

## International Journal of Research Publication and Reviews

Journal homepage: www.ijrpr.com ISSN 2582-7421

# **Grievance Management System: Streamlining Complaint Resolution**

## <sup>1</sup>D. Priyanka, <sup>2</sup>Dr. S. Mahesh

<sup>1</sup>P.G. Research Scholar, Dept. of MCA, Aurora Deemed To Be University, Hyderabad, Telangana, India. <sup>2</sup>Assossiate Professor, Dept. of CSE, Aurora Deemed To Be University, Hyderabad, Telangana, India. Email: <sup>1</sup>reddypriyanka778@gmail.com, <sup>2</sup>mahesh@aurora.edu.in

#### ABSTRACT—

The University Grievance Management System is a web-based platform developed to streamline the process of lodging, monitoring, and resolving student complaints across academic institutions. The system addresses three major categories of grievances—Academics, Hostel, and Ragging—by providing students with a secure login to submit their concerns, which are automatically routed to the respective authorities such as the Head of Department (HOD), Hostel Warden, or Anti-Ragging Committee. Designed using React.js for the frontend, Node.js with Express for the backend, and MongoDB as the database, the platform ensures a modern, scalable, and responsive interface for effective grievance redressal. Role-based dashboards empower faculty and administrators to manage complaints efficiently, while students benefit from real-time complaint tracking through a transparent status system (Pending → Ongoing → Resolved). Additional features include proof uploads for evidence, Excel-based student registration, and timestamped updates for better accountability. Compared to existing manual or semi-digital systems, our solution provides enhanced transparency, accessibility, and organization. Future enhancements, such as AI-based complaint categorization, multilingual support, and mobile application integration, are also envisioned to further improve usability and scalability.

**Keywords**— Grievance Management, Student Complaints, University Portal, User Authentication, Complaint Resolution, Role-Based Dashboard, Transparency, User-Friendly Interface, Real-Time Tracking, Academic Administration

## 1. INTRODUCTION

In every academic institution, students face multiple challenges related to academics, hostel facilities, and campus life. Traditional methods of grievance handling, such as manual registers or direct complaints to authorities, are often inefficient, time-consuming, and lack transparency. Students are frequently left unaware of the progress or resolution of their complaints, which creates dissatisfaction and weakens trust in the system. Furthermore, administrators face difficulties in categorizing, monitoring, and resolving grievances in an organized manner, especially when the volume of complaints increases.

To address these challenges, we propose a **University Grievance Management System**, a web-based solution that simplifies the process of lodging, tracking, and resolving complaints. Our system provides secure login for students, allowing them to submit grievances under specific categories such as **Academics, Hostel, and Ragging**. Each complaint is automatically routed to the concerned authority (HOD, Warden, Anti-Ragging Committee), ensuring that it reaches the right person without delay. Students can track the real-time status of their grievances, moving through stages like  $Pending \rightarrow Ongoing \rightarrow Resolved$ , with timestamps for improved transparency.

On the administrative side, role-based dashboards empower authorities to view, filter, and manage complaints effectively. Features such as **proof upload**, **Excel-based student registration**, **and data management** further enhance usability. By integrating **React.js for frontend**, **Node.js with Express for backend**, **and MongoDB** as **the database**, along with tools like **Multer for file handling** and **XLSX for student data import/export**, our system ensures scalability, security, and user-friendliness.

The proposed system is not just a digital version of the existing complaint process but an advanced platform that enhances accountability, reduces delays, and creates a transparent communication channel between students and authorities. It contributes significantly to student satisfaction, organizational efficiency, and overall campus harmony.

## 2. LITERATURE SURVEY

Existing grievance systems address complaints in different sectors but often lack comprehensive tracking and real-time updates. Here, we analyse three systems and compare them to our solution:

#### 1. e-SHRAM Grievance Management System:

Designed for laborers to submit complaints online.

Provides a grievance ID for complaint tracking.

Strength: Wide accessibility and official support.

Limitation: Lacks detailed user feedback and real-time monitoring.

#### 2. Student Complaint System:

Manages student-related issues within educational institutions.

Strength: Simple design for easy complaint filing.

Limitation: Limited tracking options and no automated notifications.

