

# resolveIT : IT Helpdesk

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**Group 5**  
April 22, 2024

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# SDLC Stages - Business Area

## Overview :

The Online Helpdesk System serves as the central platform for IT support activities in the modern enterprise, addressing a wide range of services such as hardware maintenance, software troubleshooting, network management, and cybersecurity. It empowers the workforce by ensuring technology operates flawlessly, enabling swift resolution to prevent productivity loss.

## Key Features:

- **Ticket Submission:** Allows employees to report issues with detailed descriptions for effective troubleshooting.
- **Ticket Tracking:** Offers real-time status updates from issue reporting to resolution.
- **Resource Allocation:** Enables IT staff to assign and manage tickets efficiently, matching issues with the appropriate expertise.
- **Resolution Workflow:** Implements a structured approach for resolving issues, including diagnosis, action, and closure steps.
- **Reporting & Analytics:** Provides insights into ticket volume, resolution times, and staff performance for continuous operational improvement.

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# Problem Analysis

## **Real-Time Service Request Tracking**

Challenge: Hard to track request status.

Solution: Live updates and timeline view of service requests.

## **Automated Workload Balancing**

Challenge: Poor workload distribution among staff.

Solution: System assigns requests based on staff availability and expertise.

## **Intuitive User Interface**

Challenge: Complexity leading to user frustration.

Solution: Simple, user-friendly interface design.

## **Data Protection and Encryption**

Challenge: Maintaining data integrity and security.

Solution: Top-notch encryption and adherence to data protection laws.

## **Regulatory Compliance Management**

Challenge: Keeping up with industry regulations.

Solution: Updates for compliance with current standards.

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# Core Features

## Secure User Access:

Register and log in securely for a personalized and private experience.

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## Service Request Management:

Log new service requests with ease.  
Track the status of requests in real time.  
Helpdesk staff can efficiently manage workload by assigning requests.

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## Communication and Tracking:

Keep track of progress and communicate effectively within each request.  
Get an overview of request statuses at a glance for users and staff.

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## Analytics

Admin team can get detailed charts of all logged service requests.

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# How to use locally :

- Clone the following Repo : <https://github.com/t4n15hq/IDS517-Helpdesk-Webapp>
- Make sure NodeJS is installed on your computer.
- Once cloned, open project folder and execute 'npm install' to install all the necessary modules and dependencies listed in the package.json file.
- Start the application by running 'npm start'. This will execute index.js as specified under the start script in package.json.
- Once the application is running, open your web browser and visit <http://localhost:3000> to view the application.

# Local Deployment :

```
PROBLEMS  OUTPUT  DEBUG CONSOLE  TERMINAL  PORTS

● tanishqpadwal@Tanishqs-MacBook-Pro Helpdesk WebApp % npm install

up to date, audited 267 packages in 393ms

24 packages are looking for funding
  run `npm fund` for details

found 0 vulnerabilities
○ tanishqpadwal@Tanishqs-MacBook-Pro Helpdesk WebApp % npm start

> helpdesk-webapp@1.0.0 start
> node index.js

Server running on port 3000
█
```

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# resolveIT Architecture Overview :

## Frontend:

Technology: HTML/CSS/JavaScript

Structure: Modular files for each page and functionality (\*.html, /css, /js)

Responsibilities: User Interface, Interaction with Backend via API calls, Dynamic content rendering

## Backend:

Technology: Node.js

Structure: Entry point (index.js), Environment variables (\*.env), Dependency management (package.json, package-lock.json)

Responsibilities: Authentication, Business Logic, API Endpoints, Communication with Database

## Database:


Technology: Google Cloud SQL (MySQL)

Structure: Tables corresponding to classes (Users, ServiceRequests)

Responsibilities: Data Persistence, Data Integrity, Query Processing, Secure Access

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# resolveIT Github Version Control :

 **IDS517-Helpdesk-Webapp** Public

Pin

Unwatch 1

Fork 0

Star 0

main


2 Branches

0 Tags

Go to file

Add file

<> Code

 **t4n15hq** added login ✓

3929939 · 18 hours ago

🕒 29 Commits

public	added login	18 hours ago
.DS_Store	updates	4 days ago
.env	update	4 days ago
.gitattributes	Initial commit	2 weeks ago
Procfile	Create Procfile	5 days ago
index.js	added login	18 hours ago
package-lock.json	changes	4 days ago
package.json	added login	18 hours ago

