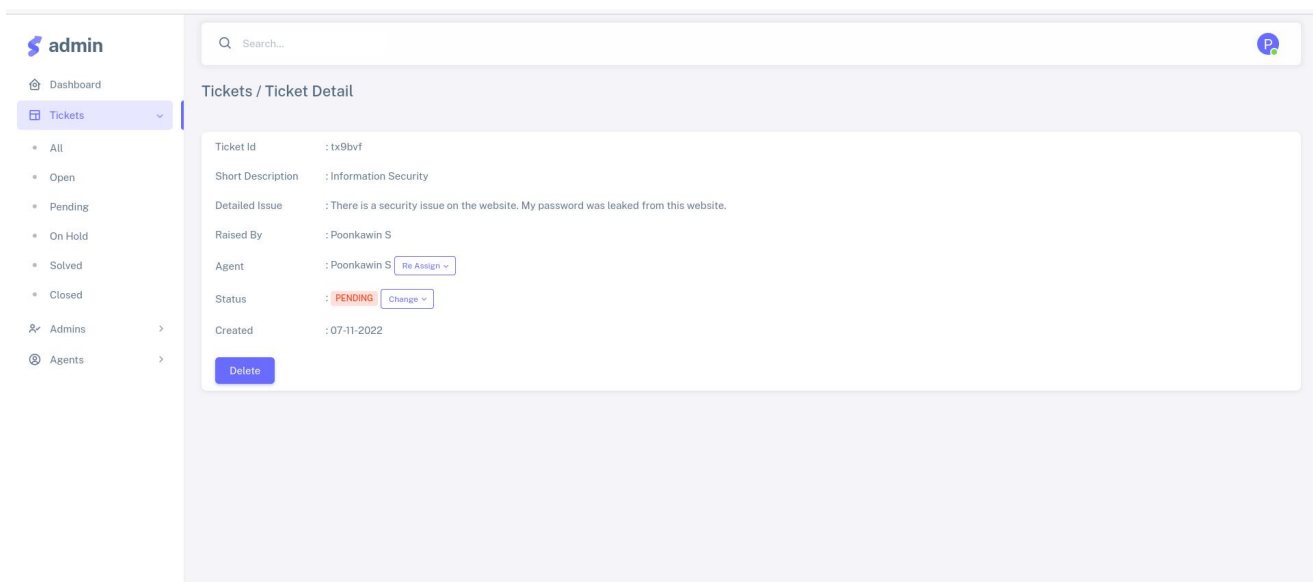


Fig 6.14 Agent Assigned

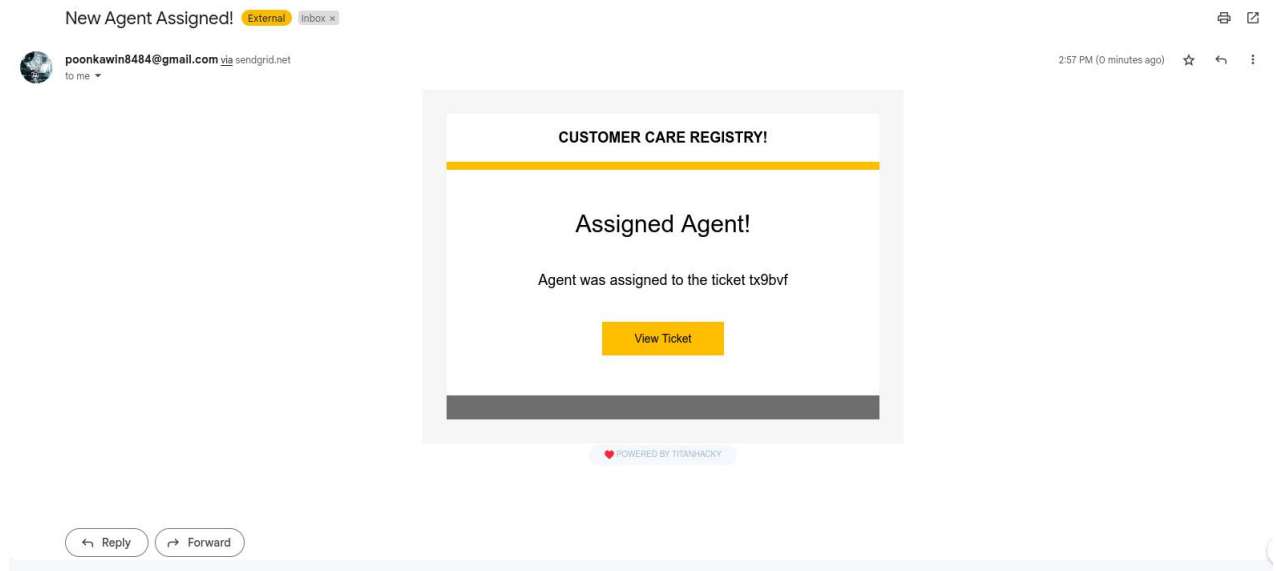


Fig 6.15 Agent Assigned Mail

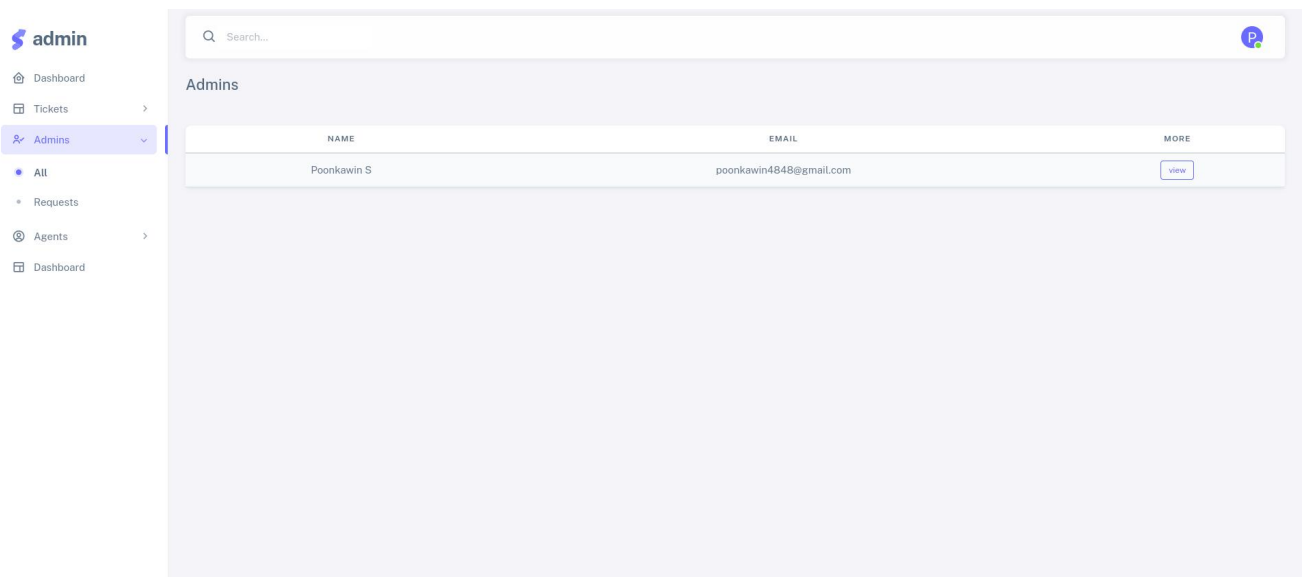