#### 3. Customer Complaint Management System:

A multi-role platform allowing separate views for customers and admins.

Strength: Structured data storage for better complaint handling.

Limitation: No purchase ID tracking and lacks multi-level escalation.

#### 3. METHODOLOGIES

We adopted a systematic development approach to create a user-friendly **Grievance Management System**, focusing on efficient complaint handling, transparency, and real-time updates. The system was developed using lightweight web technologies, ensuring ease of use for both students and administrators while maintaining scalability and security.

## 3.1 Technologies Used

- Frontend: HTML and CSS were used to design the user interface and styling, ensuring a simple and intuitive experience for students and administrators.
- Backend: PHP was used for implementing complaint handling, authentication, and business logic to manage workflows effectively.
- Database: MySQL was adopted to securely store user records, complaints, and their resolution status, ensuring fast retrieval and relational
  integrity.
- **Development Environment:** XAMPP was employed as the local hosting and testing environment, enabling seamless integration of PHP and MySQL for development and deployment.

## 3.2 System Workflow

- 1. User Registration: Students register on the platform using their credentials, which are securely stored in the database.
- 2. **Complaint Submission:** Registered users file complaints through the system by selecting relevant categories (e.g., academics, hostel, ragging) and providing details. Each complaint is assigned a unique ID for tracking.
- Complaint Management: Administrators log in to review submitted complaints. They can assign tasks to relevant authorities, update records, and manage complaint lifecycles.
- 4. Status Updates: Users can monitor the progress of their complaints in real-time, with statuses updated from Pending → Ongoing → Resolved.
  This ensures transparency and accountability.

## 4. System Features (Our Contributions)

In our University-Based Grievance Management System project, we made the following contributions:

## 1. Student Complaint Portal:

We developed an interface where students can easily register academic complaints by providing their details along with a unique ID.

## 2. HOD/Admin Dashboard:

We created a centralized dashboard for Heads of Departments (HODs) to review, manage, and resolve student complaints in an organized way.

## 3. Real-Time Complaint Tracking:

We implemented a feature where students can track the status of their complaints from Pending to In Progress and finally Resolved.

#### 4. Complaint Assignment System:

We introduced a mechanism for HODs to assign complaints to specific staff members for faster resolution.

#### 5. Notification and Updates:

Students receive updates whenever the status of their complaint changes, ensuring transparency.

## 6. Secure Data Storage:

We designed the database to store all complaints securely using MySQL, allowing only authorized access for students and HODs.

## 5. Comparative Analysis

Our system is designed to address the limitations of other grievance platforms while offering enhanced features:

Feature	e-SHRAM System	Student CMS	Our System
Tracking Method	Grievance ID	Complaint ID	Based on complaint
User Roles	Worker, Admin	Student, Admin	Hod, Warden, Anti-Ragging Team, Admin
Real-Time Monitoring	Limited	No	Yes
Admin Dashboard	Basic	Limited	Comprehensive with filters
Notification System	Yes	No	Yes (Automatic)
Multi-Language Support	Yes	No	Not Yet (Planned for Future)
<b>Escalation Process</b>	Yes	No	Planned for multi-level resolution
Feedback Integration	No	No	Student can give feedback

## Why is the Grievance Management System Important?

## **Improves Student Satisfaction:**

Our system provides students with a simple platform to submit academic and administrative complaints. By allowing them to track their grievance status in real time, students feel that their voices are heard, which improves trust and satisfaction within the university environment.

#### **Efficiency in Handling Complaints:**

Traditionally, student grievances are handled manually, which is time-consuming and often leads to delays. Our automated system categorizes, stores, and forwards complaints to the respective Head of Department (HOD), ensuring quick and error-free handling.

## Transparency and Accountability:

Each complaint submitted is recorded in the system with a **unique grievance ID**. This ensures that no complaint is ignored, and department admins or HODs are held accountable for timely resolutions.

#### **Faster Resolution Times:**

With real-time notifications, both students and faculty receive updates on the progress of complaints. Urgent issues can be prioritized, leading to quicker resolutions compared to traditional manual processes.

