

# Your Ticket

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**Abstract**—Students still find it difficult to report or request repairs for their college environment, including their dorm and canteen. In addition to students, faculty members occasionally experience issues with college equipment. The issue will take longer than anticipated to resolve using the conventional methods of contacting college technicians and management. The suggested system is a mobile application platform, a structured digital process that links all college personnel, including faculty, students, college technicians, and college administration. With the help of a ticketing system, which is tailored to be visible to specific departments or management personnel, this platform allows every user to share their questions. The department or management can even use this platform to alert users to gather money for disaster relief supplies or to assist a person in need. All of the questions submitted by students, faculty, and other platform users are saved in the database of the ticketing system, which is a secure system. Additionally, this platform encourages departments, management, and students to create a vote pool to request that management set up or provide something that can be helpful to the majority of people. This helps to track the progress of the queries, and everyone on the platform can see the progress and learn about the current status. Each and every request and question will be recorded, addressed, and fulfilled by the platform. The various departments listed in the application, which includes all of the crucial departments, can be assigned to each ticket. Lastly, the ticket rising system changes the conventional complaint-handling procedure into a technology-driven, disciplined system that guarantees quicker resolutions, enhanced communication, better governance, and a more effective and student-friendly campus environment.

**Index Terms**—Ticket Rising, Campus Management, Complaint Raising, Query.

## I INTRODUCTION

All manual labor has been replaced by digital means in the modern world, allowing people to do tasks

without physically visiting a location. At the moment, everything can be done using a mobile device. All of it is digital, including the ticketing system, but it is only utilized in the IT sector and is extremely difficult to use, even for IT professionals. We have therefore created a much more straightforward ticket rising application that is easy to use, has all the features, and can be adjusted to suit specific requirements. Students, faculty, and college staff can raise tickets if they are experiencing any problems or issues in the college that need to be fixed and resolved so that everyone benefits. The ticketing system is designed for effective campus management. Issues pertaining to different departments can be resolved by raising a ticket against them. The departments include the following: the library, academics, catering, and information technology. Building trust and promoting sincere issue reporting are two benefits of raising tickets to different departments in this manner.

Therefore, we proposed a ticketing system that can be trusted by everyone in the campus and helps management to identify the issues and solve it more sooner.

## II LITERATURE REVIEW

Despite recent technological advancements that have led to the digitization of everything, some daily tasks that may have been digitalized have not yet satisfied customer needs or effectively addressed problems. The main works that are pertinent to the suggested system are reviewed in this section, along with their advantages and disadvantages.

This study investigates how artificial intelligence techniques can be applied to develop an intelligent helpdesk system that can increase the accuracy and efficiency of customer service. By employing rule-based and case-based reasoning techniques to capture expert knowledge, the system saves human labor and streamlines service operations while offering

consistent solutions to common problems. Traditional helpdesk models, which frequently rely significantly on human operators, have inconsistent responses, and are constrained by the expertise and experience of support staff, are examined by researchers.

An AI-powered web-based smart ticketing system was suggested by one of the main search engines with the goal of enhancing the effectiveness, automation, and user experience of managing service requests inside businesses. The paper highlights the limitations of traditional ticketing models, which often rely on manual sorting, human-based categorization, and slow response cycles. With the least amount of human involvement, their system automatically classifies tickets, assigns priority levels, and routes issues to the relevant department using artificial intelligence.