Fig 6.16 All Admins

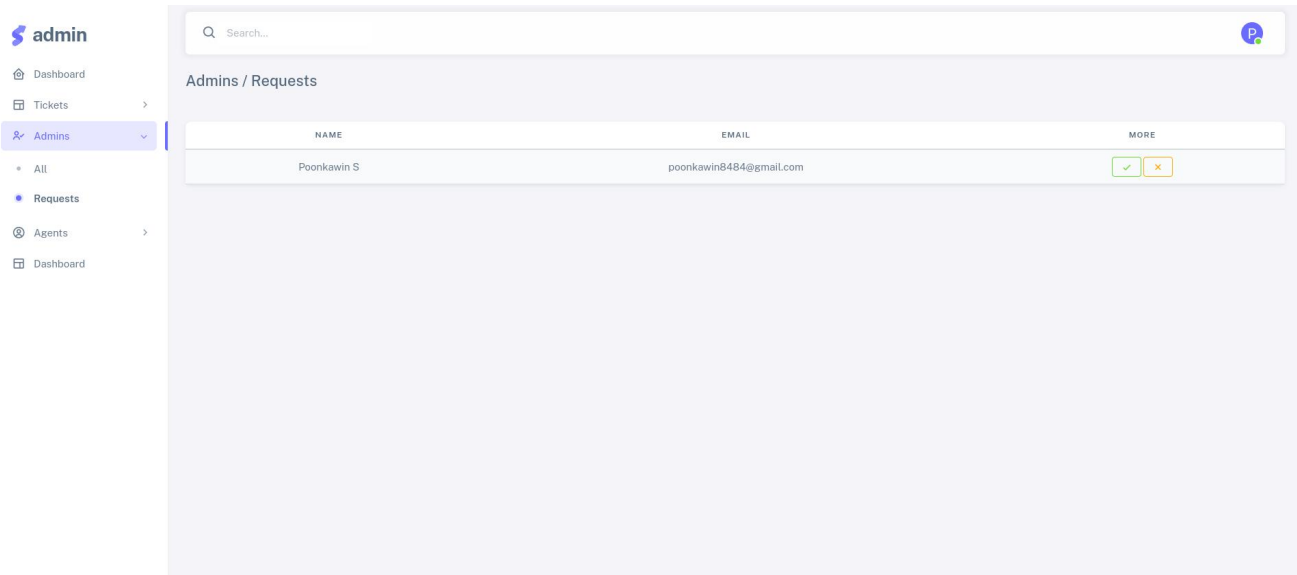


Fig 6.17 Registered Admins

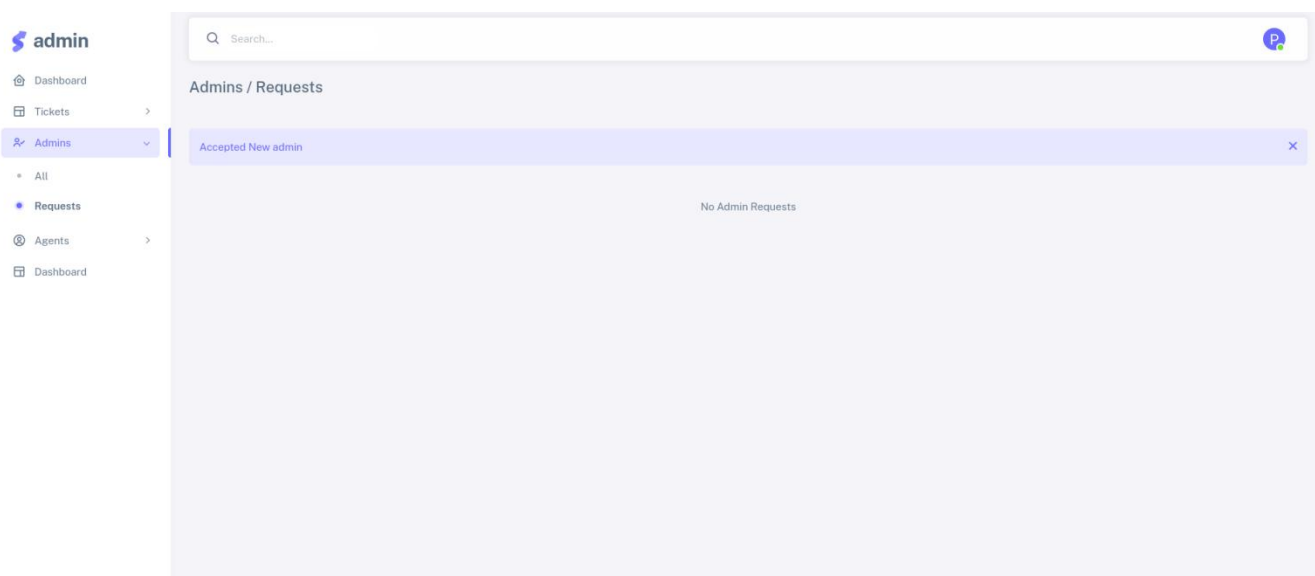


Fig 6.18 Accepted New Admin

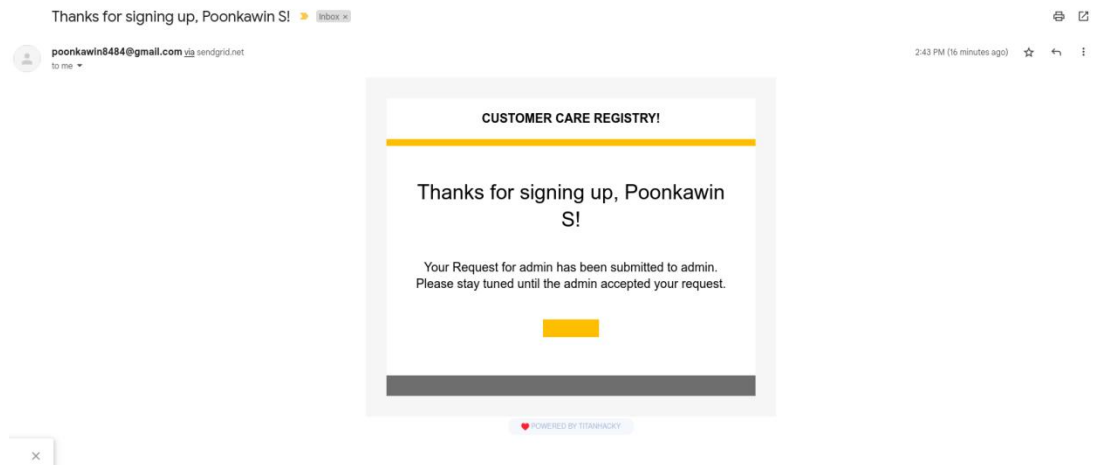