## **Data-Driven Decision Making:**

The system collects valuable data, such as the number of complaints, common issues, and resolution times. University management can analyze these insights to improve academic processes, student services, and administrative policies.

#### Scalability and Flexibility:

While our project is designed for academic institutions, it is flexible enough to be adapted to different departments or even scaled to the entire university. The system can manage thousands of complaints without affecting performance.

#### **Reduces Manual Work:**

By digitizing the grievance redressal process, our system eliminates paperwork and minimizes human effort. This allows faculty and administrators to focus on resolving student issues rather than spending time managing records.

#### **Compliance with University Guidelines:**

Many universities are required by regulations (e.g., UGC guidelines) to maintain a student grievance redressal mechanism. Our project helps in complying with these requirements while ensuring fair, transparent, and ethical handling of complaints.

### Why Should Organizations Use This System?

#### **Better Student Engagement:**

Students feel empowered when they can submit complaints anytime and track them online without visiting offices repeatedly.

#### **Operational Efficiency:**

Automating the grievance process reduces the workload of HODs and admin staff, making the process smoother and quicker.

## Compliance with Educational Standards:

The system ensures that our university follows UGC and NAAC requirements for student grievance redressal.

#### Competitive Advantage:

A transparent grievance redressal system enhances the university's reputation, improving student trust and satisfaction compared to institutions without such mechanisms.

#### Real-Life Applications of the System

Our Grievance Management System is designed to be flexible and adaptable, making it suitable for different industries and sectors. Some real-life applications include:

## **E-Commerce Platforms:**

Customers can easily register complaints related to wrong product deliveries, payment issues, delays, or refund problems. The system ensures faster resolution and builds customer trust.

#### **Educational Institutions:**

Students can submit grievances regarding academic records, exam-related queries, or administrative issues. This helps institutions maintain transparency and improve student satisfaction.

## **Government Services:**

Citizens can lodge complaints about public infrastructure, utilities, tax issues, or service-related problems. The system ensures accountability of officials and better governance.

#### **Healthcare Systems:**

Patients can raise concerns about medical errors, billing disputes, appointment delays, or service quality. This helps hospitals and clinics improve patient care and maintain trust.

## Why People Should Use the Grievance Management System and How It Increases Satisfaction

## EASY AND CONVENIENT COMPLAINT SUBMISSION

Our system allows students to file academic or administrative complaints online without the need to physically visit the HOD or office. Complaints can be submitted anytime through a simple and user-friendly web interface, saving time and reducing effort.

### REAL-TIME COMPLAINT TRACKING

After submitting a grievance, students receive a unique complaint ID to track their status. They can easily check whether the issue is "Pending," "In Process," or "Resolved," which ensures transparency and builds confidence.

#### FASTER AND MORE EFFICIENT RESOLUTIONS

The system automatically categorizes complaints (academic, exam, facility, etc.) and forwards them to the concerned authority such as HOD or admin. This reduces manual delays, ensuring quick action and faster resolutions for students.

## CLEAR COMMUNICATION AND UPDATES

Students get regular notifications/updates about the progress of their grievance. This helps reduce confusion and keeps them informed about what stage their complaint is in.

#### INCREASED TRUST AND RELIABILITY

The system ensures no complaint is misplaced or ignored, as everything is digitally recorded. This creates trust between students and faculty, showing that all issues are taken seriously.

#### PERSONALIZED AND FAIR RESOLUTION

Each complaint is handled depending on its urgency and nature (e.g., exam issue may be prioritized over general facility requests). This fairness in handling complaints ensures student satisfaction.

#### FEEDBACK MECHANISM FOR CONTINUOUS IMPROVEMENT

After resolution, students can provide feedback. This helps faculty and administration improve their services while giving students a sense that their voice truly matters.

#### What Happens If the Grievance Management System Is Not Introduced?

If a **University Complaint/Grievance Management System** is not implemented, both students and the administration face several issues that affect efficiency, satisfaction, and transparency. Below are the key problems that arise in its absence:

#### 1. Delayed Complaint Resolution

Without an automated system, complaints are handled manually (through paper or informal emails), which leads to delays.

Students may wait for days or weeks without receiving updates or responses to their grievances, resulting in frustration.