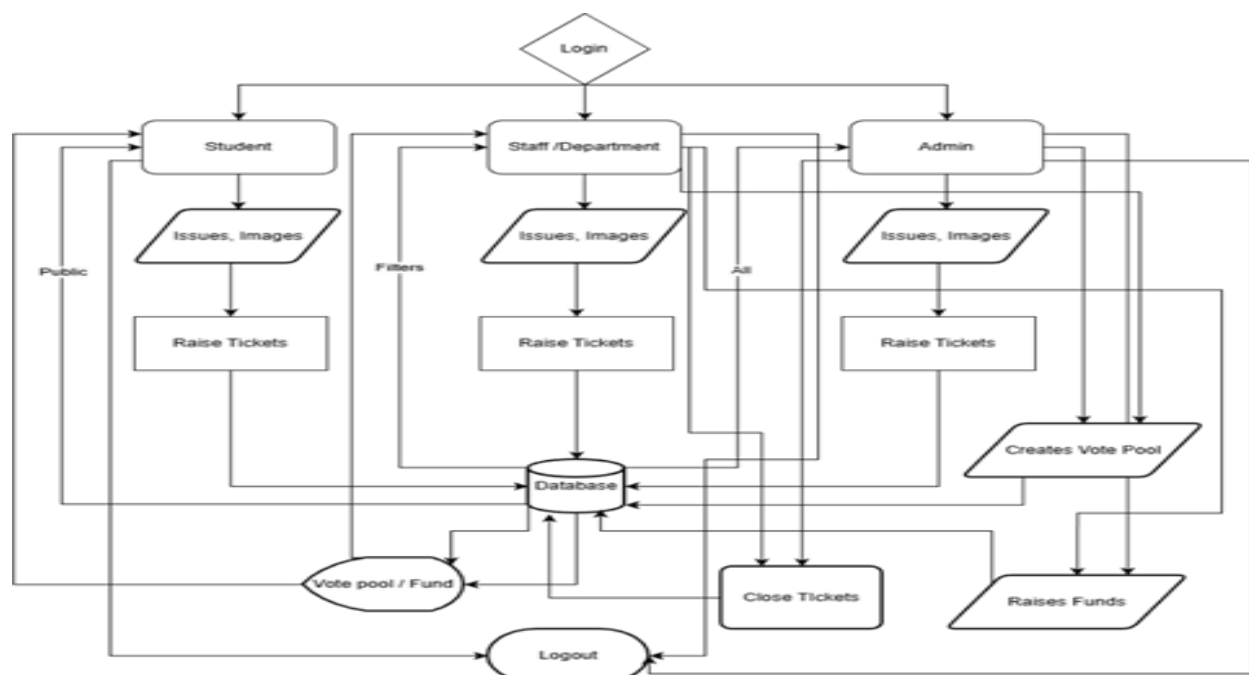
In order to enhance issue management in businesses, this paper examines the development and deployment of a HelpDesk Ticketing System. Based on manual procedures like in-person reporting, phone calls, or email correspondence, the paper emphasizes how ineffective traditional complaint handling methods are. These procedures frequently result in delays, misunderstandings, and a lack of accountability. In place of these antiquated procedures, the proposed HelpDesk system offers a centralized online platform where users can submit tickets, monitor their progress,

and communicate with support agents.

The help desk system presented in this study is powered by machine learning and is intended to improve IT service management in business settings. Traditional ticketing systems, which frequently have manual triaging, inconsistent issue classification, and slow response times, are the authors' main focus. Incoming tickets are automatically categorized and prioritized by the suggested system using machine learning algorithms that consider past trends, textual similarity, and problem severity. The model intelligently assigns tickets to the best support team by examining past incidents, user reports, and system logs; this minimizes triage errors and human dependency.

This study examines the effectiveness and precision of IT ticket classification systems and demonstrates how ticket category simplification greatly enhances classification performance. According to the authors, a lot of current IT support systems make use of ticket taxonomies that are too complicated or detailed, which leads to more categorization errors, slower support, and misrouted tickets. According to their research, clear and organized categories increase support workflow efficiency, decrease ambiguity, and improve automation accuracy.

### III METHODOLOGY



The above image showcases the flow diagram of the proposed system in the mobile application. The Whole application is categorized in 4 sections, Authentication Layer, Student Journey, Department Journey and Admin Journey.

### 3.1 Authentication Layer

The authentication layer is where users must choose whether they are administrators, department employees, or students. Selecting the type of authentication will change the selection in the tab switching. In order to search the desired database for the authentication login, we are altering the account type in the backend, so the credentials entering for the authentication will appear similar to those of every user.

