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Vellore Institute of Technology

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B Tech. Fall Semester 2022-2023

CSE 3002 INTERNET & WEB PROGRAMMING

J COMPONENT

Under the guidance of,

Prof Maheshwari S

TOPIC – COMPLAINT REGISTRATION PORTAL

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ABSTRACT

Since a lot of students have been facing constant difficulties and complaints regarding hostels or mess or Wi-Fi, it has been troublesome experience and not very convenient for both the students and the staff. There has been a lack of understanding, communication and genuine interest from both sides which leads to certain difficulties. As a result of this, we have come up with an Online Registration Complaint Portal which attempts to reduce these difficulties to the maximum extent and make dealing with complaints a little easier and comprehensive.

The project Complaint Registration Portal is a web-based application that allows the admin to handle all the lodged complaints, manage them in flexible, convenient and an efficient manner. Since the admin is a very busy person and does not have the time to sit and manage the entire activities manually on paper, this application gives him/her the power and flexibility to manage the entire system from a single online system without facing anydifficulties at all. The Online Complaint Registration Portal provides the userto register itself and then login safely to access the system and raise issues which he/she faced which can be concerned with any activity. The system hence provides an online way of solving the problems faced by the user in abetter and more effective way without having the need to register for their complaints manually by writing in registers and thus maintaining bulk of records.

Keywords – Complaint, Registration, Portal, Online, Web-Application, records, admin, users, flexibility, efficient, Wi-fi, hostel, mess

INTRODUCTION

The Complaint Registration Portal is a web-based application, and it is designed to keep track of complaints registered by the users of the system. The admin has control over all the activities of the system. The system is designed for a user of a college to lodge any complaint regarding any specific category. The admin can monitor all the user log activities and can also view all the complaints lodged by the users of the system. The admin can then choose to take necessary action against the complaint and the file the subsequent report. The system also allows the user to view the status of their complaint.

The objective of the Complaint Registration Portal is to simplify the life of a student in the college, hostel, and even online education. The system will be ableto handle many services to take care of all users in a prompt manner. As a solution to the large amount of file handling happening at the college, this software will be used to overcome those drawbacks. Safety, easiness of using and most importantly the efficiency of lodging complaint and report generation are some of the benefits that this system isgoing to present. The system is user appropriate, easy to use, provide easy recovery of errors and have an overall high satisfaction.

LITERATURE SURVEY

PAPER 1

Paper Title – Decision Support System: UTHM Pagoh Residential College Online Registration and Complaint

Authors – Hazwani Rahmat, Muhmad Haiqal Omar, Nurin Afrina Saad

Date of Publication – November 2020

This research paper attempts to solve students' residential issues and difficulties. According to a preliminary conversation with the residential college administration, the residential college management now assigns rooms to students once they register using a manual business process, regardless of their ethnicity or religion. However, most Malaysians, particularly UTHM students, are Muslims. It is essential to provide residential housing with suitable room assignments since it is possible for students to cook in the college or bring outside food that is not halal. With the use of a decision-making technique, grievances, and online access to information from residential colleges, by this project and paper the authors attempt to assist students in reserving their rooms.

PAPER 2

Paper Title – Analysing and Implementing a System for Reporting, Follow Up and Resolving of Complaints

Authors – Angham Al Abbas, Khadeeja Alzayer, Mutasem Alsmadi

Date of Publication – July 2019

This research paper aims to make complaints easier to be reported, coordinated, monitored, tracked and resolved, and to provide governments with effective tool to keep records of complaint data, to use them for identifying problem areas and to improve services. The base of the problem

statement remains the same, creating a platform to store and resolve complaints easily.

PAPER 3

Paper Title – Smart Complaint Management System

Authors – Pattamaporn Kormpho, Panida Liawsomboon, Narut Phongoen, Siripen Pongpaichet

Date of Publication – July 2018

SCMS was developed to enhance the current complaint management system by using the mobile application and web application. Therefore, SCMS was able to provide several channels for filing the complaint, which enables users to send the complaint easier, and also provides the channel for progress tracking by using the mobile application. Moreover, SCMS was capable of classifying the complaint and directly sending it to the appropriate responsible department, therefore, the system could reduce the cost of hiring the staff and time of the operation. In addition, SCMS could decrease the duplicate complaints by suggesting similar complaints to users. Furthermore, SCMS allows the staff to manage the complaint through the web application instead of done manually on the paper form. Finally, the system generates the data visualization for the summary of complaint data.

METHODOLOGY

- The existing system for resolving student's queries and difficulties is not viable and convenient on a long run.
- Not only that, but it is also a lot slower and requires the use of a file-based system where-in the users have to write their complaints in just about 2-3 lines, our system immensely improves on this.
- Moreover, it is quite difficult to keep a track record of all the past complaints and resolve them efficiently using such an outdated file-based system.
- This system is not at all user friendly.
- The platform that we are willing to design can handle the complaints details without any difficulty & with minimal effort. As the work is done manually before, it will be very time consuming & require large efforts to maintain the files. By computerizing the system these files can be handled with a small effort & in less time.
- The chances of duplicity of complaints are negligible. The complaint report can be generated easily by getting the information without any problem from all the related files. The platform will be designed in a very interactive way to make it user friendly & easy to use.

FUNCTIONAL REQUIREMENTS OF THE SYSTEM

- The system creates an account or the user after the registration is completely done, and the user has the facility to change login credentials anytime he wants.
- The user can select the complaint category and subcategories along with the type of the complain the user wants to register.
- The user can select the block, nature of the complaint by giving a brief description about it. If necessary, the application provides the user an option to select a file describing his/her complain.
- The user also has an access to his complaint history where he can view allhis previous complaints and check their status. Also, if required the user has an option to view the entire complaint details of any of his former complaints.
- This system allows the admin to process all the complaints registered by

different users and have a look at the number of complaints that haven't been processed yet, the number pending complaints, and the number of complaints that have been completely resolved and closed.

