A
# Project Synopsis
on
# GRIEVANCE REDRESSAL SYSTEM

Submitted as a part of course curriculum for

## Bachelor of Technology
in
## Computer Science

**Submitted by**
Vishal Yadav(2000290120194)
Yuvraj Narayan Mishra(2000290120200)
Shruti Gautam(2000290120155)

**Under the Supervision of**
Prof. Pallavi Sharma
Assistant Professor

# Department of Computer Science
# KIET Group of Institutions, Ghaziabad
### Affiliated to
# Dr. A.P.J. Abdul Kalam Technical University
# 2022-2023

# DECLARATION

I/We hereby declare that this submission is our own work and that, to the best of our knowledge and belief, it contains no material previously published or written by another person nor material which to a substantial extent has been accepted for the award of any other degree or diploma of the university or other institute of higher learning, except where due acknowledgment has been made in the text.

Date:

Signature:                                Signature:

Name:  Yuvraj Narayan Mishra        Name:  Shruti Gautam

2000290120200                          2000290120155

Signature:

Name: Vishal Yadav

2000290120194

# CERTIFICATE

This is to certify that Project Report entitled "**Grievance Redressal System**" which is submitted by "Yuvraj Narayan Mishra, Vishal Yadav and Shruti Gautam" in partial fulfillment of the requirement for the award of degree B. Tech. in Department of Computer Science of Dr. A.P.J. Abdul Kalam Technical University, Lucknow is a record of the candidates own work carried out by them under my supervision. The matter embodied in this report is original and has not been submitted for the award of any other degree.

**Date:**                                                    **Signature of Supervisor**

Prof. Pallavi Sharma

Assistant Professor

# ACKNOWLEDGEMENT

It gives us a great sense of pleasure to present the report of the B. Tech Project undertaken during B. Tech. Final Year. We owe special debt of gratitude to Professor Pallavi Sharma, Department of Computer Science, KIET, Ghaziabad, for his/her constant support and guidance throughout the course of our work. Her sincerity, thoroughness and perseverance have been a constant source of inspiration for us. It is only his cognizant efforts that our endeavors have seen light of the day.

We also take the opportunity to acknowledge the contribution of Dr. Ajay Kumar Shrivastava, Head of the Department of Computer Science, KIET, Ghaziabad, for his full support and assistance during the development of the project. We also do not like to miss the opportunity to acknowledge the contribution of all the faculty members of the department for their kind assistance and cooperation during the development of our project.

Last but not least, we acknowledge our friends for their contribution in the completion of the project.

Signature:

Name: Yuvraj Mishra       Shruti Gautam      Vishal Yadav

Roll No.:  2000290120200   2000290120155   2000290120194

# TABLE OF CONTENTS

# ABSTRACT

The cornerstone of our initiative lies in the swift identification and resolution of public grievances. We recognize the critical importance of providing citizens with a platform to voice their concerns regarding various local community matters. These issues span a broad spectrum, ranging from sensitive topics such as law and order, sociological challenges like child labor and harassment of women, to practical issues encompassing garbage management, water supply, energy, transportation, and sewage. However, administrative organizations often grapple with the formidable task of managing these complaints effectively. The sheer volume and diversity of grievances demand a systematic approach to categorization and prioritization. To address this challenge, we propose the development of a web application specifically designed to methodically analyze the multitude of complaints received, with the aim of pinpointing common problems and facilitating their resolution. This digital platform will not only streamline the complaint submission process for citizens but also enable administrators to identify trends, allocate resources efficiently, and expedite the resolution of pressing issues. By harnessing the power of technology, we seek to foster greater transparency, accountability, and responsiveness in governance, ultimately enhancing the well-being of our communities.

# CHAPTER 1
# INTRODUCTION

## 1.1  Introduction

In today's intricate social fabric, grievances are an inevitable aspect of human interactions, stemming from differences, injustices, and internal conflicts. The maintenance of fairness, equity, social cohesion, and institutional trust hinges upon the effective resolution of these grievances. Consequently, governments, organizations, and communities worldwide are increasingly recognizing the imperative of establishing robust grievance redressal mechanisms. A grievance, delineated as an oppressive state resulting from any perceived wrong or hardship endured by an individual, forms the legitimate basis for complaint, demanding remedial action.