README

About

[resolveit-48846b1ec1d0.herokuapp.c...](#)

Activity

0 stars

1 watching

0 forks

Releases

No releases published

[Create a new release](#)

Packages

No packages published

[Publish your first package](#)

Deployments 40

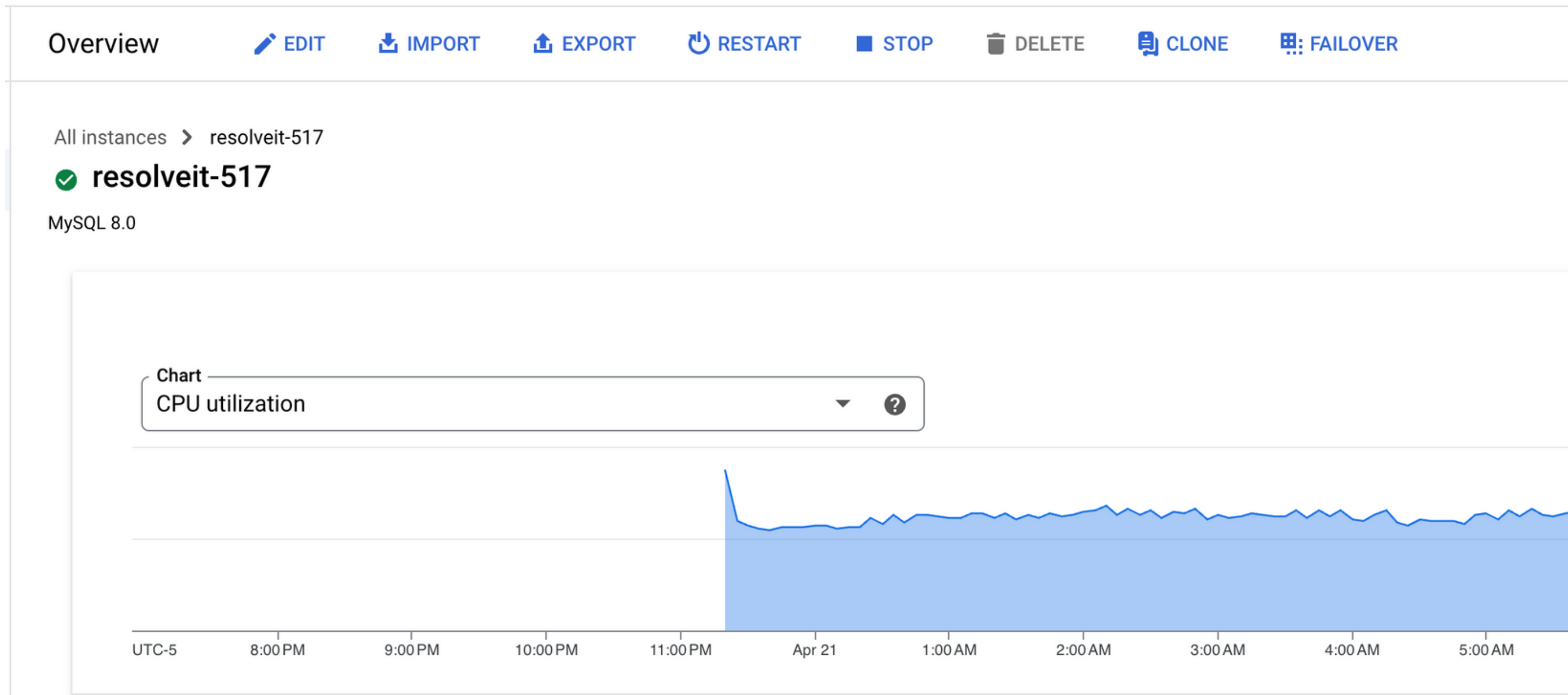
✓ github-pages 18 hours ago

✓ Production 17 hours ago

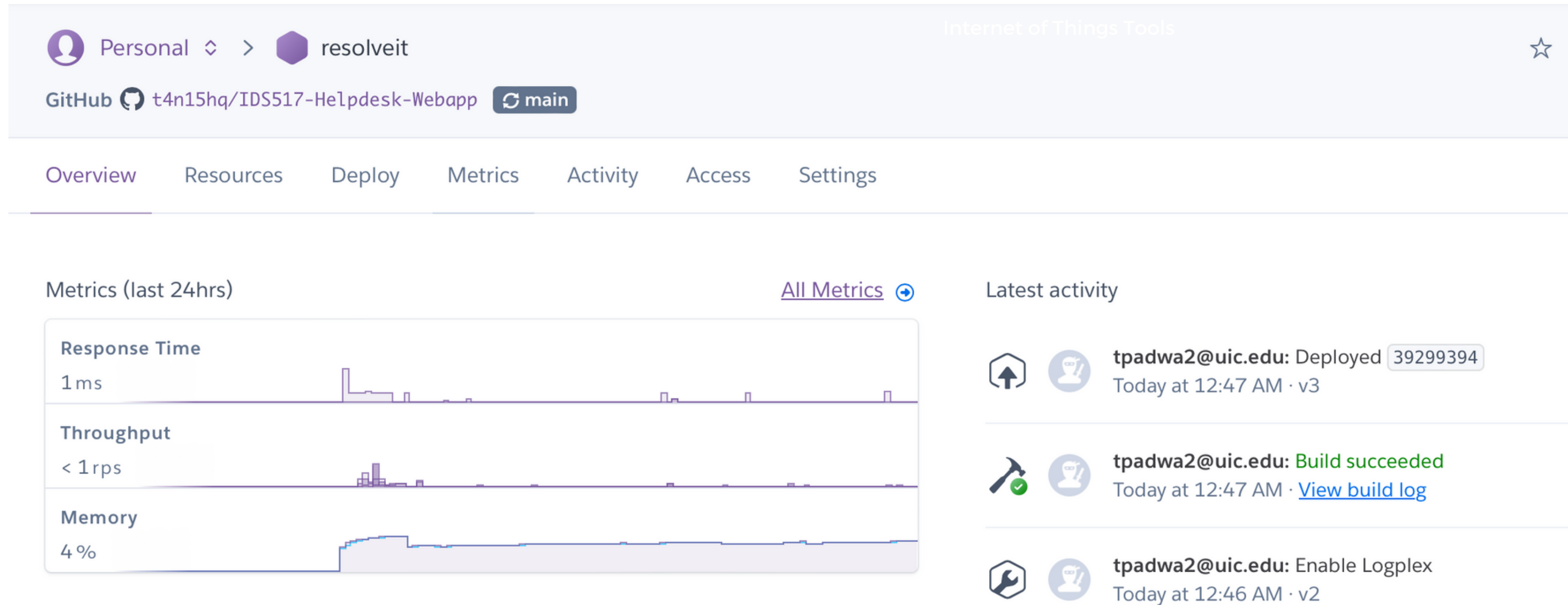
✓ resolveit 16 hours ago



# resolveIT Cloud SQL:

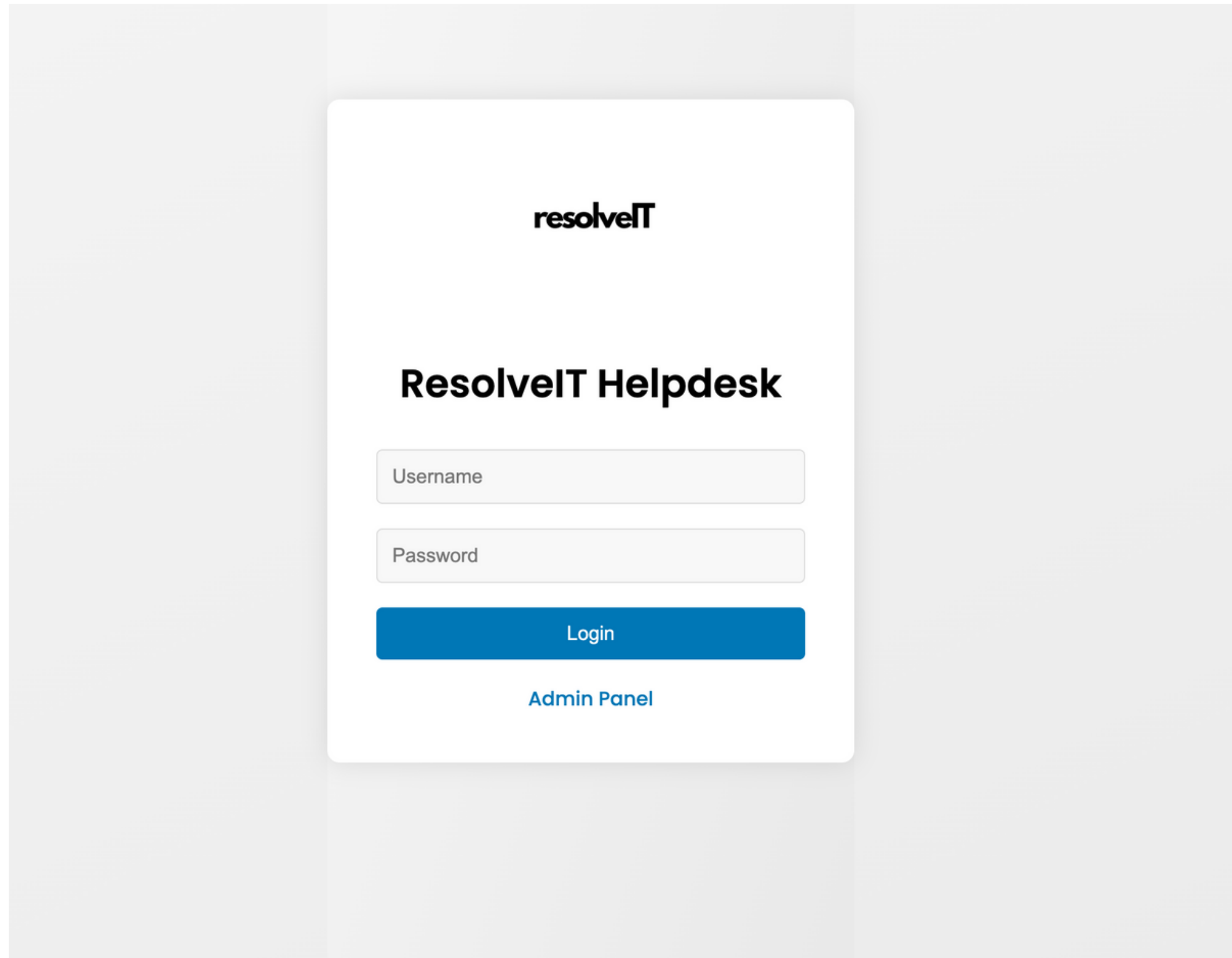


# resolveIT Heroku Deployment :



# resolveIT Login Page :

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**resolveIT**