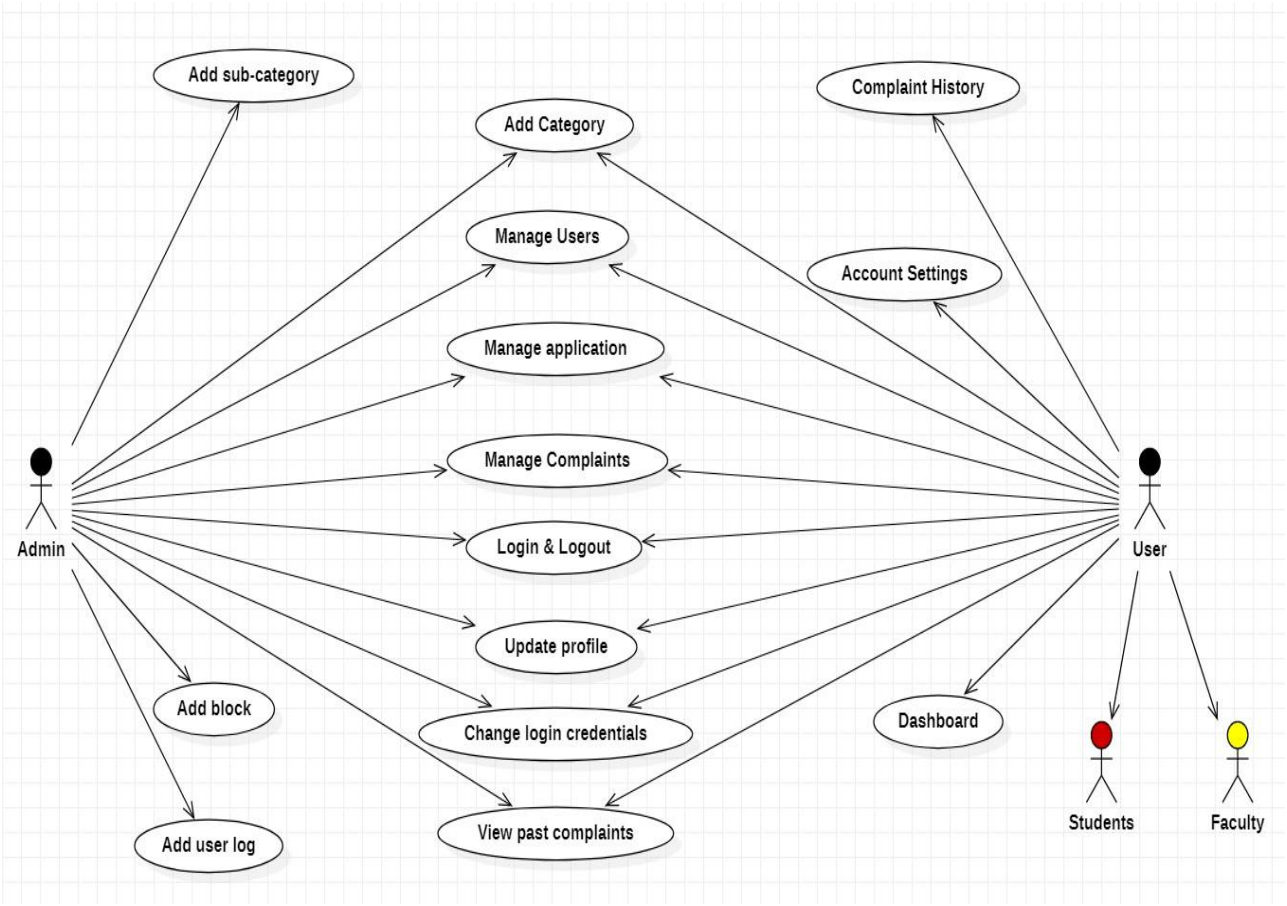
- The application provides the admin an option to add complaint categoriesand sub- categories that are dependent on various issues faced by the users. The admin can also give a description about the added categories.
- The system also provides the functionality where the admin can add different academic blocks in the application. The admin can add a subcategory based on the different categories of complaint which would help the admin to generalize the complaints.
- The application provides the admin an option to manage the user activities to view their login and logout time and the user details. The system shows the user login status to the admin, successful if the user hasentered correct credentials, else shows failed.
- When the admin enters the correct credentials, he should get complete access to the entire Complaint Registration Portal.

NON-FUNCTIONAL REQUIREMENTS OF THE SYSTEM

- The users should be able to safely sign up and login to the Complaint Registration Portal without any data breach. Data security of users is one of the system's main priorities.
- The system should provide the admin complete access of the application and enable him to keep a track of users' complaints andmaintain records.
- The admin ensures that the complaints registered by the user remain confidential and are resolved within time. Also, the admin owns up to thetask of making sure that all the complaints are carefully looked upon and are resolved comprehensively.
- All the records and documents of each user should be linkedtogether for easy access and better efficiency.
- The database and application should be available to the users andadmin 24x7 without any inconvenience.
- The system should provide an option to update the credentials orrecords of the users if required.
- The application should be easy to use, time and cost efficient, properly designed and make life easier for all its users. The flow of information in the system should not be broken.