Within the framework of any administration, a grievance redressal mechanism constitutes an integral component of the prevailing machinery. The redressal of grievances serves as a litmus test for the efficacy of an organization, underpinning its responsiveness and user-friendliness. Without a well-established system for addressing grievances and complaints, no entity can credibly claim to prioritize the needs and concerns of its constituents. Recognizing this fundamental principle, we embark on an initiative to establish an online grievance redressal system that transcends traditional barriers and empowers both society and Municipal Corporations alike.

Our vision is to harness the power of digital technology to facilitate the resolution of community issues, from cleanliness and environmental concerns

to a myriad of other pressing problems. The motivation behind our endeavor stems from the prevailing reluctance of individuals to engage with bureaucratic processes, often leading to the neglect of vital societal issues. By offering a user-friendly online platform, we aim to bridge the gap between the public and relevant authorities, facilitating seamless communication and efficient problem-solving.

Through the utilization of cutting-edge features such as geo-tagging, our website or app will enable citizens to pinpoint specific issues, providing authorities with direct access to real-time community concerns. This innovative approach not only streamlines the grievance redressal process but also fosters greater accountability and transparency within administrative bodies. In essence, our online grievance redressal system represents more than just a technological solution; it embodies a paradigm shift in governance, where citizen engagement and participatory decision-making lie at the heart of public administration.

Moreover, the imperative for sustainability underscores the urgency of implementing innovative solutions in grievance redressal. Traditional models of complaint resolution often contribute to inefficiencies and disparities, resulting in prolonged grievances and discontent within communities. By promoting an online platform for grievance redressal, the initiative aims to streamline the process and reduce the environmental footprint associated with traditional complaint resolution methods. This includes minimizing the need for physical paperwork, reducing travel requirements for both complainants and administrators, and optimizing resource allocation for more sustainable outcomes.

Finally, the platform recognizes the importance of community empowerment and collaboration in driving effective grievance resolution. By fostering

connections among stakeholders, facilitating knowledge exchange, and enabling peer-to-peer support, the platform cultivates a sense of solidarity and collective action within the community. Through interactive features such as discussion forums, chat rooms, and shared resources, individuals can leverage each other's expertise and experiences to address grievances more effectively. This collaborative approach not only promotes transparency and accountability but also strengthens trust and cohesion within the community, ultimately leading to more equitable outcomes and enhanced community resilience.

## 1.2   Problem Statement

As India is moving forward and is becoming a clean and digital country under schemes like Swachh Bharat Abhiyaan and Digital India, it becomes imperative that people have convenient means of communicating their grievances related to cleanliness in their neighbourhood, overflowing drainage and garbage bins, unauthorized construction, etc. People prefer to neglect these issues as nobody wants to spend their time standing in long queues and waiting for the authorities to address their issues. This in turn encourages the authorities to turn a blind eye to their problems and also the problem is not get solved.

The people need not go to the higher authorities always when they face problem. They have to file a complaint and can give their complaint and the complaint is taken up by the employee of specified department and he solves the problem, this was the traditional approach .Still many problems are not resolved and having pending status and no one cares.

The drawback of existing system is:
* Limited hour service availability in the current system.
* Lack of involvement of people in exhibiting their responsibilities towards society.

You know the feeling of when you see an issue in a public space, and wish you could tell others about it? Well now you can! With our online platform, anyone can report a problem in a muncipality and easily see what others have reported. This enables authorities to fix problems more efficiently and quickly, and make our communities better places to live.

## 1.3   Objective

1. To provide an easily accessible platform that allows stakeholders to submit grievances online from any location, at any time, thereby increasing convenience and participation.

2. To create a transparent process where the status and progress of grievances can be tracked by both the complainant and the administrators, fostering accountability and trust.

 3. To streamline the grievance handling process with automated workflows and notifications, ensuring timely acknowledgment, investigation, and resolution of grievances.

4. To establish clear channels of communication between the stakeholders and the grievance handling team, allowing for prompt responses, updates, and feedback throughout the resolution process.

5. To design a system that adheres to relevant legal and regulatory requirements, safeguarding the confidentiality and privacy of all grievance-related information.

6. Implement tools for analyzing grievance data to inform decision-making and policy improvements.

## 1.4  Scope

**User Management:**

- User registration for complainants and relevant authorities (optional for public platforms).
- Login and account management functionalities.