Fig 6.19 Accepted New Admin Mail

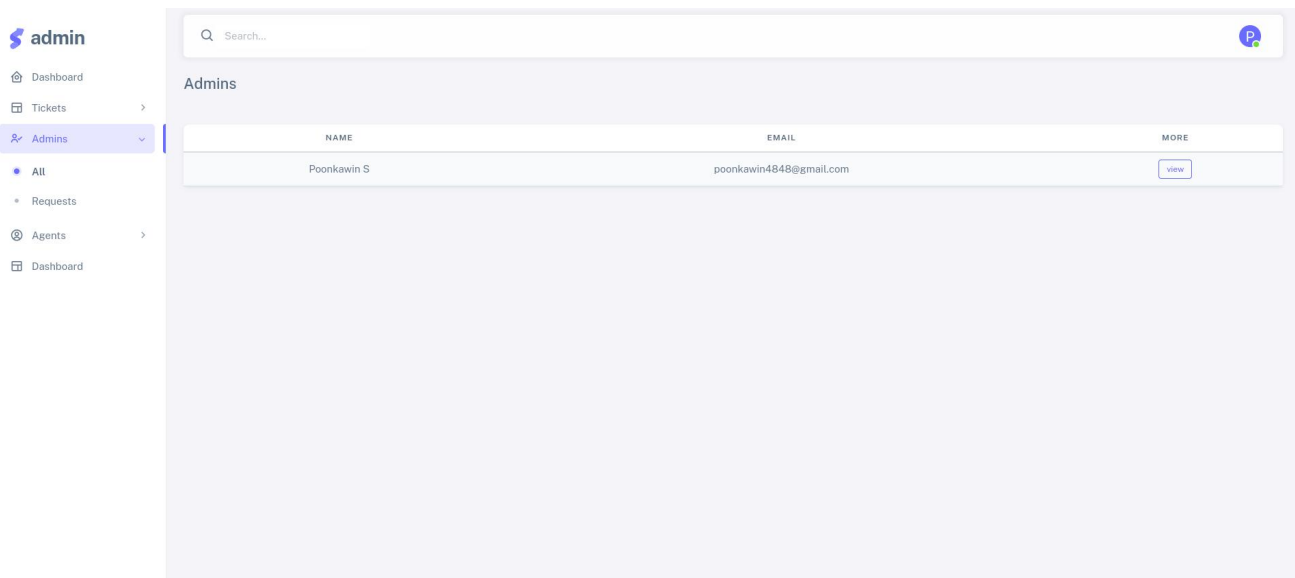


Fig 6.20 All Agents

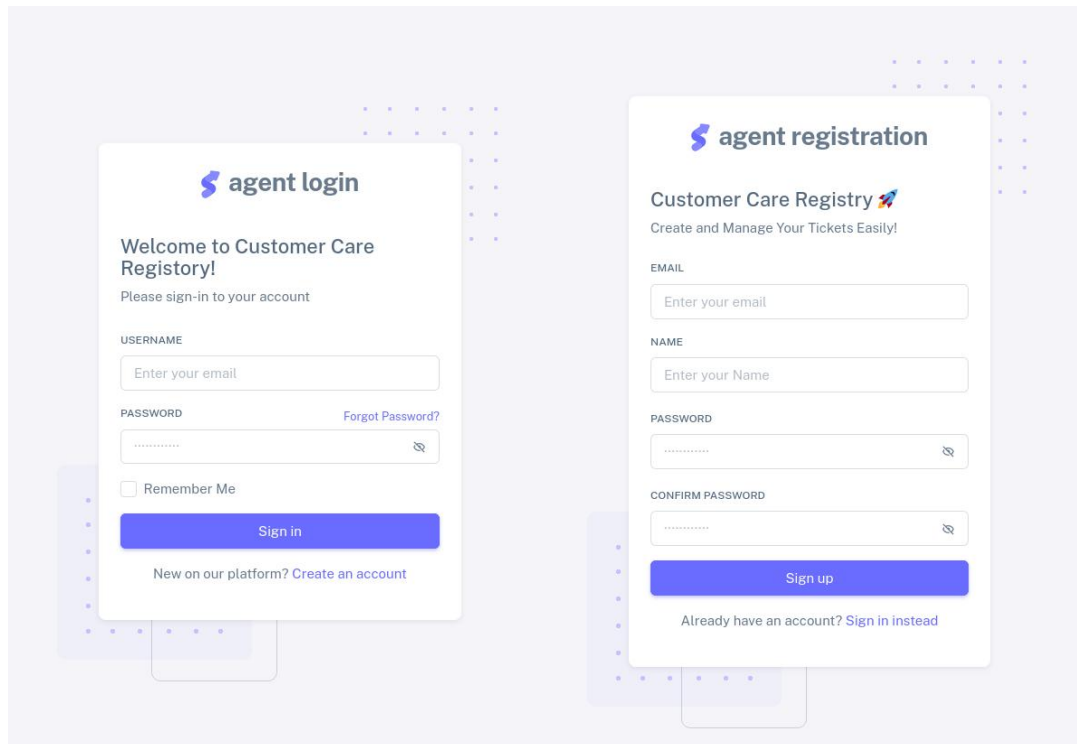


Fig 6.21 Agent Login

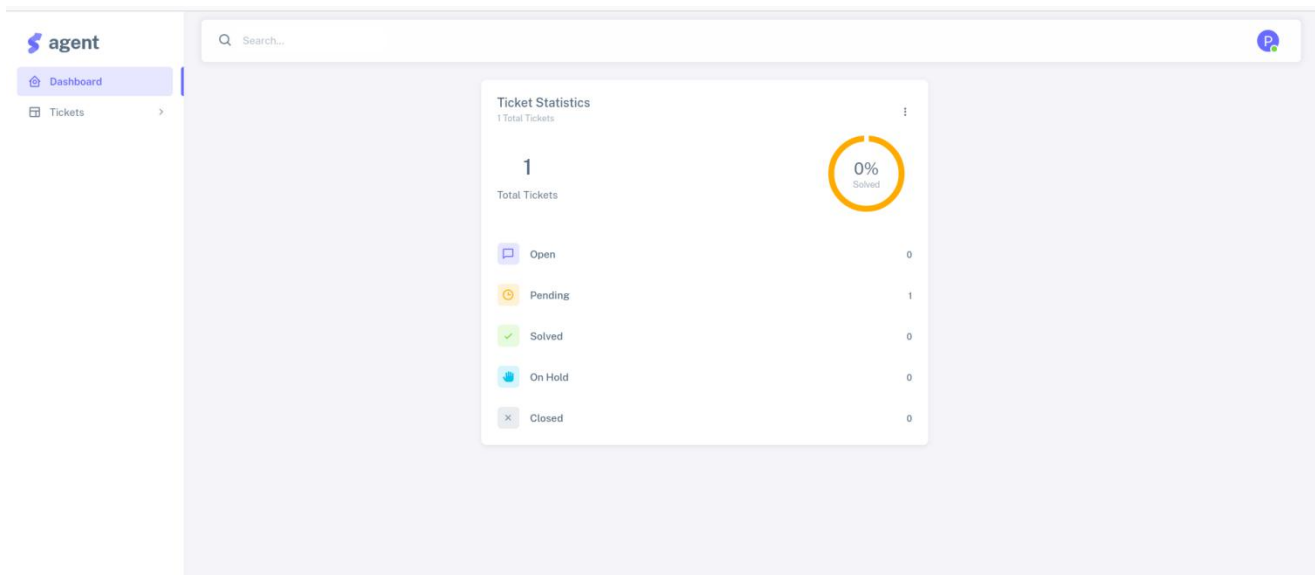