RESULTS AND DISCUSSION

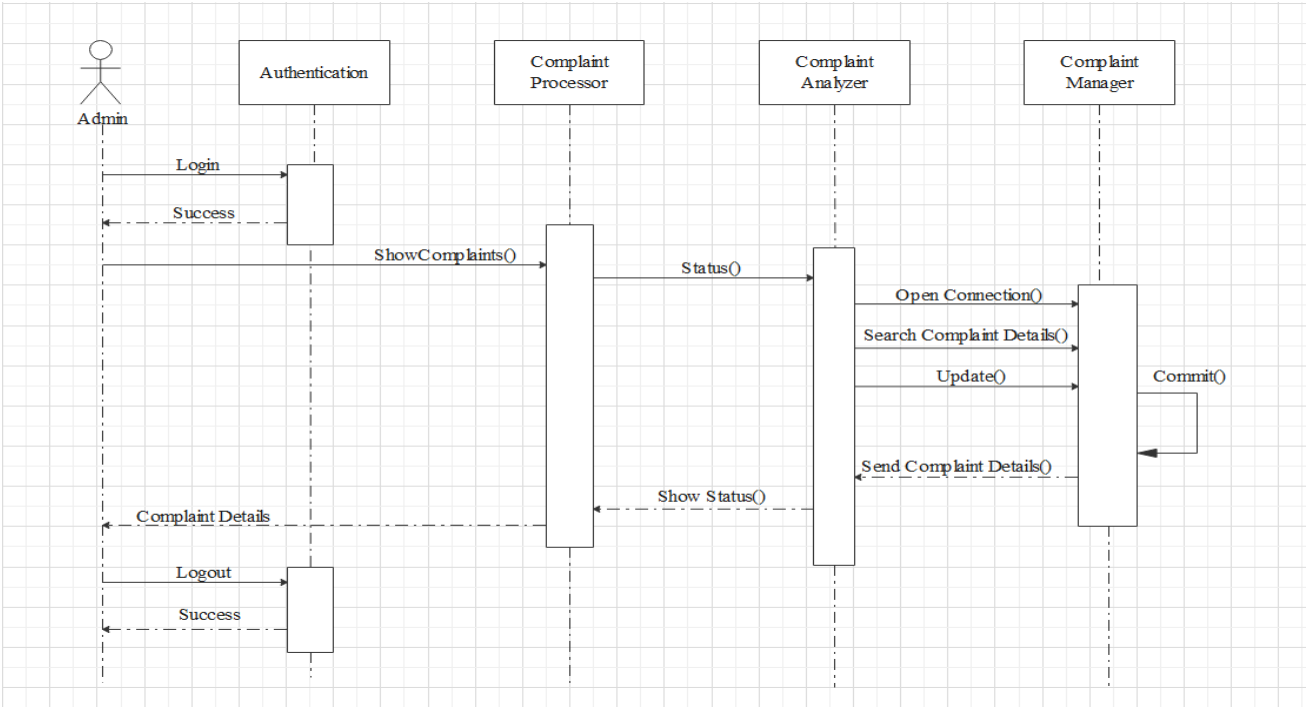
1. USE CASE DIAGRAM



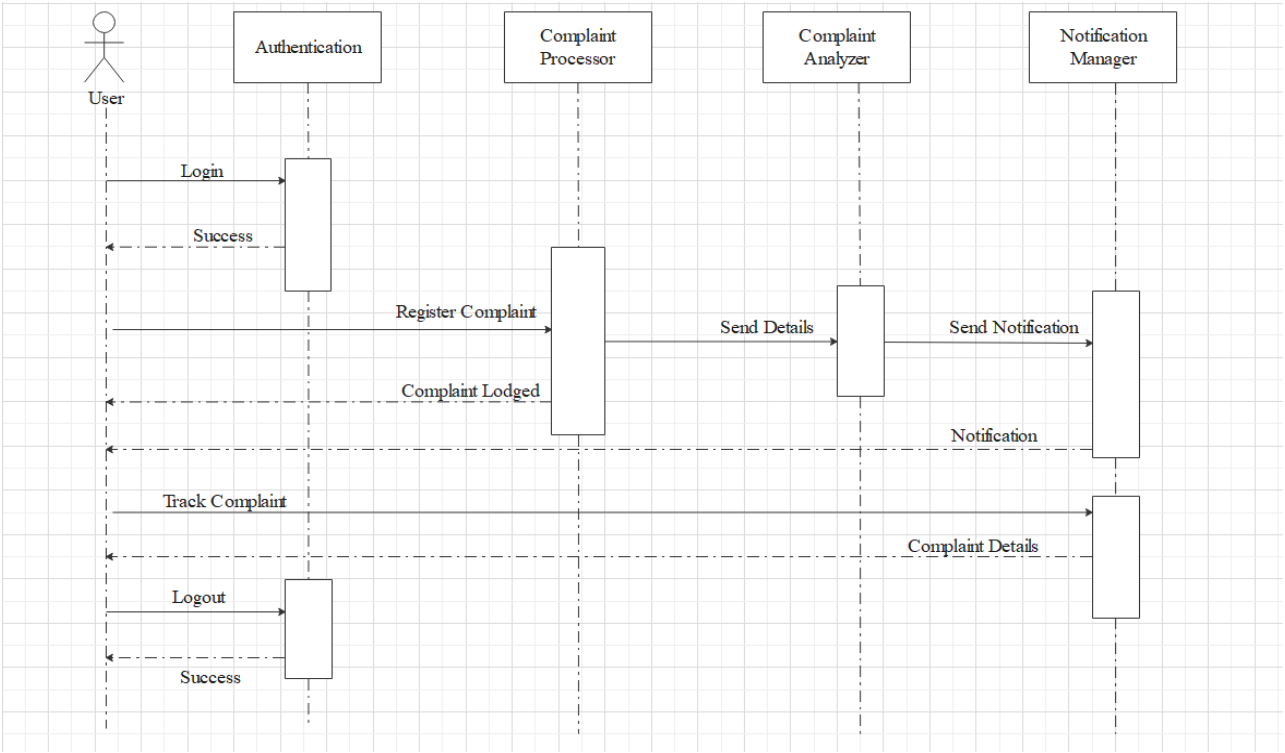
- This use case diagram justifies the entire functioning of the web application and what are the features available to both the users and admin and how they can make use of them.
- It depicts all the functionalities that are common to both the users (students, staff, or faculty) and admin and the ones which are specific to either of them.

2. SEQUENCE DIAGRAM

For admin –



For users –



3. ARCHITECTURE

3.1 Data Centric Architecture

Our system relies heavily on its database, both the user relevant complaint data and the dataadmin gives it. The database-centric architecture offers:

- A standard relational database management system. This means the data will be stored awayfrom the client-side application.
- Dynamic table-driven logic. We need to update the tables every time complaint status change.
- Stored procedures running on database servers to analyse our data.
- A shared database for communication between parallel processes.

3.2 Tier Based Architecture

To make the model equipped for handling complaint, the researchers have divided the proposedmodel into 3-tiers:

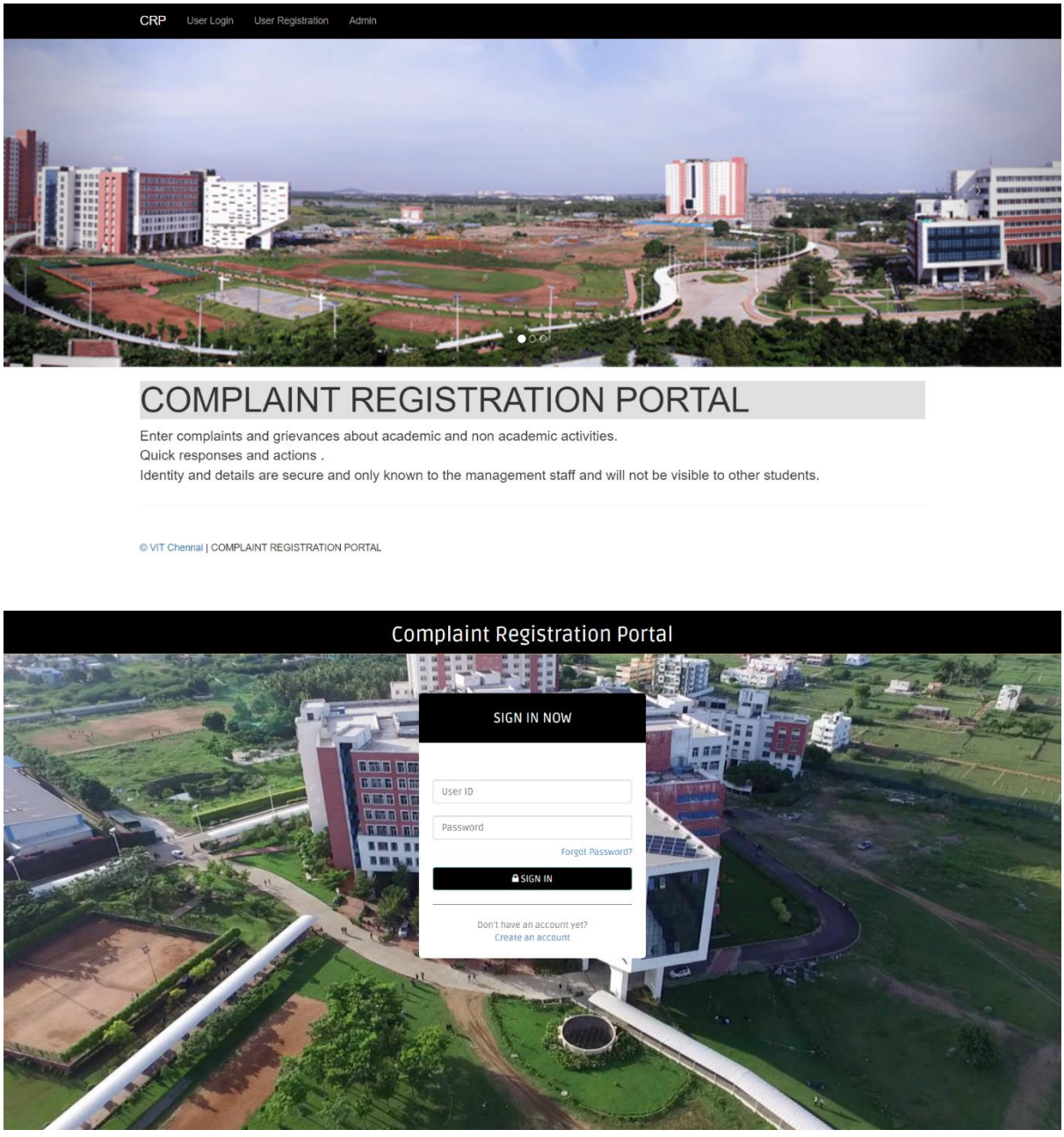
Storage – tier: It includes information pertaining to those who use the system, their profiles,citizens information available resources in addition to social association profiles.
Business – tier: It is composed of the system key part that includes complaint handling andfeedback components.
Presentation - tier It comprises web-based user interface.