**ResolveIT Helpdesk**

Username

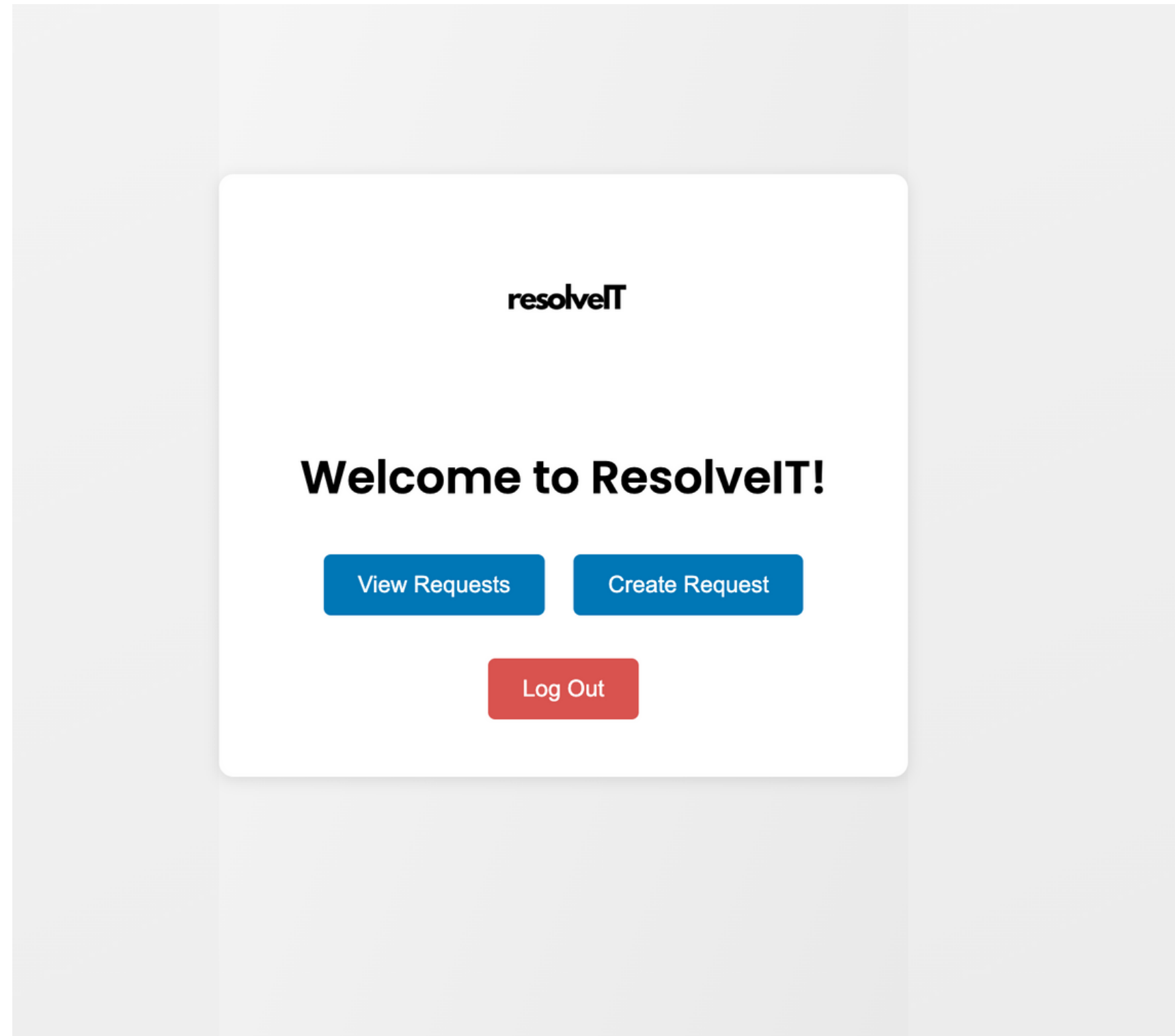
Password

Login

[Admin Panel](#)

# resolveIT dashboard :

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# resolveIT Create Request :

resolveIT

Create New Request

Problem:

Network Connectivity Issue

Severity:

Severity 1 - Critical: System Down

Submitted By:

Detailed Description // Summary:

Helpdesk Contact: [ids517helpdesk@gmail.com](mailto:ids517helpdesk@gmail.com)

Submit

[Knowledge Base](#) / [FAQ](#)

# resolveIT Custom SLAs :

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Your request has been submitted successfully. Helpdesk team will reach out to you within 3 hours.



# resolveIT Knowledge Base :

## Knowledge Base

### Network Connectivity Issue

**Q:** What should I do if my computer cannot connect to the office network?

**A:** Ensure your device's Wi-Fi is on and try reconnecting to the office network. If you're using a wired connection, check if the Ethernet cable is plugged in properly. Restart your device as a first step of troubleshooting.

### Software Installation Problem

**Q:** I need specific software for my work. How can I get it installed?

**A:** Submit a ticket to the IT helpdesk with details of the required software. Please note that software installation might need approval from your manager.

### Hardware Malfunction

**Q:** My office laptop is not working properly. Who should I contact?

**A:** Report the issue to the IT helpdesk with details of the malfunction. Do not attempt to fix hardware issues yourself to avoid voiding any warranties or causing further damage.