Fig 6.22 Agent Dashboard

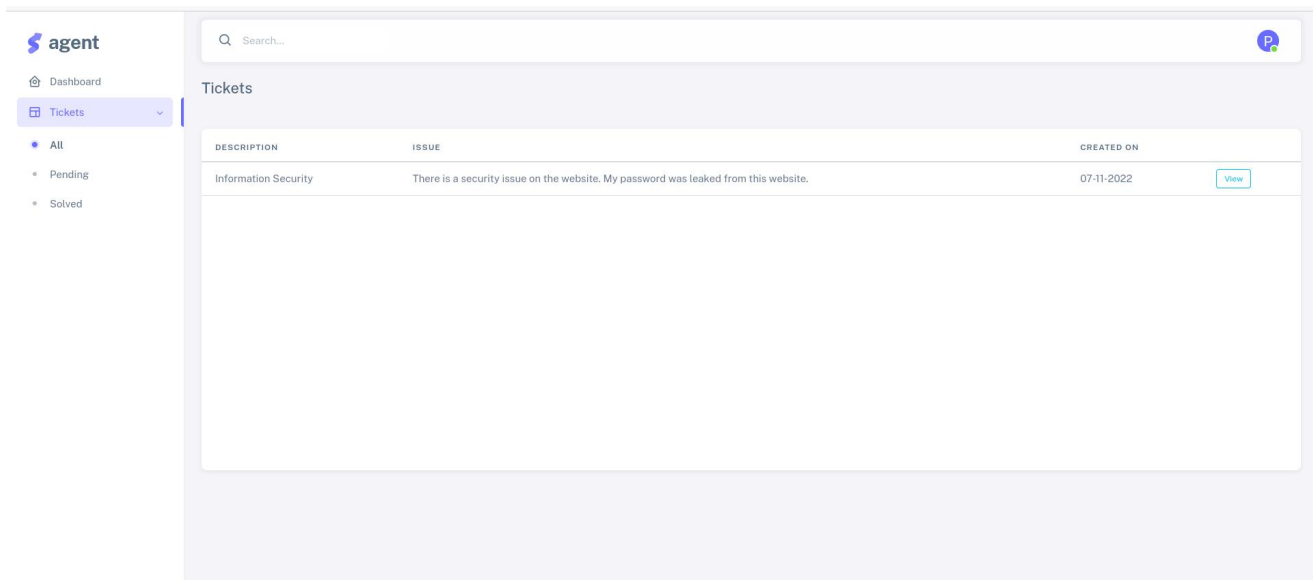


Fig 6.23 Assigned Tickets

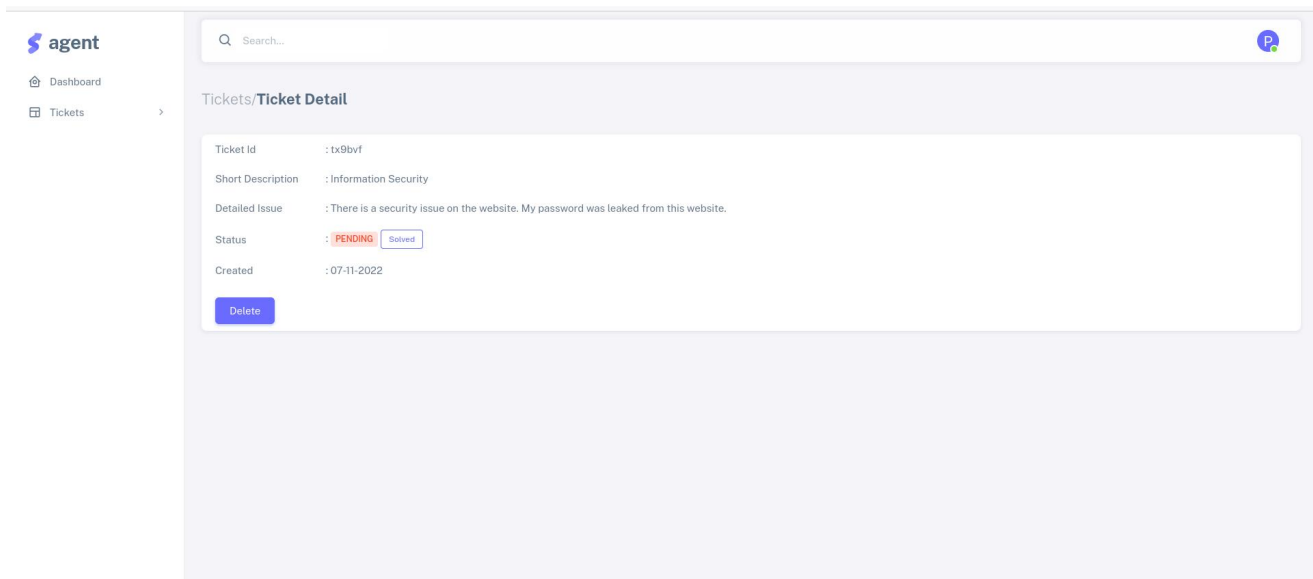


Fig 6.24 Ticket Detail