### 3.2 Student Journey

After logging in, the student can view the ticket submission tab, my ticket tab, and home dashboards. The dashboard displays the most recent tickets that have been opened and closed, but they are not reviewed in this manner. Additionally, the student receives notifications about the voting pool and fundraising campaign at the top of each tab, which serves a variety of functions. They can choose their vote, donate, and engage with those campaigns. The methods provide an explanation of the specifics of the voting pool and fundraising. To open a new ticket, select the Submission tab. They can also choose to open a ticket anonymously. The raised ticket will show up for the admin and the staff of the chosen department on their dashboard. Students can follow the issue's development and see how the staff or administrator responds in terms of appropriate communication or work progress.

### 3.3 Department Journey

The faculty of the various departments, such as academic departments like CS, IT, and EEE, as well as management departments like the library, food, IT technicians/electricians, etc., are included in the department journey or staff journey. Staff members from these different departments have a single login page where they must choose their department under department, or each department will be distinct with its own user ID, login ID, and password. The database can be easily searched for authentication. Tickets from other departments won't be visible on the faculty

dashboard; only tickets filtered for their departments will be shown. The faculty will also see the dashboard's top banner for the fundraiser and voting. When a department launches a campaign, its employees can view the campaign's statistics and other data. The faculty members of the department have the option to raise their own tickets in the application and reply to them.

### 3.4 Admin Journey

Campus management personnel are in charge of the admin journey. They have complete access to the application and the authority to close or update any ticker that is raised in it. The application's overall statistics for tickets raised and closed, as well as department-specific details, will be available on the admin dashboard. The administrator will have the ability to filter all of the tickets worldwide in order to identify any that remain unresolved and alert the appropriate department or individuals to finish. If the ticket is common for all departments, the admin can also raise a new one, and all departments will be able to see it; otherwise, only the users from the selected department will see it. No matter the user category, the administrator can start a fund-raiser and start a vote by notifying every user in the application. The administrator has access to both historical campaign data and their statistics, as well as real-time data for every campaign. All tickets can be overseen by the administrator, who can also modify or redistribute them to other departments. Even before the deadline, the administrator can end the voting campaign and fundraiser, or they can extend it.

According to the suggested system, each user must submit a ticket in a specific manner.

Students, employees from various departments, and administrators are the three primary user categories that can log in to the system. In the majority of cases, the staff and students will have nearly identical workflows. The information will be stored in the Firebase database along with the distinct ticket ID for every ticket that has been raised on the platform.

### 3.5 Student Login

The app will require each student to sign in before they can use it to voice their grievances and have their needs met. To provide additional evidence of their problem, students can attach images and videos to their ticket along with a description of the issue. They

can choose the department that will fix the problem from the list of departments in the dropdown box. Students can monitor their raised tickets in the app, which shows the current status or progress as raised, working, or solved. They can also view the response to their raised tickets, which is displayed on the ticket page with the related department staff's response to alert the user. Additionally, the students can view some of the common tickets that other departments have raised. Additionally, students can submit an anonymous ticket since they risk losing opportunities if they report something. Employees in the related departments are unable to see who is doing what.

The image shows two screenshots of the 'Campus Access' app. The top screenshot is the login screen, featuring a blue header with a building icon and the title 'Campus Access'. Below the title is a subtitle 'Sign in to manage your tickets.' and three tabs: 'Student', 'Staff', and 'Admin'. The 'Student' tab is selected. The login form includes fields for 'University Email / ID' (with the example 'student@university.edu') and 'Password'. There is a 'Forgot Password?' link and a large blue 'Log In' button. Below the button is a 'Log in with Face ID' option and a link to 'Contact IT Support'. The bottom screenshot is the 'Raise a Ticket' screen. It has a back arrow and the title 'Raise a Ticket'. A subtitle says 'Please fill in the details below to report an issue.' The form includes a 'Category' dropdown (set to 'IT Support'), a 'Location' field (with the example 'e.g. Room 304, Main Block'), and a 'Description' text area. There is an 'Upload Evidence' section with a file upload icon and a 'Submit Anonymously' toggle switch. At the bottom is a navigation bar with icons for home, add, menu, and profile.