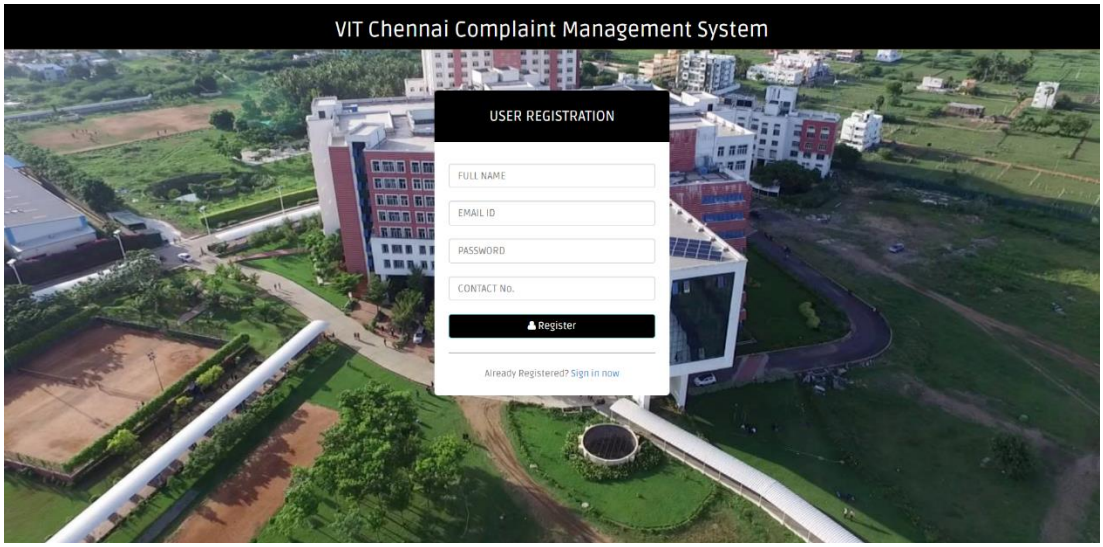
4. SUBSYSTEMS AND HARDWARE

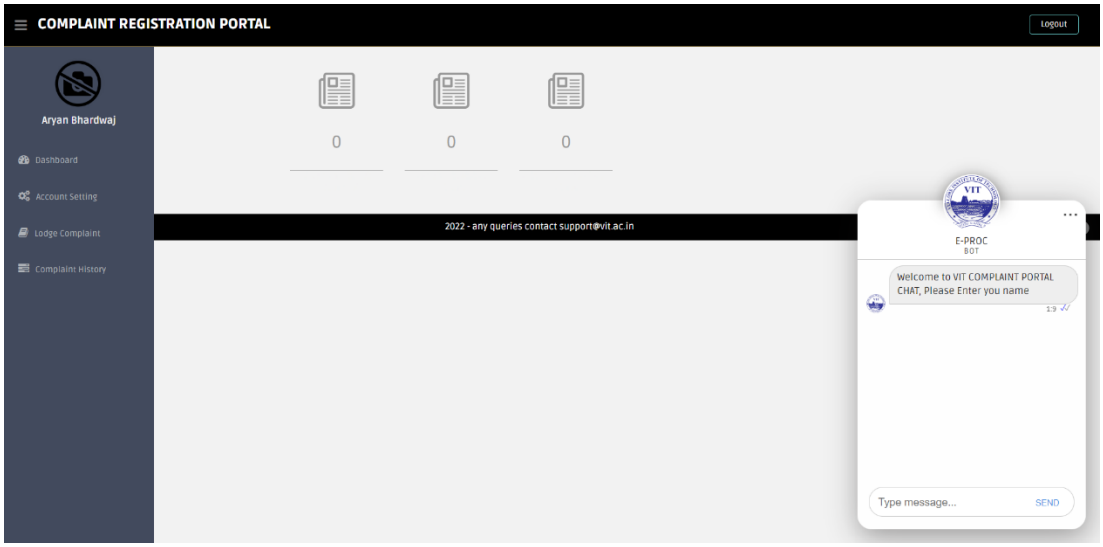
Our software employs the use of a client/server system. The client–server model of computing is a dispersed application structure that divides tasks between the provider of a resource or service,called the server, and an entity making a request, called the client. This establishment can be made with a network connection between host (the server) and client, or it is possible for this relationship to exist on the same system, sharing hardware.

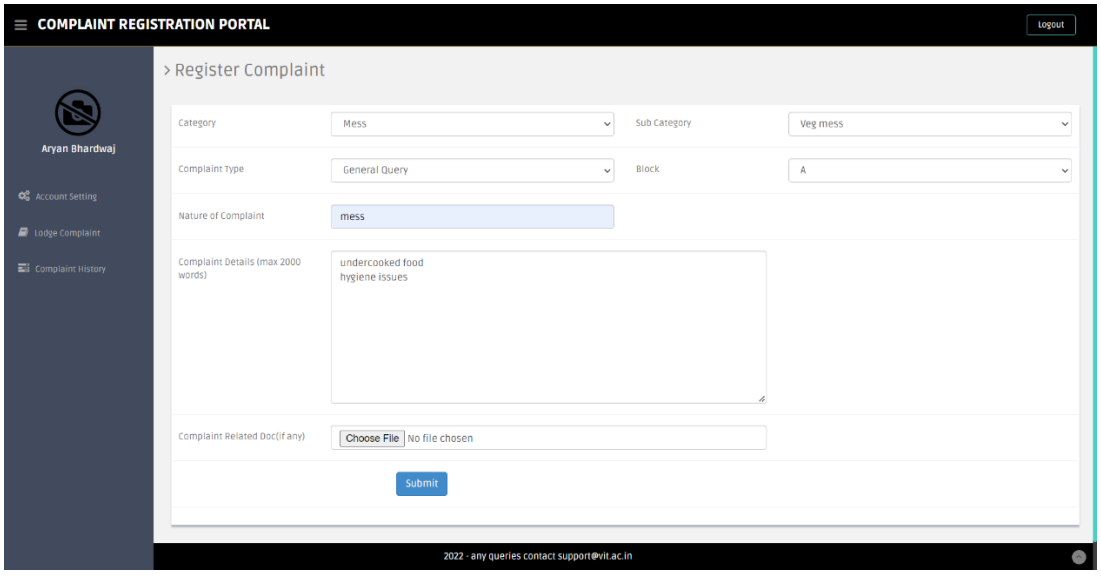
A web browser will be used to request the various data from our server, as well as retrieve stockinformation and updates that can be sent and retrieved via communication with that server. The GUI, which will run on the web browser, will be executed client side while the process itself is handled by the server's web service. The web service will ensure proper transmission of user data between the client and the server.