# resolveIT View Requests :

resolveIT View Requests									
Ticket ID: <input type="text" value="Search by Ticket ID"/> <input type="button" value="Search"/>									
RequestID	Problem	Priority	Severity	Description	Status	Comment	SubmittedBy	Timestamp	ResolutionDate
1	Network Connectivity Issue	Priority 3 - Medium	Severity 1 - Critical: System Down	tanishq	Under Review	In Progress	tanishq	4/18/2024, 12:58:46 AM	4/18/2024
2	Network Connectivity Issue	Priority 1 - Immediate	Severity 1 - Critical: System Down	aaa	Resolved	In Progress	tanishq	4/18/2024, 1:00:59 AM	4/18/2024
3	Hardware Malfunction	Priority 4 - Low	Severity 4 - Low: Cosmetic Issues	test	Resolved	In Progress	tanishq	4/18/2024, 5:08:53 AM	4/18/2024
4	Network Connectivity Issue	Priority 3 - Medium	Severity 1 - Critical: System Down	test	Open	In Progress	test	4/18/2024, 6:31:58 AM	N/A
5	Network Connectivity Issue	Priority 2 - High	Severity 1 - Critical: System Down	test	Open	In Progress	test	4/18/2024, 6:32:49 AM	N/A
6	Network Connectivity Issue	Priority 4 - Low	Severity 4 - Low: Cosmetic Issues	test	Open	In Progress	test	4/18/2024, 6:33:16 AM	N/A
7	Network Connectivity Issue	Priority 3 - Medium	Severity 1 - Critical: System Down	test	Open	In Progress	test	4/18/2024, 6:34:15 AM	N/A
8	Network Connectivity Issue	Priority 2 - High	Severity 1 - Critical: System Down	tanishq	Open	In Progress	tanishq	4/18/2024, 6:38:48 AM	N/A
9	Network Connectivity Issue	Priority 1 - Immediate	Severity 1 - Critical: System Down	test	Open	In Progress	test	4/18/2024, 6:40:36 AM	N/A
10	Network Connectivity Issue	Priority 3 - Medium	Severity 4 - Low: Cosmetic Issues	test	Open	In Progress	test	4/18/2024, 6:40:47 AM	N/A



# resolveIT Search Requests :

resolveIT

View Requests

Ticket ID:  Search

RequestID	Problem	Priority	Severity	Description	Status	Comment	SubmittedBy	Timestamp	ResolutionDate
16	Network Connectivity Issue	Priority 4 - Low	Severity 1 - Critical: System Down	test	Open	In Progress	test	4/18/2024, 6:50:57 AM	N/A

Supervisor Login

# resolveIT Supervisor Login :

29	Software Installation Problem	Severity 2 - High: Major Functionality Impaired	null	AS	Ff	Open	4/19/2024, 5:10:32 AM	Pending
30	Password Reset Request	Severity 4 - Low: Cosmetic Issues	Priority 1 - Immediate	KT	reset password	Resolved	4/19/2024, 5:10:40 AM	4/19/2024
31	Network Connectivity Issue	Severity 1 - Critical: System Down	null	tanishq latest	test	Open	4/19/2024, 5:46:41 AM	Pending
32	Network Connectivity Issue	Severity 1 - Critical: System Down	null	akshay	Emailtesting	Open	4/21/2024, 6:41:06 AM	Pending
33	Network Connectivity Issue	Severity 1 - Critical: System Down	null	akshay	testing error	Resolved	4/21/2024, 6:56:15 AM	4/21/2024

Priority: 

Priority 1 - Immediate

Mark as Resolved

Return for Review

Adjust Priority

# resolveIT Admin Panel :

Users

UserID	Name	Email	Role
1	tanishq	t4nishq@gmail.com	Admin
2	Kamal	kamalteckchandani.kt@gmail.com	Admin
3	Prof Choi	profchoi@test.com	User
4	Group 1	group1@test.com	User
5	Group 2	group2@test.com	User
6	Group 3	group3@test.com	User
7	Group 4	group4@test.com	User
8	Group 5	group5@test.com	User

Add User

Delete User

Analyse Service Requests

# resolveIT Admin Panel Add User :

Add New User

Name:

