**ANDROID-BASED COLLEGE NOTICE BOARD WITH AI-POWERED CHATBOT**

**Synopsis:**

The Android-Based College Notice Board is an innovative application designed to streamline and enhance the dissemination of college-level notices and information within the college campus. The app utilizes a tab-based view to present various categories of notices, targeting students and staff members. The main modules of the system include the Admin, Head of Department (HOD), and Notice Board. Additionally, the app incorporates an AI-powered chat bot service that allows users to query the system for real-time assistance and information.

**Main Modules:**

**Admin:**

The Admin module serves as the central authority with privileged access to manage and publish college-level notices. Administrators can use a web-based interface to upload and categorize notices, ensuring seamless communication with the entire college community. The Admin can assign specific rights and roles to HODs and Notice Board moderators, maintaining a well-organized and efficient notice distribution system.

**Head of Department (HOD):**

HODs have a crucial role in the system as they can publish notices relevant to their respective departments. Through the app, HODs can update and notify students and staff members about department-specific events, academic schedules, and other essential information. This decentralization of notice management improves accuracy and relevance in communication.

Notice Board:

The Notice Board module acts as the primary user interface, offering a tab-based view for easy navigation. The tabs represent various categories such as General Notices, Academics, Events, Placements, and more. Users can access and view notices relevant to their interests, ensuring they receive timely updates and important announcements.

AI-Powered Chatbot:

The app is enhanced with an AI-powered chatbot that utilizes Natural Language Processing (NLP) and Machine Learning algorithms to interpret and answer user queries effectively. Users can interact with the chatbot by asking questions related to college policies, events, schedules, and other relevant topics. The chatbot provides intelligent and instant responses, reducing the need for manual assistance and improving user satisfaction.

**Functionality:**

Notice Publishing: The Admin module enables administrators to upload, edit, and publish notices to specific categories, ensuring targeted distribution to the relevant user groups.

HOD-Specific Notices: HODs can directly publish and update notices related to their respective departments, improving the efficiency of department-level communication.

Tab-Based View: The Notice Board module presents various notice categories through a tab-based view, allowing users to easily access and view notices of interest.

Chatbot Interaction: Users can interact with the AI-powered chatbot through natural language queries, receiving accurate and contextually relevant responses.

Real-Time Updates: The app provides real-time updates on new notices, ensuring users are promptly informed about the latest college-related information.

The Android-Based College Notice Board with AI-Powered Chatbot promotes efficient notice dissemination, reduces communication gaps, and enhances user engagement within the college campus. The app's intelligent chat bot feature improves accessibility to information, enabling users to receive instant assistance and answers to their queries.

**REQUIREMENTS**

**HARDWARE AND SOFTWARE REQUIREMENT**

This specifies the hardware and the support software required to

carry out the development.

**SOFTWARER EQUIREMENTS:**

One of the most difficult task is selecting software for the system, once

the system requirements is found out then we have to determine

whether a particular software package fits for those system requirement.

Operating System : Microsoft windows 7 or Above

Frond End : Python, JavaScript, HTML, CSS

Back End : MySQL Server

IDE :JetBrains PyCharm / VSCode Android Studio

**HARDWARE COMPONENTS:**

The selection of hardware is very important in the existence and proper

working of any software.Then selection hardware,the size and capacity requirements are also important

Processor : i3 Processor/Above

RAM : 8 GB or Above

HARD DISK : 40 GB or Above