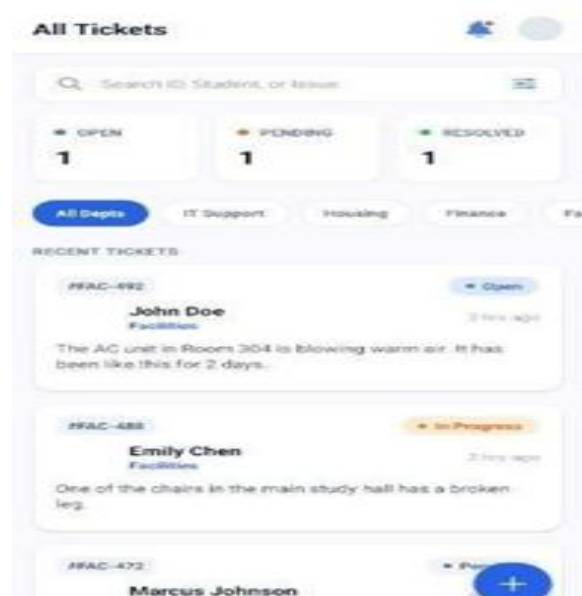
### 3.6 Department Login

The Department login is the same as the student login. If department staff members need help installing new software for the lab or are experiencing any problems, they can submit a ticket to another department. Alternatively, they can submit a request to the management. Students will not have access to the tickets that the departments have raised. Every ticket raised mentioning their departments can be viewed by the department staff.

The image shows two screenshots of the 'Facilities Management' app. The top screenshot is the department login screen. It has a blue header with a building icon and the title 'Facilities Management'. Below the title is a subtitle 'Good Morning Sarah Jenkins' and a status indicator. The login form includes fields for 'Total Tickets' (3), 'Urgent' (1), and 'Pending' (2). There is a search bar and buttons for 'All Tickets', 'Open', 'In Progress', and 'Urgent'. Below these are 'Recent Tickets' with a 'View All' link. The bottom screenshot is the 'Ticket #FAC-492' details page. It has a back arrow and the title 'Ticket #FAC-492'. The ticket details include the title 'AC Not Working in Dorm A', the category 'Facilities / Maintenance', and the status 'Open'. The ticket was submitted by 'John Doe' (Computer Science) 2 hours ago. The description is 'The AC unit in Room 304 is blowing warm air. It has been like this for 2 days.' There are two empty boxes for 'Attachments (0)'. At the bottom is a section for 'Internal Notes' with a 'Mark Admin' button and a 'Close Ticket' button.

### 3.7 Admin Login

Through the admin login, which is a management login, the administrator can view and respond to all tickets submitted by students and department staff without concealing any information from them. Tickets for specific departments or unresolved tickets that have been raised for a long time can be viewed by the admin by filtering the tickets. Regardless of the users or staff, the administrator can post a notification if they have resolved any issues, which will be visible to all users.