**Complaint Handling:**

- Online form for submitting grievances with clear categorization options.
- Uploading relevant documents and evidence.
- Assigning complaints to appropriate departments/personnel.

**Communication and Tracking:**

- Two-way communication channels for updates and discussions.
- Real-time tracking of complaint status for complainants.
- Automated notifications for progress updates.

**Resolution and Reporting:**

- Defined workflows for grievance resolution with deadlines.
- Disposition options like resolved, rejected, or forwarded.
- Reporting tools to analyse grievance trends and identify systemic issues.

# CHAPTER 2
# LITERATURE REVIEW

[1] This research aims to develop a unified model for e-government adoption in India, validated using data from 419 citizens and nine other models. The proposed model outperforms others, explaining 66% variance in behavioral intentions and showing significant relationships. The study also presents limitations and implications for theory and practice. [2] This paper investigates the factors influencing the adoption of the online public grievance redressal system (OPGRS) in India, based on the government's strategic policy to reform bureaucracy. The model, based on UTAUT, includes constructs like performance expectancy, effort expectancy, social influence, facilitating conditions, self-efficacy, and behavioral intention. The study aims to improve OPGRS's potential for transparency and corruption-free India.

[3] India's states provide online services to empower citizens, addressing issues like corruption and bureaucracy. The Department of Administrative Reforms and Public Grievances (DARPG) addresses grievances from various departments. This paper considers four Indian states and their grievance redressing systems, measuring their performance on a scale. Key metrics include HarSamadhan of Haryana, eSamadhan of Himachal Pradesh, SWAGAT of Gujarat, and JanMitra of Karnataka. [4] This paper examines the success of India's online public grievance redressal system (OPGRS) using an IS success model. It measures intention to use and user satisfaction, finding positive connections between system quality, information quality, perceived usefulness, user satisfaction, and intention to use.

[5] The Grievance Redress System (GRS) is a crucial tool for Bangladesh's public administration. Introduced in 2007, it has evolved into an online system

in 2014 to address citizens' grievances. A study assessed the implementation of GRS in district-level government offices, revealing that it is still in its infancy. Service providers were found to be insufficiently following GRS guidelines, with stumbling blocks including complaints submission, institutional incapacity, and lack of monitoring. The study concluded that institutionalizing awareness building programs, service provider capacity development, establishing a separate legal authority, and result-based monitoring are essential for better GRS outcomes. [6] Bitcoin's popularity has led to the development of blockchain, which has been applied across various domains, including the grievance redressal system. This system involves submitting grievances to different hierarchical levels of authority, each with the authority to resolve, revert, and forward them to higher levels. Data integrity is built-in, preventing misuse of power by authorities. The dynamic time threshold transfers grievances to higher authorities, eliminating ignorance and overcoming anomalies in the current grievance system.

[7] Griefs in academic institutions are sensitive and important, especially for students who often fail to express their concerns. Despite a lack of a formulated grievance redressal mechanism in some prestigious colleges of Madhya Pradesh, a prototype has been developed to address these conflicts. This paper focuses on developing and executing this prototype, addressing the identified problem areas and incorporating additional necessary areas to ensure effective grievance redressal for students. [8] The Grievance Redressal Mechanism (GRM) is crucial in a fast-paced world, especially during the pandemic. It facilitates smooth functioning by receiving complaints and redressing them effectively. With growing technologies and digital literacy, GRMs have become more accessible, user-friendly, and contactless. This paper reviews existing literature and looks at recent on-field examples of e-governance innovations in states like Kerala, Himachal Pradesh, and Bihar. However, challenges include the ability of GRMs to be accessible to the general public and bridging the digital divide. The paper seeks solutions to

these problems for a better future for all.

[9] Grievances arise at any level, especially in education, where students often fail to seek support. A Student Grievance Support System was designed to address these issues. The web application allows students to lodge complaints, which are forwarded to the Grievance Redressal Committee. The committee then forwards the complaints to the appropriate institute or department, ensuring sensitivity. The institute or department takes action and updates the status, providing transparency and enabling students to find solutions. This project aims to improve student experience and satisfaction. [10] This paper examines the success factors of online public grievance redressal systems (OPGRSs) in India, focusing on system quality, information quality, social influence, self-efficacy, perceived trust, user satisfaction, and intention to use. The study aims to improve OPGRS's potential for a transparent, corruption-free country.