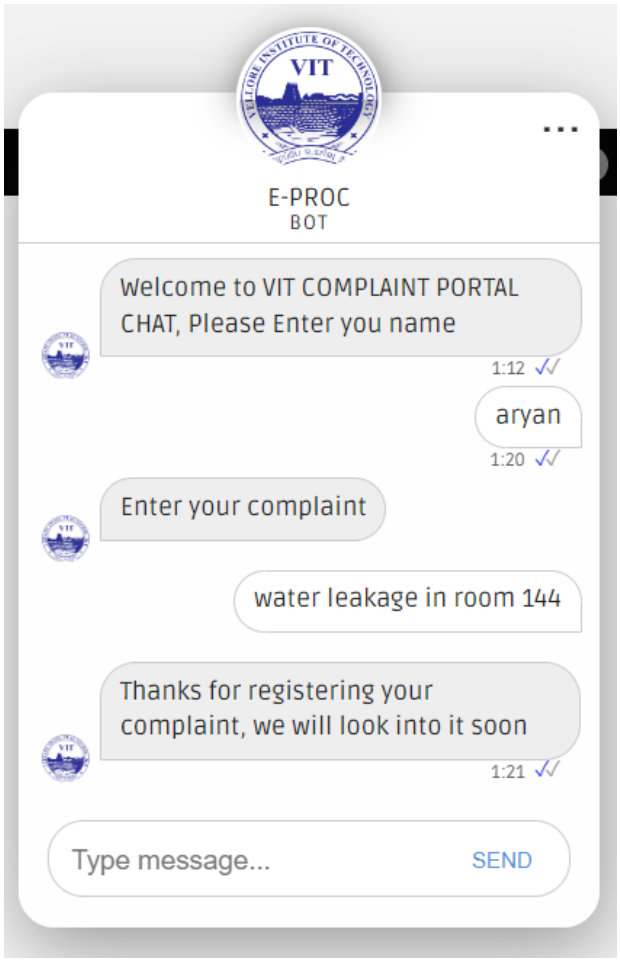
5. GRAPHICAL USER INTERFACE (SCREENSHOTS)

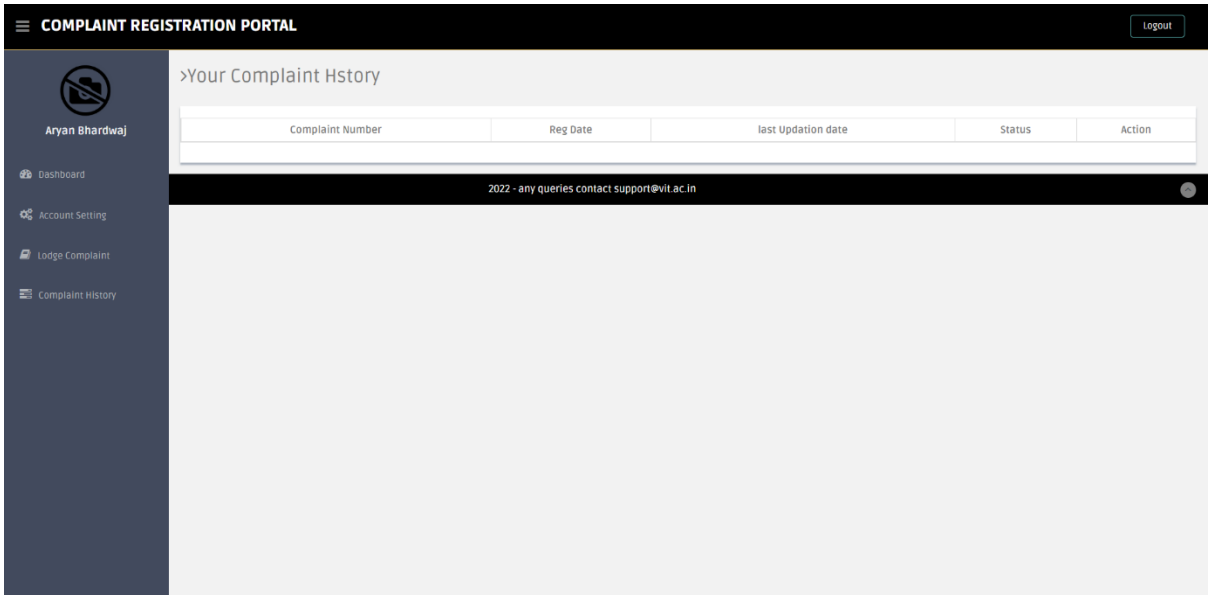


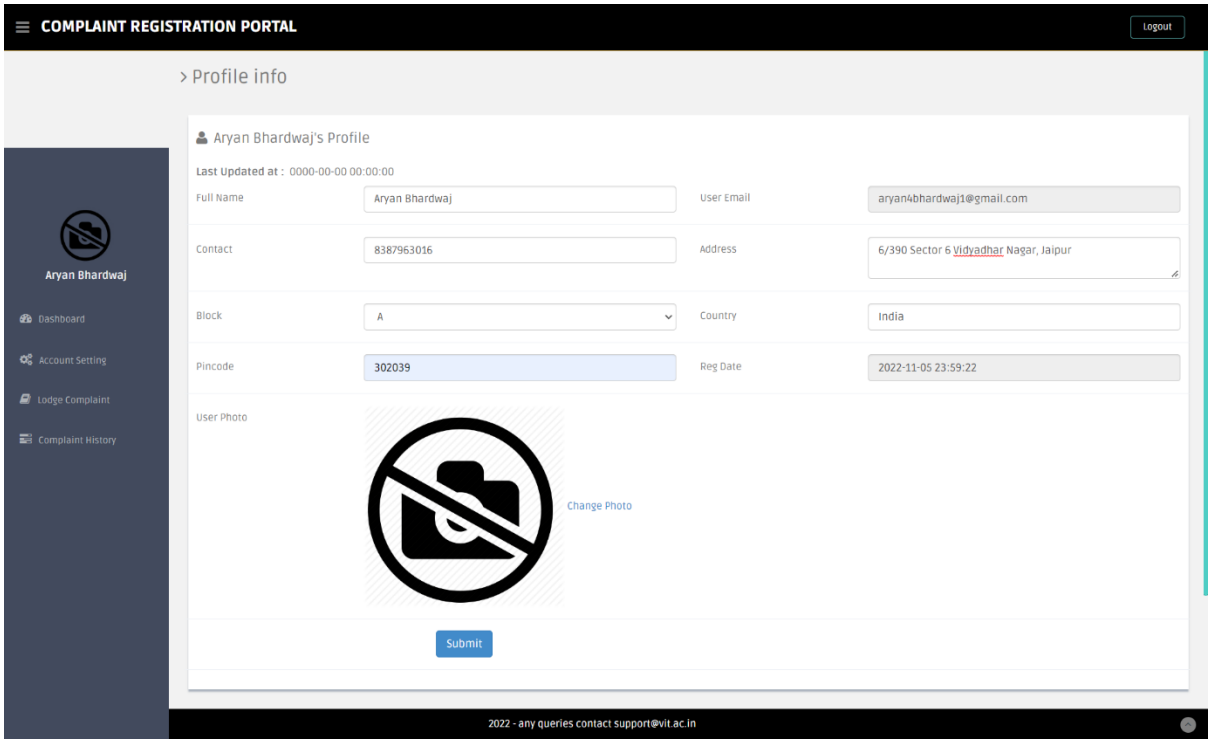

VIT Chennai Complaint Management System
USER REGISTRATION
FULL NAME
EMAIL ID
PASSWORD
CONTACT No.
Register
Already Registered? Sign in now

