ANDROID BASED STUDENT GRIEVANCE HANDLING SYSTEM

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Abstract – In this project "Android Based Grievance Handling System" is an android application, in which maintenance of details of grievances received, action taken and status of the grievances. Users with access to the Web can enter their grievances and find out the status of its processing. Each grievance will be assigned a unique id for reference. The primary purpose of Android application is to develop and maintain a community information network, which provides open and free access to information for the students. The hallmark of this community information network is the ability of the general public to obtain information that may not have been previously, or easily, accessible to them.

*Keywords***:** Grievance management, Complaint Response, Complaint Status, Raise Complaint, Compliance monitoring

I. INTRODUCTION

The purpose of this application is to respond to public inquiries. This application will be used by people to complain about their problems in their local areas. Problems like EB-related problems, garbage problems, water-related problems, etc. This will be taken to the municipal corporations, which will see the problem and resolve it. This app will have two panels. The first one is a user panel, while the second is a government panel. User panel: In this panel, the user or general public will voice their grievances about issues in their neighborhood. A login and signup screen will be included. A dashboard will appear after that. In the dashboard, the users may view their complaints and the status of each. The user has the option to expand their complaints and use photographs to further describe their issues.

In the existing manual system, educational institutions face challenges such as extensive project usage, time-consuming communication processes, difficulty in tracking and retrieving data, and duplication of work. There is a need for an integrated automated system to streamline grievance handling processes, improve efficiency, reduce paperwork, and provide timely updates to students regarding the status of their grievances. In this project, we develop an Android application specifically tailored for educational institutes. The primary focus of the Grievance Handling Module is to efficiently manage various types of grievances received from students and faculty members. The key activities include: Receiving Grievances, Speedy Processing, Updating Grievance Status, Generating Reports.

II. LITERATURE SURVEY

1) Using a chatbot to take complaints

A chatbot is computer software that interacts with people via voice chat, messaging apps, or chat windows.   To manage CRM and customer service, many firms now employ chatbots. A chatbot can be used, for instance, to solve customer problems, provide news or promotions, and provide recommendations or advise.   According to studies, over 50% of customers expect a

business to remain open 24/7, and 65% of consumers prefer to use a messaging app to contact a business. A chatbot is also the most effective technique to handle customer demands. Rule-based chatbots and AI (artificial intelligence) chatbots are the two primary categories of chatbot. A rule-based chatbot is created to respond to queries in accordance with predefined rules. They may be created quite quickly, are simple to use, and are inexpensive. AI chatbot are intelligent chatbots that combine natural language processing and deep learning techniques (NLP) [3]. A chat bot's ability to comprehend human language and context is aided by NLP.

2) Using machine learning to classify information as compliant

In order to transmit a complaint to the appropriate department, the organization must automatically classify complaints due to the volume of complaints it receives. Hence, time and labor savings are among the advantages.   One method for automatically categorizing documents into predetermined classes or categories based on their text is text classification.   Several algorithms, including rule-based and decision-tree algorithms, can be used. A system or computer may learn and develop depending

on its experiences and knowledge by using a variety of machine learning techniques. Supervised learning and unsupervised learning are the two categories of machine-learning algorithms. Using the labeled training set, supervised learning teaches students to make predictions about the future. For instance, when a person delivers accurate information and a result, the computer will pick this up and use an algorithm to map the two.   The computer can therefore anticipate the outcome given any information. Support vector machines, naive Bayes, and gradient boosting   are   examples algorithms. Unsupervised learning, on the other hand, entails learning without the use of predefined classes or labeled data sets. As a result, the computer will do.

III. EXISTING SYSTEM

Colleges or educational institutions handle various day-to-day activities similar to any system. However, the existing manual system incurs significant costs and time in communicating information across different departments. Hence, there is a pressing need for an integrated automated system

Disadvantages

- High Costs
- Data Integrity Risks
- Difficulty in Analysis

- Risk of Misplacement or Loss

IV. PROPOSED SYSTEM

In this project, we develop an Android application specifically tailored for educational institutes. The primary focus of the Grievance Handling Module is to efficiently manage various types of grievances received from students and faculty members. The   key   activities   include: Receiving Grievances, Speedy Processing, Updating Grievance Status, Generating Reports.