[11] In India, citizens expect quality public services, including information technology-enabled versions. To increase citizen satisfaction, countries worldwide aim to develop transparent and accountable online systems. This study aimed to assess the e-service quality of an online grievance redress portal for student users. A survey of 677 respondents was conducted using partial least squares structural equation modeling. Results showed that security and privacy are crucial for student satisfaction, as they build trust in the online e-governance system. Reliability and quality of information delivery were also important. Gender did not significantly affect student satisfaction with e-government services. The study's limitations and future research scope are also presented.

# CHAPTER 3
# PROPOSED METHODOLOGY

The proposed methodology for developing the online grievance redressal system is based on the Agile methodology, which emphasizes iterative development, collaboration, and flexibility. The project begins with a comprehensive requirement gathering and analysis phase, involving stakeholder interviews and surveys to capture detailed needs and expectations. This phase also includes an analysis of existing grievance handling processes to identify gaps and opportunities for improvement. Following this, the system design phase involves creating user interface (UI) and user experience (UX) layouts, along with developing the system architecture and database design. Detailed technical and functional specifications are also crafted to guide the development process.

During the development phase, the team sets up the development environment and tools, and begins constructing core modules such as grievance submission, tracking, categorization, and resolution. User authentication and data security measures are also implemented, and the system is integrated with existing platforms like HR and customer service systems. Testing is carried out in multiple stages: unit testing for individual components, integration testing to ensure cohesive functionality among modules, and system testing to validate overall performance. User acceptance testing (UAT) is conducted with selected stakeholders to gather feedback and make necessary adjustments.

Deployment is planned and executed in phases, starting with a pilot rollout to identify and address any issues before a full-scale deployment. The production environment is prepared, and data migration is managed carefully. Initial deployment monitoring is crucial to resolve any immediate issues. Training and documentation are critical components, with user manuals and training

materials developed and training sessions conducted for both administrators and users. Ongoing support and training resources are provided to ensure smooth operation.

Post-deployment, the system's performance and user satisfaction are evaluated through continuous feedback collection. This feedback informs areas for improvement, which are implemented in subsequent updates. Regular system updates and enhancements ensure the system remains secure, efficient, and responsive to user needs, maintaining an ongoing feedback loop for continuous refinement. This Agile approach ensures that the system is developed in a flexible, collaborative manner, allowing for iterative improvements and alignment with stakeholder expectations throughout the project lifecycle.
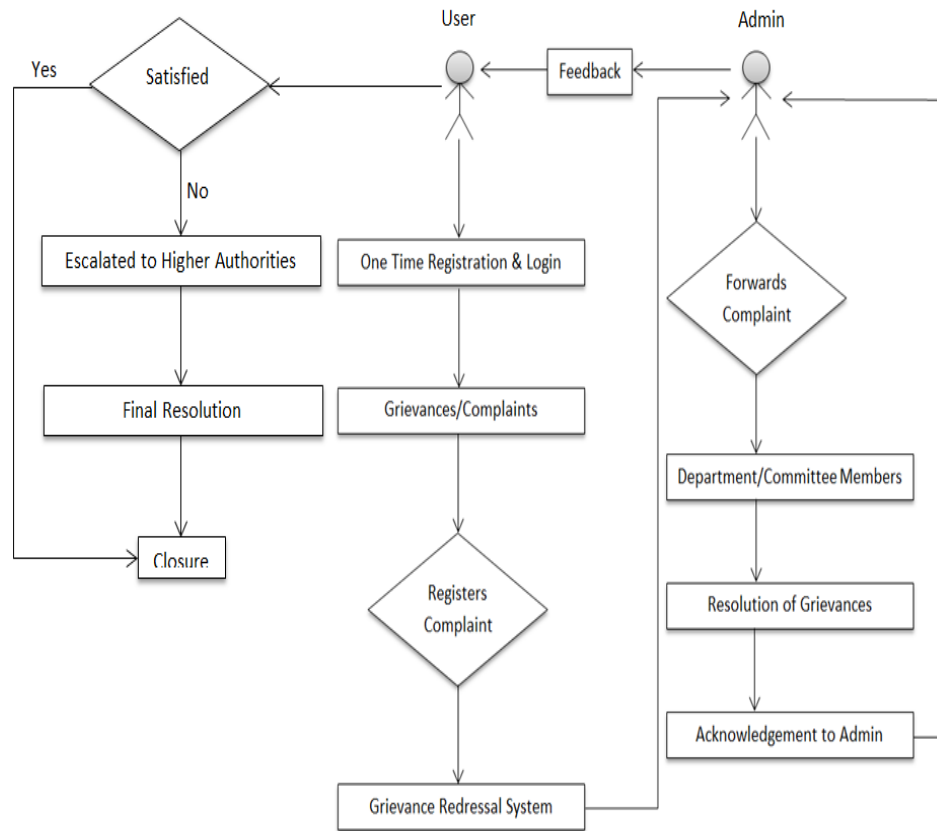
# 3.1   Flowchart