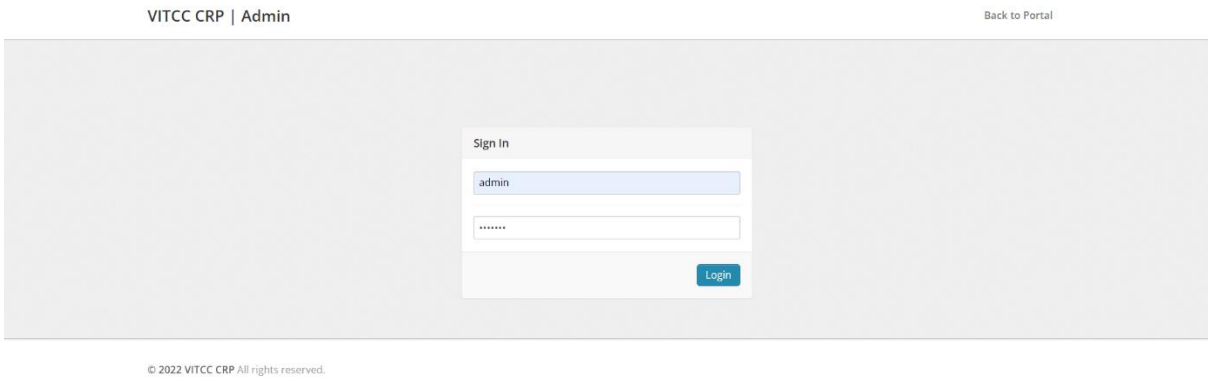

COMPLAINT REGISTRATION PORTAL
Logout
Aryan Bhardwaj
Dashboard
Account Setting
Lodge Complaint
Complaint History
0
0
0
2022 - any queries contact support@vit.ac.in
E-PROC
BOT
Welcome to VIT COMPLAINT PORTAL CHAT, Please Enter you name
Type message...
SEND


COMPLAINT REGISTRATION PORTAL
Logout
Aryan Bhardwaj
Account Setting
Lodge Complaint
Complaint History
Register Complaint
Category
Mess
Sub Category
Veg mess
Complaint Type
General Query
Block
A
Nature of Complaint
mess
Complaint Details (max 2000 words)
undercooked food
hygiene issues
Complaint Related Doc(if any)
Choose File
No file chosen
Submit
2022 - any queries contact support@vit.ac.in


E-PROC
BOT
Welcome to VIT COMPLAINT PORTAL CHAT, Please Enter you name
1:12
aryan
1:20
Enter your complaint
water leakage in room 144
Thanks for registering your complaint, we will look into it soon
1:21
Type message...
SEND


COMPLAINT REGISTRATION PORTAL
Logout
Aryan Bhardwaj
Dashboard
Account Setting
Lodge Complaint
Complaint History
>Your Complaint Hstory
Complaint Number
Reg Date
last Updation date
Status
Action
2022 - any queries contact support@vit.ac.in


COMPLAINT REGISTRATION PORTAL
Logout
> Profile info
Aryan Bhardwaj's Profile
Last Updated at : 0000-00-00 00:00:00
Aryan Bhardwaj
Dashboard
Account Setting
Lodge Complaint
Complaint History
Full Name
Aryan Bhardwaj
User Email
aryan4bhardwaj1@gmail.com
Contact
8387963016
Address
6/390 Sector 6 Vidyadhar Nagar, Jaipur
Block
A
Country
India
Pincode
302039
Reg Date
2022-11-05 23:59:22
User Photo
Change Photo
Submit
2022 - any queries contact support@vit.ac.in


VITCC CRP | Admin
Back to Portal
Sign In
admin
Login
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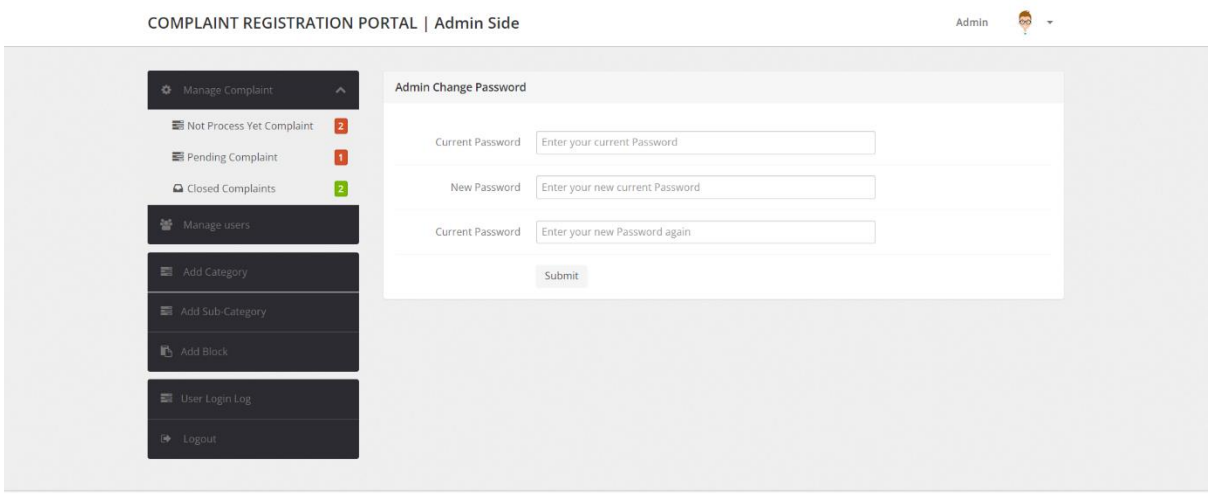

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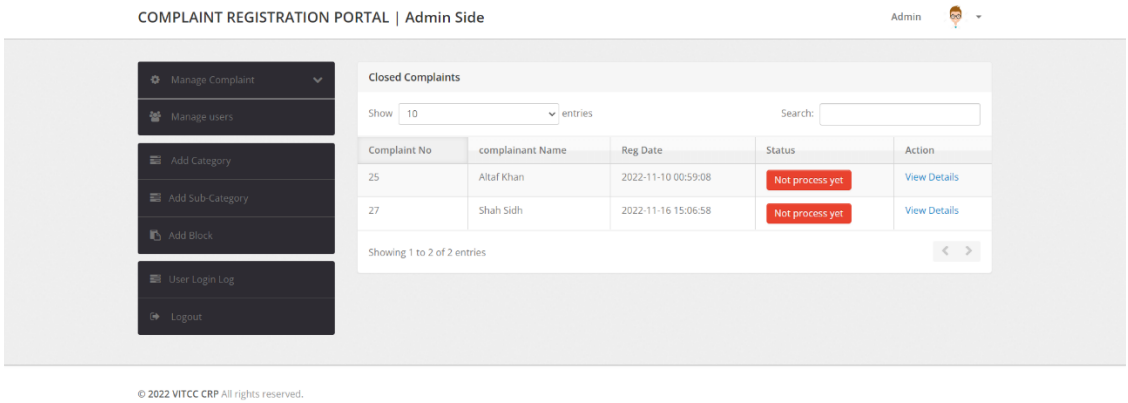