#### 2. Lack of Transparency

Students would not have access to real-time updates on the status of their complaints.

This lack of visibility reduces trust in the administration and creates doubts about whether issues are being addressed.

## 3. Miscommunication and Lost Complaints

Manual complaint handling often causes miscommunication between students, faculty, and HODs.

Complaints may be misplaced, forgotten, or overlooked without a proper tracking system.

#### 4. Student Dissatisfaction

When grievances remain unresolved or delayed, students feel ignored and unsupported.

This dissatisfaction can negatively affect the overall learning experience and university reputation.

## 5. Increased Workload for Faculty/HODs

Without an automated portal, HODs and administrators must manually record and categorize complaints.

This increases workload, reduces efficiency, and makes it harder to prioritize urgent issues such as exam-related grievances.

#### 6. No Accountability or Escalation

If a grievance is not resolved within a set timeframe, there is no proper mechanism to escalate it to higher authorities (like the Principal/University Grievance Cell).

This may cause grievances to remain unresolved for a long time.

#### 7. Inconsistent Record-Keeping

Paper-based or email-based complaint handling leads to poor record-keeping.

Tracking complaint history, student details, and previous resolutions becomes difficult, leading to repeated issues.

#### 8. Decline in Student Trust and Loyalty

When grievances are not addressed properly, students lose trust in the administration.

This could lead to negative word-of-mouth and a bad image of the university.

#### 9. No Feedback Mechanism for Improvement

Without a proper system, the university cannot collect structured feedback from students.

As a result, recurring problems may not be identified and resolved, lowering academic and administrative quality.

#### 10. Risk of Escalation to Higher Authorities or Legal Issues

If complaints remain unresolved for too long, students may escalate issues to university-level grievance cells, UGC, or even legal authorities.

This can harm the institution's reputation and create compliance challenges.

#### Discussion

Our University Grievance Management System improves student satisfaction by providing a simple and transparent process to raise complaints related to academics, administration, or facilities. Students can submit grievances anytime through the portal without visiting offices.

The system uses a **unique Complaint ID** for real-time tracking, allowing students to monitor whether their grievance is *Pending, In Process*, or *Resolved*. This increases transparency and trust between students and the university.

Unlike traditional systems where complaints may be delayed or ignored, our solution provides an **interactive admin dashboard**, **automated notifications**, **and secure handling of grievances**, ensuring faster and more reliable resolutions.

By implementing this structured system, universities can **strengthen communication**, **reduce delays**, **and improve overall satisfaction**, while also collecting feedback to continuously improve campus services.

#### Conclusion

The University Grievance Management System provides an efficient, transparent, and secure platform for handling student complaints. By digitizing the complaint process, the system eliminates delays caused by manual methods and ensures that every grievance is properly recorded, tracked, and resolved. Features such as **real-time status updates**, **admin dashboards**, **secure authentication**, **and automated notifications** make the system reliable and user-friendly for both students and administrators.

Overall, this project not only improves the complaint resolution process but also enhances trust and communication between students and the university. With its scalable design, the system can be expanded to cover various academic and administrative areas, ultimately contributing to a more responsive, student-friendly campus environment.

## **Future Scope**

## 1. AI-Based Complaint Prioritization:

Implementing machine learning to categorize and prioritize complaints.

## 2. Mobile App Integration:

Expanding the system with a dedicated mobile application.

## 3. Multi-Language Support:

Adding support for multiple languages to improve accessibility.

## 4. Advanced Escalation System:

Developing an automated multi-level escalation for unresolved complaints.

## 5. Chatbot Assistance

Introducing a chatbot feature to guide students in filing complaints, checking status, and getting answers to common queries.

## References

 $1. \quad \ \ Government\ of\ India-e\text{-}SHRAM\ portal\ documentation.$ 

- 2. Academic resources on grievance handling systems.
- 3. Internal documentation of our Grievance Management System development.
- 4. Sharma, P., & Kumar, A. (2020). A Web-Based Complaint Management System for Universities. International Journal of Emerging Technologies in Engineering Research (IJETER), 8(6), 115-120.
- 5. Government of India. (2022). National Education Policy (NEP 2020) Implementation Guidelines. Ministry of Education, New Delhi.