Figure 4.2 Workflow Diagram

# CHAPTER 3
## CONCLUSION

In conclusion, the online grievance redressal system project represents a significant advancement in how organizations handle complaints and concerns from their stakeholders. By leveraging the Agile methodology, the project ensures a responsive, user-centric approach that adapts to evolving needs and feedback. The system's design prioritizes accessibility, transparency, and efficiency, providing stakeholders with a reliable platform to voice their grievances and track their resolution. Through comprehensive data management and analytics, the system not only resolves individual issues but also identifies broader trends to inform policy and procedural improvements. Integration with existing organizational systems and adherence to legal and regulatory requirements further enhance its effectiveness and compliance. Continuous training, support, and system updates ensure sustained performance and user satisfaction. Ultimately, this project aims to foster a more transparent, accountable, and responsive environment, strengthening trust and engagement among all stakeholders.

# REFERENCES

[1] Rana, Nripendra P., et al. "Adoption of online public grievance redressal system in India: Toward developing a unified view." Computers in Human Behavior 59 (2016): 265-282.

[2] Rana, Nripendra, Michael Williams, and Yogesh Dwivedi. "Examining factors affecting adoption of online public grievance redressal system: A case of India." (2013).

[3] Chander, Subhash, and Ashwani Kush. "Assessing grievances redressing mechanism in India." International Journal of Computer Applications 52.5 (2012).

[4] Rana, Nripendra P., Yogesh K. Dwivedi, and Michael D. Williams. "Examining the factors affecting intention to use of, and user satisfaction with online public grievance redressal system (OPGRS) in India." Grand Successes and Failures in IT. Public and Private Sectors: IFIP WG 8.6 International Working Conference on Transfer and Diffusion of IT, TDIT 2013, Bangalore, India, June 27-29, 2013. Proceedings. Springer Berlin Heidelberg, 2013.

[5] Chowdhury, Md Shahidul Islam. "Strengthening Grievance Redress System: A Case of Narsingdi District Administration." angladesh ournal of ublic dministration 31.1 (2023): 23-46.

[6] Shettigar, Rakshitha, et al. "Blockchain-Based Grievance Management System." Evolution in Computational Intelligence: Frontiers in Intelligent Computing: Theory and Applications (FICTA 2020), Volume 1. Springer Singapore, 2021.

[7] Prajapat, Shaligram, Vaibhav Sabharwal, and Varun Wadhwani. "A prototype for grievance redressal system." Proceedings of International Conference on Recent Advancement on Computer and Communication: ICRAC 2017. Springer Singapore, 2018.

[8] Shahi, Abhinav. "Grievance Redressal in India during Pandemic and the Way Forward." ASCI Journal of Management 51.1 (2022).

[9] Aravindhan, K., et al. "Web Portal for Effective Student Grievance Support System." 2020 6th International Conference on Advanced Computing and Communication Systems (ICACCS). IEEE, 2020.

[10] Rana, Nripendra P., et al. "An extended DeLone and McLean's information system model for examining success of online public grievance redressal system in Indian context." International Journal of Indian Culture and Business Management 10.3 (2015): 267-290.

[11] Kumar, Anil, et al. "Does e-service quality of online grievance redress portals lead to satisfaction? An outlook from the perspectives of I ndian youth." Journal of Public Affairs 23.1 (2023): e2822.