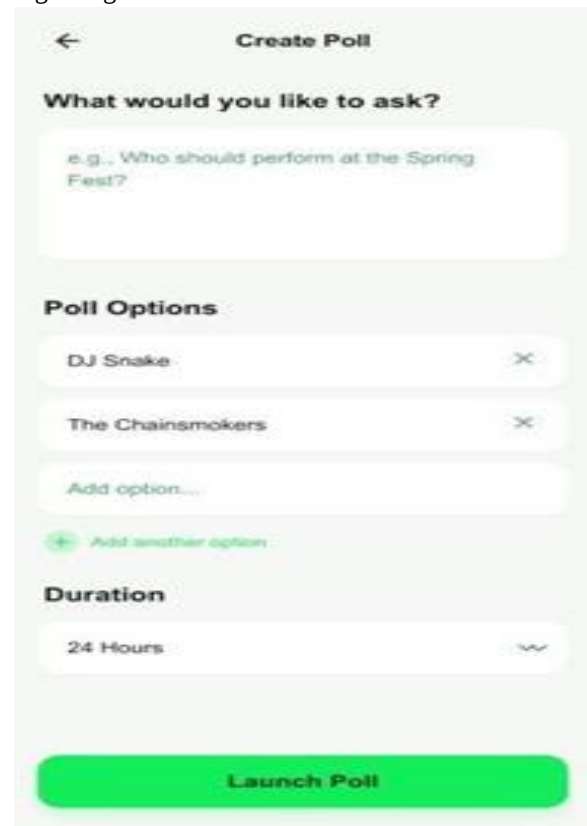
### 3.8 Tools and Storages

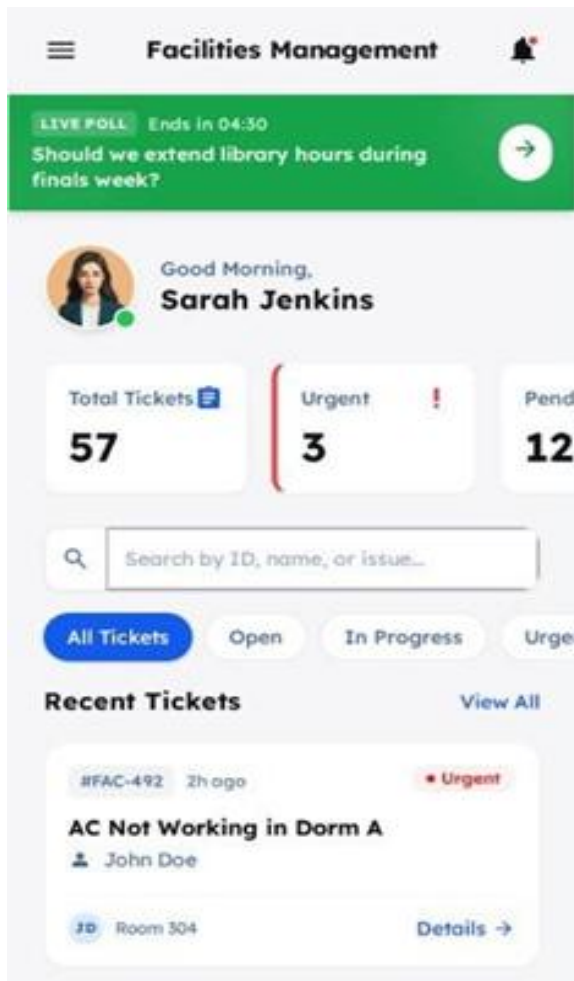
The login system and data storage are powered by Firebase Database and Authentication. The string format is how the data is kept. In this format, all data is stored. For example, the user-uploaded image is stored in Cloudinary, and the image's URL is returned and saved in the Firebase database. The database's stored URL will be used to load the appropriate images when a user opens the ticket. React Native is used to build the entire application, Android Studio is used for the app build, and the emulator is used for testing.