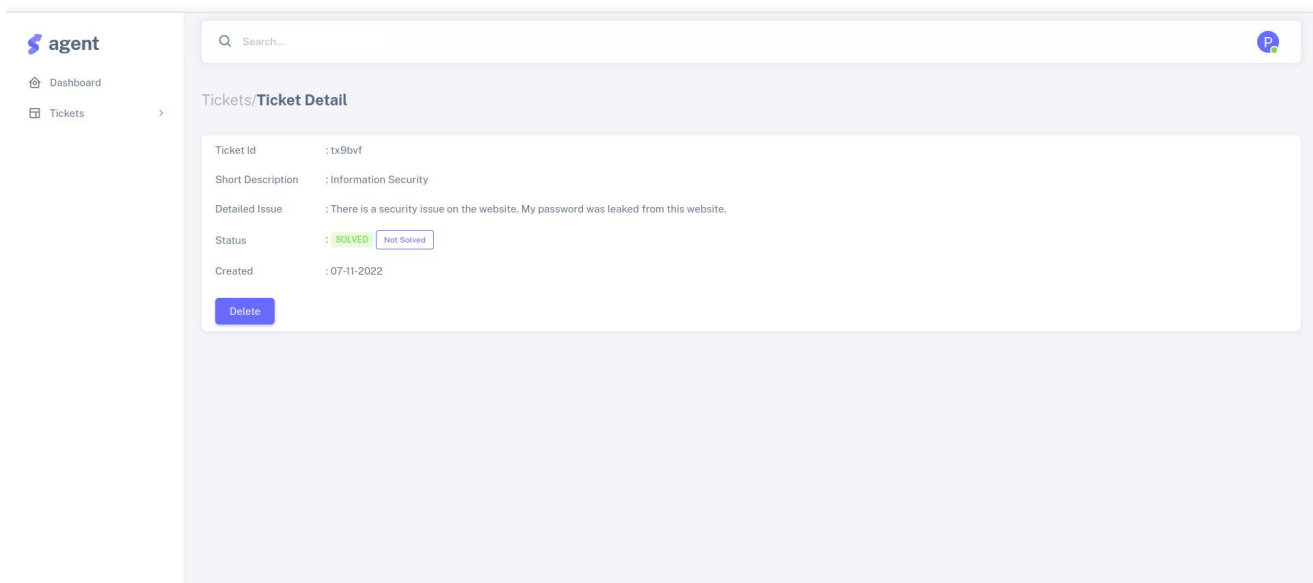


Fig 6.25 Solved Ticket

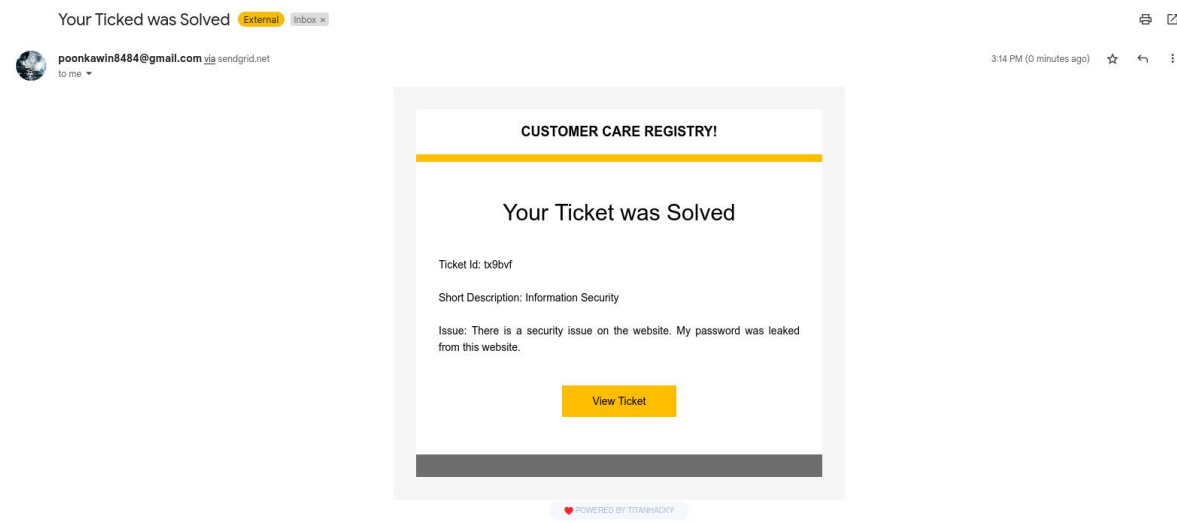


Fig 6.26 Solved Ticket Mail To User

CHAPTER 7 - CONCLUSION

In this project, we proposed Customer Care Registry to help the customer in processing their complaints and making the process in a transparent manner. The customer can register an account and start raising complaints. Following the customer's complaint, they will receive an email informing them that a ticket has been created. The admin has to choose an agent for the opened ticket. The customer will receive an email regarding the agent assignment after the admin has allocated one. Customer will be notified via email once the ticket has been resolved.

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