

1. Project Overview

Complain NSTU is a web-based application designed to streamline and digitize the complaint submission process for students at the university (NSTU). The system allows students to submit complaints through their student accounts, which admins can then manage. The admin team can monitor, categorize, and update the status of complaints, improving communication and transparency between students and university administration.

2. Objectives

- Enable students to submit complaints and track their progress.
- Allow admins to view, manage, and comment on complaints.
- Facilitate clear communication and quick resolution of issues raised by students.
- Provide features like sorting and filtering complaints by department, batch, date, and status.

3. Key Features

For Students:

1. **Student Account Login:** Students must log in using their university credentials, ensuring only verified students can submit complaints.
2. **Submit Complaints:** Students can file complaints by providing necessary details such as the nature of the issue, department, and additional comments.
3. **Track Complaint Status:** Students can view the status of their complaints (e.g., Completed, In Progress, Due) in real-time.
4. **View Complaint History:** Students can see a complete list of all complaints they've submitted, along with their submission dates and any admin responses.
5. **Edit Personal Information:** Students can update their personal information, such as department and contact details, ensuring their profile is always up-to-date.

For Admins:

1. **View All Complaints:** Admins can view a comprehensive list of all student complaints submitted through the system.

2. **Filter and Sort Complaints:** Admins can filter and sort complaints based on department, batch, status (Completed, In Progress, Due), and date to prioritize effectively.
3. **Update Complaint Status:** Admins can change the status of complaints, marking them as Completed, In Progress, or Due, and notify students accordingly.
4. **Comment on Complaints:** Admins can add comments to complaints to provide students with updates, additional instructions, or feedback on how the issue is being resolved.
5. **Assign Complaints to Departments or Admins:** Admins can delegate or assign complaints to specific departments or staff members for further action, ensuring faster resolutions.

4. Technology Stack

Frontend:

- **React.js:** To create an interactive, responsive user interface for both students and admins.
- **Material-UI (MUI):** For designing a modern and user-friendly interface.

Backend:

- **Node.js and Express.js:** To handle server-side logic and API routes.
- **MySQL:** To store and manage student data, complaints, and admin records.

Authentication:

- **OAuth:** To securely authenticate students using their university accounts.

9. Conclusion

Complain NSTU will provide an efficient and user-friendly platform for students to voice their concerns and track their complaints while allowing the university administration to manage and resolve complaints in a streamlined way. The proposed tech stack and architecture ensure scalability, security, and ease of use for all users.