### 3.9 Voting Pool

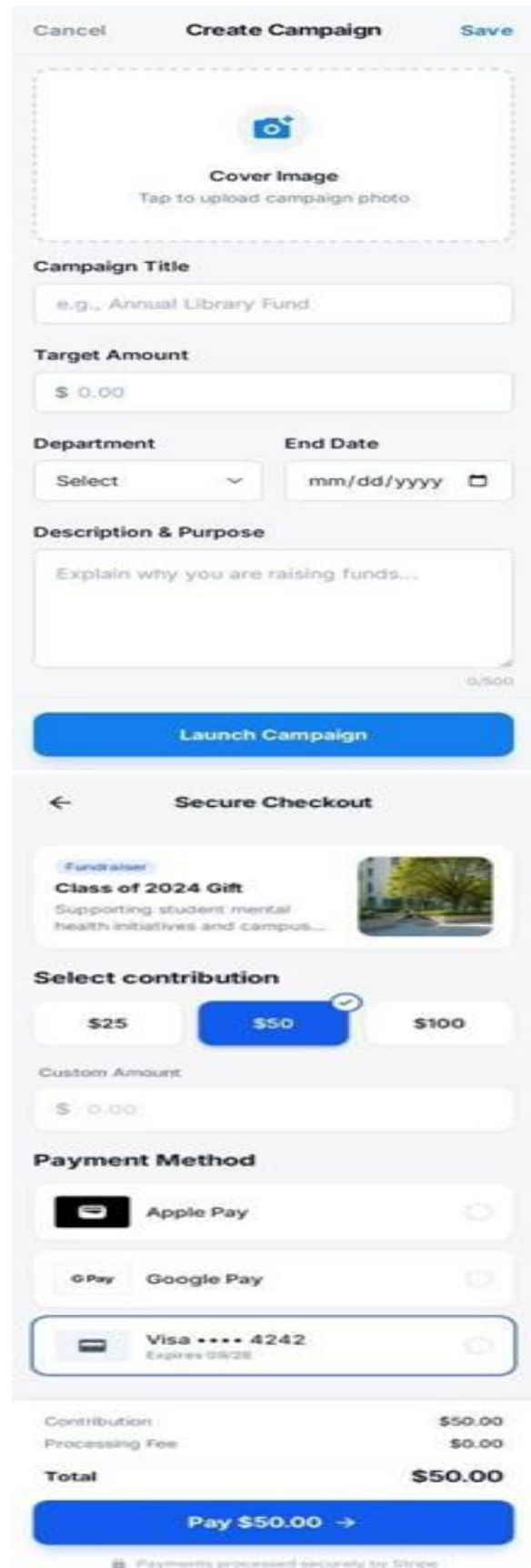
The voting pool is one of the app's features; it can be used in a variety of scenarios, with the outcome depending on the number of votes. Because a small number of people's opinions won't determine everything. This is the reason we included a voting feature in the app, which can only be started by the college administration or department employees. Students are unable to start the voting pool. The voting pool may be started by department employees, administrators, or management personnel for a variety of reasons, such as to start something new on campus or to vote on an event or other new development. Depending on the results of the major vote, the campus administration will grant their requests and supply the required materials. Since students are unable to cast direct ballots, department employees can begin casting votes on their behalf. The vote will appear at the top of the screen for every user in the application once it has begun. It will remain visible until the end of the vote and even one day after it does. We have created a tab for the voting list where users can view all of the active votes, if there are multiple active votes. The votes will also show the statistics and real-time data regarding the number of votes.