Email:

Password:

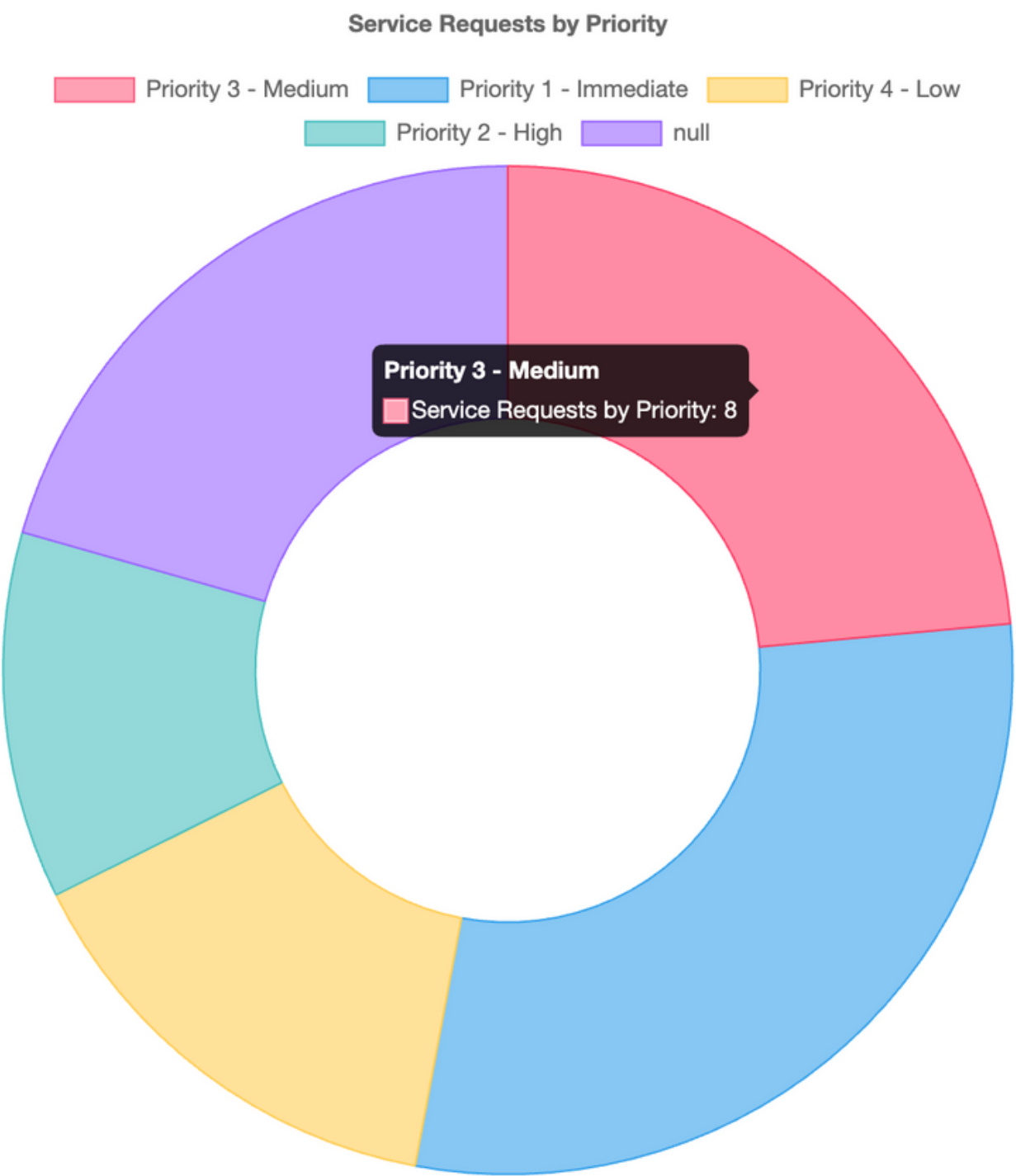
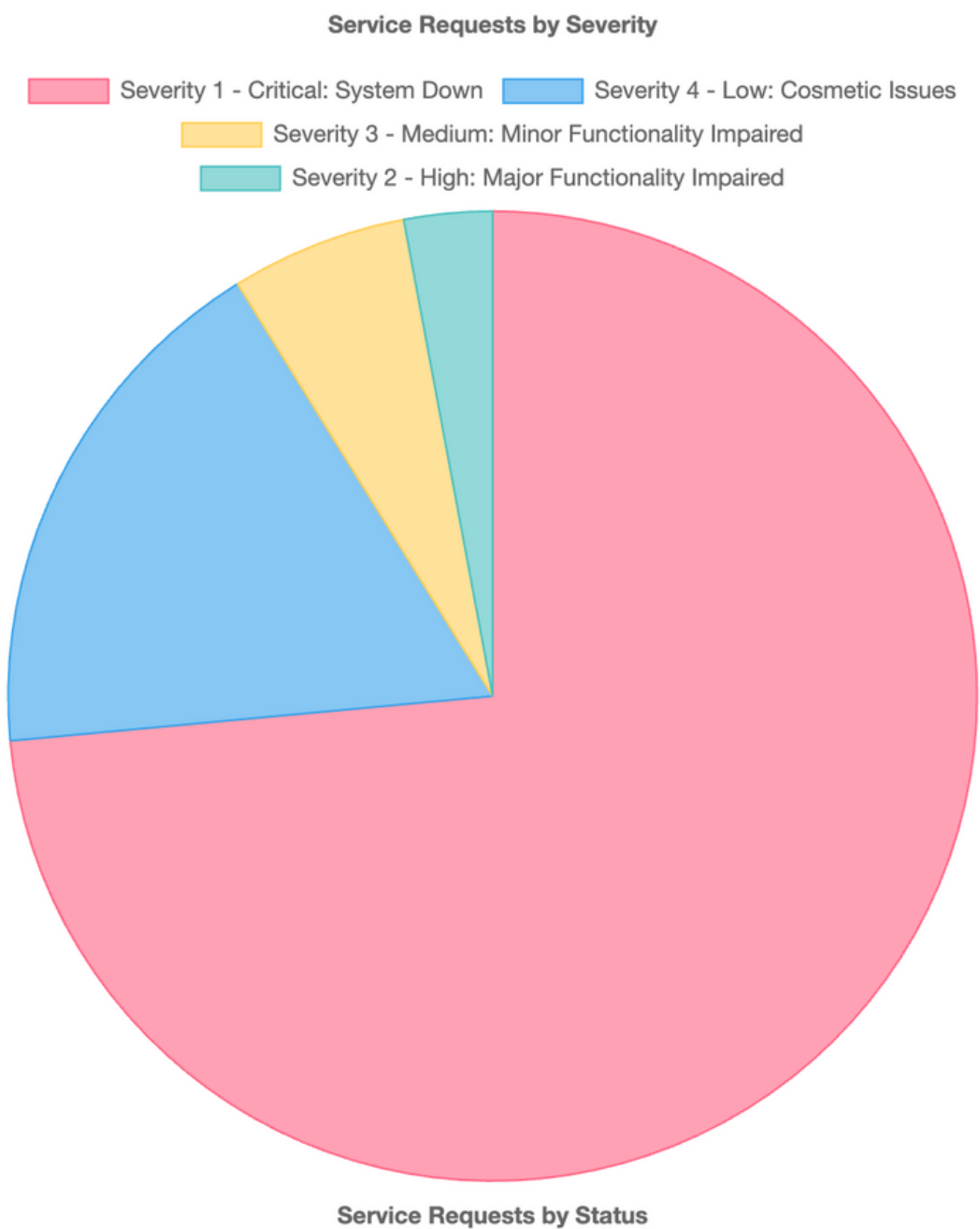
Role:

User

Cancel

# resolveIT Service Request Visualisation :

## Service Request Analysis



# resolveIT Demonstration :

resolveituic.tech

Prof. Choi : “profchoi@test.com”, “IDS517”

Group 1 : “group1@test.com”, “Group1”

Group 2 : “group2@test.com”, “Group2”

Group 3 : “group3@test.com”, “Group3”

Group 4 : “group4@test.com”, “Group4”



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# Thank You

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