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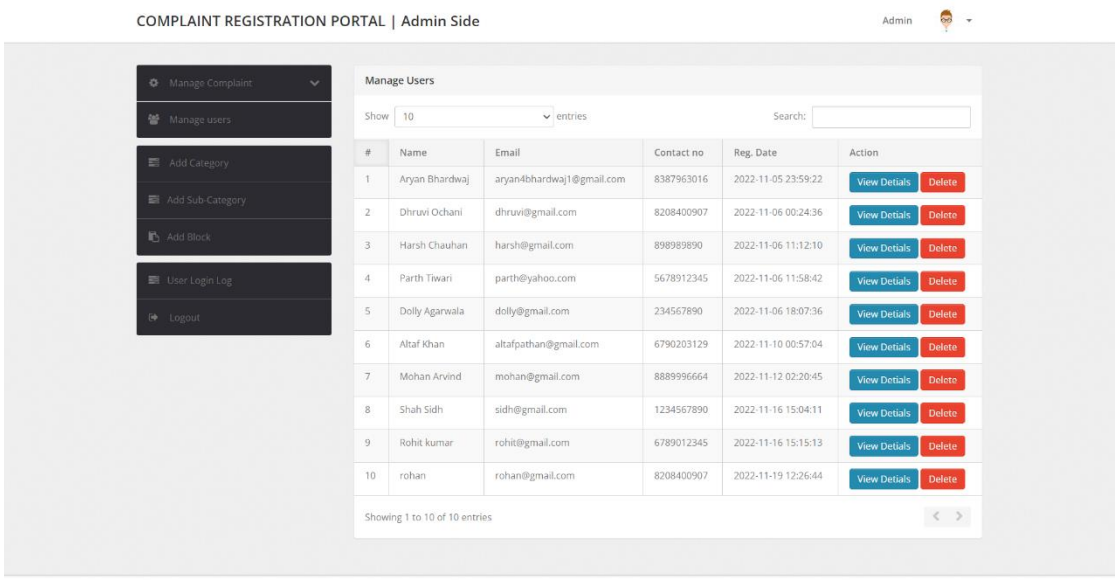

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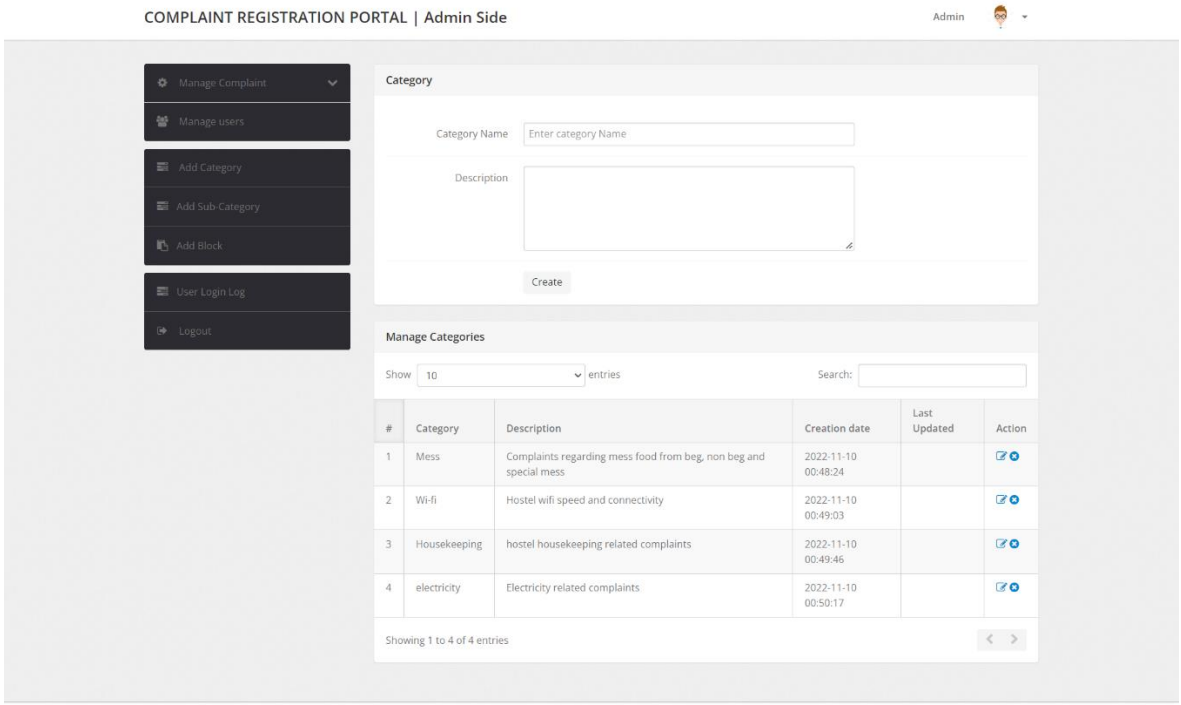