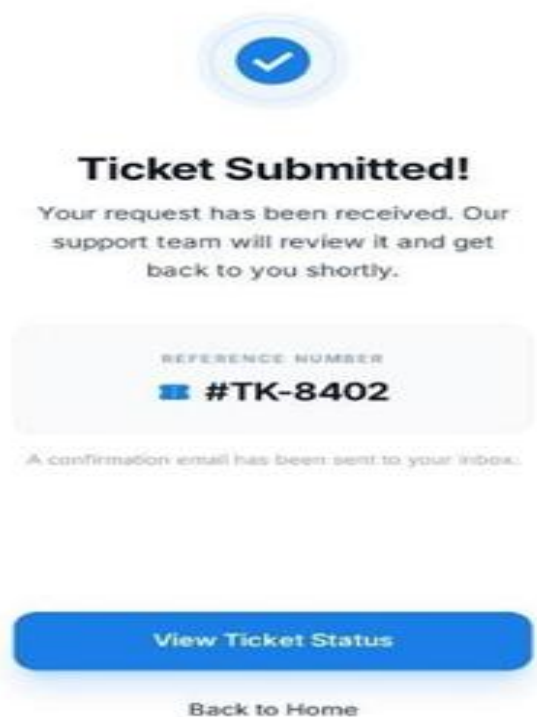
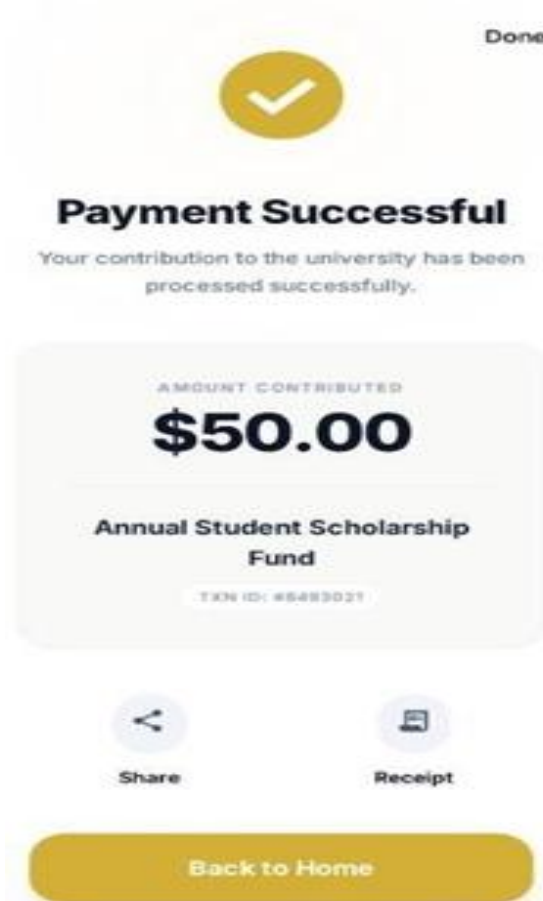
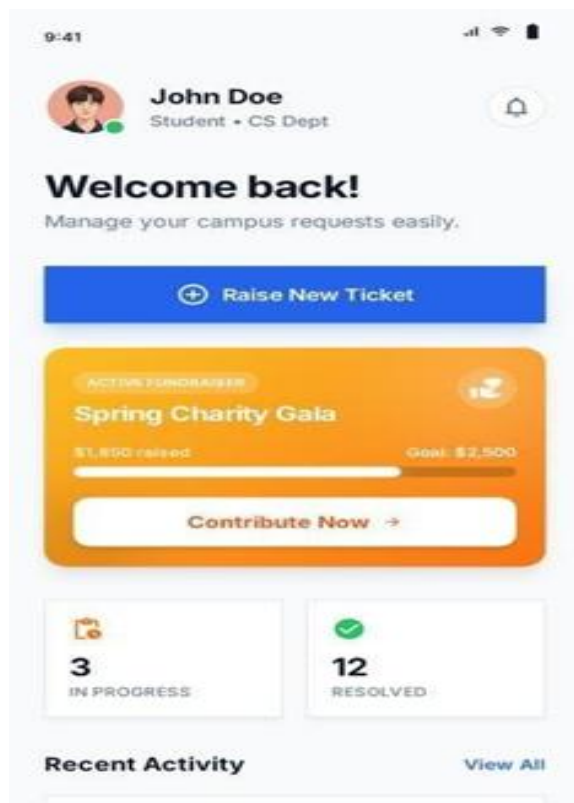




### 3.10 Fund Raising

Increasing campus or departmental funds for events, festivals, IV trips, tours, and other charitable causes, such as donations to orphanages, disaster relief efforts, or senior citizen homes, is another awesome feature. The voting pool feature is similar in that only department administrators and employees are able to start fund-raising. The funding will be shown at the top of the dashboard, just like the voting pool, which is visible to all users. Users can donate as much as they want using the integrated payment gateway, which records every transaction. The administrator or the department that initiated the fund collection can see how many people have contributed and how much they have donated, along with comprehensive information about the process raising, while the ticketing system addresses the primary issue of reporting problems on campus.





#### IV RESULT

The suggested system will function more effectively than the more intricate IT ticketing system. Moreover, since some of the features are only centralized, it can be altered to suit management requirements. The suggested ticketing system will make it easier to identify and resolve issues that both staff and students at the college are facing. The management will maintain a much better atmosphere by implementing features like vote pooling and fund

#### V CONCLUSION

In this paper, we developed a mobile application that streamlines the IT ticketing system to give campus management a better ticketing system. It enables all students, staff, and management personnel to report, raise, and vote for the problem to be resolved or to demand new items for departments or classrooms,

among other things. Several departments have been divided into different categories, such as the accounts department, library department, transportation department, laboratory department, and technical department. Each department can use this app to learn about the problem they need to fix and concentrate on the most critical issues first. In conclusion, the campus ticketing system will assist departments and management in resolving issues and maintaining the campus in a better state so that students can learn new things without any problems.

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