Objectives of the Proposed System

- Solving Complaints
- Enhanced Communication
- Continuous Improvement

Advantages of Proposed System

- Healthy communication regarding complaints between institutes and students
- Paper work is drastically reduced
- Duplication of work avoided
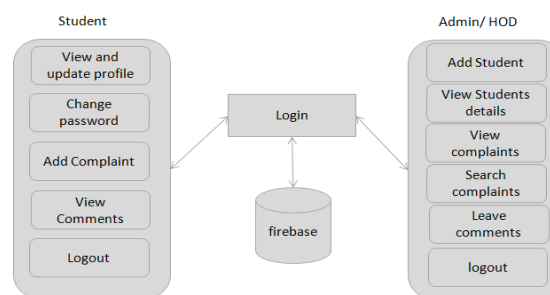
System Architecture

Fig. 1: Proposed Architecture

Implementation Modules

- **Admin**

- In this module, admin login to the system. After successful login he various operations like add student details, view student details, view complaints, add comments. In this module we add filters to efficiently manage the complaints.

- **Student**

- In this module, student login to the system. After successful login he performs various operations like, update student details, view profile, and add complaints, view comments and change password.

- **Complaint Module**

- In this module, the complaints are add to system related categories like faculty and college. We manage the complaints in admin module related categories like visited and unvisited.

- **Firebase**

- In this module, we implementing realtime database such as firebase in which we store and manage the datain JSON structure. Firebase provides android application development support.

V. RESULTS

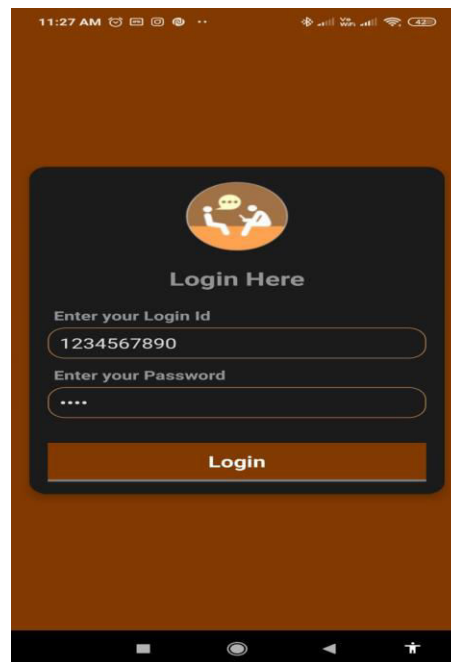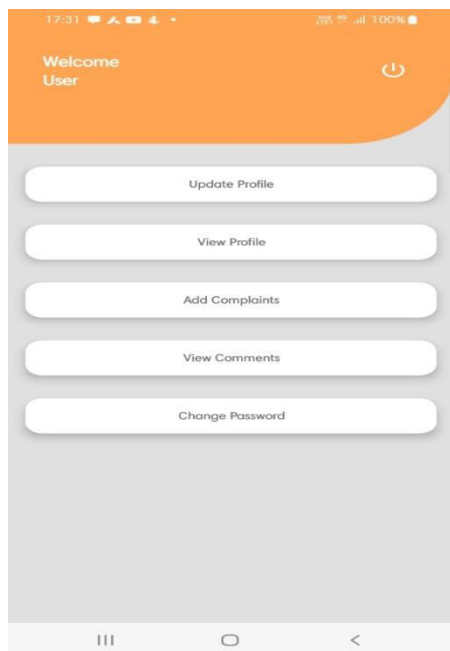Fig. 2: Splash Screen

Fig. 3: Login Page

Fig. 4: Student Menu Page

Fig. 5: View Complaints Details

VI. CONCLUSION

In this project, we develop an android based application to handling the student grievances in colleges. Users with access to the Web can enter their grievances and find out the status of its processing. Each grievance will be assigned a unique id for reference. The primary purpose of Android application is to develop and maintain a community information network, which provides open and free access to information for the students. The hallmark of this community information network is the ability of the general public to obtain information that may not have been previously, or easily, accessible to them.

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