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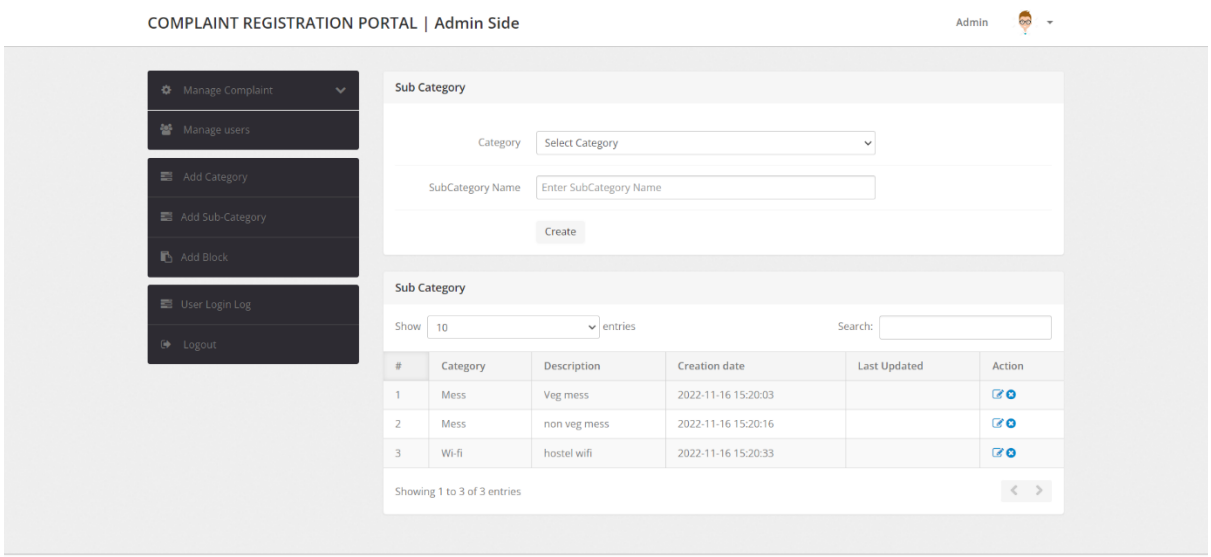
COMPLAINT REGISTRATION PORTAL | Admin Side
Admin
Manage Complaint
Manage users
Add Category
Add Sub-Category
Add Block
User Login Log
Logout
Sub Category
Category
Select Category
SubCategory Name
Enter SubCategory Name
Create
Sub Category
Show 10 entries
Search:
Category Description Creation date Last Updated Action
1 Mess Veg mess 2022-11-16 15:20:03
2 Mess non veg mess 2022-11-16 15:20:16
3 Wi-fi hostel wifi 2022-11-16 15:20:33
Showing 1 to 3 of 3 entries
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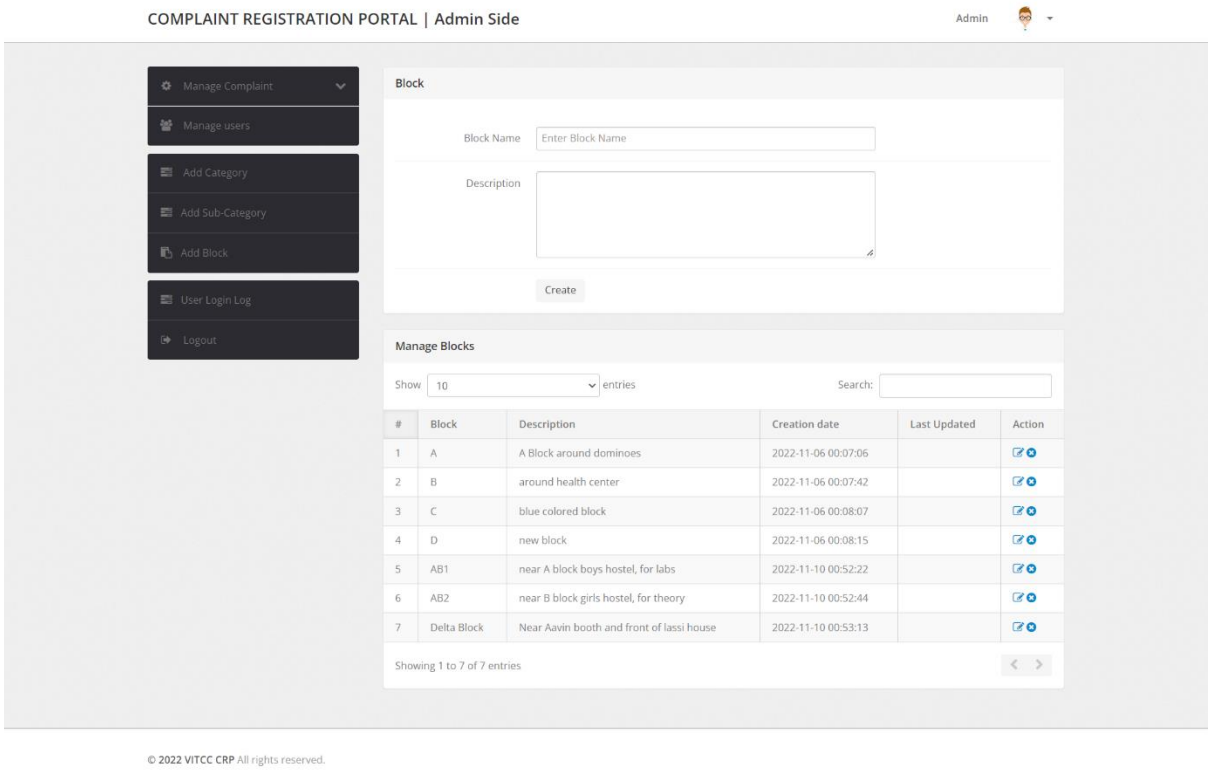
COMPLAINT REGISTRATION PORTAL | Admin Side
Admin
Manage Complaint
Manage users
Add Category
Add Sub-Category
Add Block
User Login Log
Logout
Block
Block Name
Enter Block Name
Description
Create
Manage Blocks
Show 10 entries
Search:
Block Description Creation date Last Updated Action
1 A A Block around dominoes 2022-11-06 00:07:06
2 B around health center 2022-11-06 00:07:42
3 C blue colored block 2022-11-06 00:08:07
4 D new block 2022-11-06 00:08:15
5 AB1 near A block boys hostel, for labs 2022-11-10 00:52:22
6 AB2 near B block girls hostel, for theory 2022-11-10 00:52:44
7 Delta Block Near Aavin booth and front of lassi house 2022-11-10 00:53:13
Showing 1 to 7 of 7 entries
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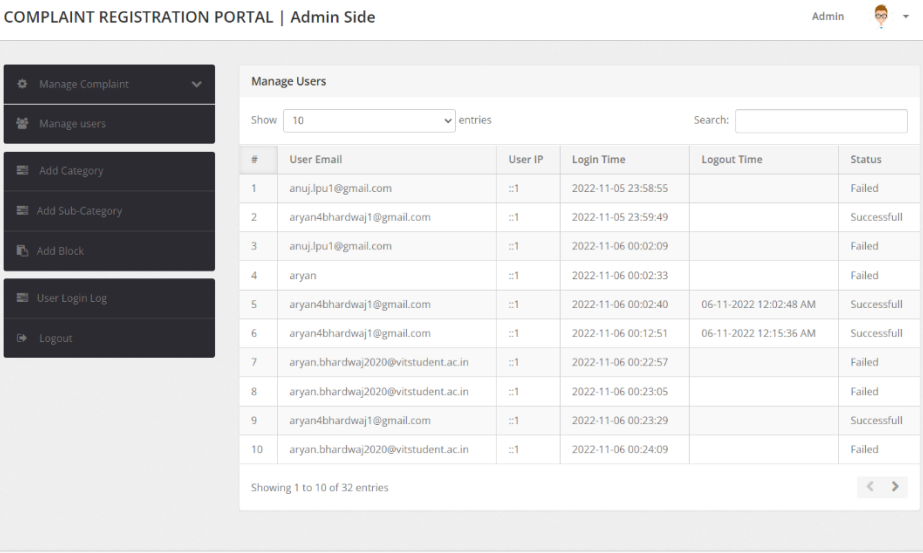
COMPLAINT REGISTRATION PORTAL | Admin Side

Admin



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CONCLUSION

We believe our Online Complaint Registration platform will be of massive help for all college students, faculties, staff, admin and the entire management. It is very user friendly, time & cost efficient and a solid replacement for existing systems which generally include registering complaints via files.

The application has everything which makes life easier for everyone associated with the college. One does not have to be hesitant to register complaints on thisplatform as all the details about its users are kept confidential along with their complaints. The platform makes it easy for students especially learning via Online mode of education since it takes a toll to study and causes a lot of issuesand difficulties.

Our Complaint Registration Portal if properly implemented by the college will be of great use. Easy to use, great user interface, time saving & efficient with utmost security of data and 24x7 availability makes it a very handy tool.

This package will provide accuracy, efficiency, speed, and easiness to the end user. Since the system is verified with valid as well as invalid data and is run with an insight into the necessary modifications that may be required in the future, it can be maintained successfully without much effort.

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