

College Knowledge – A Networking Portal

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Abstract

A networking site called College Knowledge is devoted to creating communities within college to strengthen networks. We all had to stay at home because of circumstances like COVID, so we only knew the people in our classes. If we had been offline, we would have had a much larger network. Although our placement officer informs us about the options, the purpose of the portal is to inform the students about the opportunities that are accessible at the appropriate moment. However, occasionally students learn more information that they can share with their peers on this website. Additionally, when encouraged by their other students who have already done it, pupils are more likely to apply and offer their best effort. The portal's primary goal is to facilitate communication. The article goes into detail about the portal's implementation and functionalities. The portal's primary features include the ability for students to blog about their interview experiences, the ability for anyone to submit links in case they learn of any off-campus placements, and the ability for staff to utilise the website to post any course-related materials. Together, these factors facilitate communication among the pupils. Additionally, clubs can utilise this website as a platform for promoting their activities and making any necessary notifications.

Keywords: Web Application, Organization, Access control/Authority, College networking

1 Introduction

There are various apps available now that can be utilized to connect with one another and expand one's network, including StackOverflow, Geeks for Geeks, and LinkedIn.

Students and working professionals use these apps to have their questions answered, learn about job opportunities, and build a larger community. A closed organization may use the networking site known as College Knowledge. Through the portal, college students can blog and exchange content. Students do not need to follow one another in order to see what others publish. Club presidents can also submit information about current events and forthcoming college activities. The primary goal of this website is to encourage students to take advantage of off-campus placement options; however, for this to happen, they must be aware of the opportunity and submit an application in a timely manner. Students can also share their interview experiences in the blogs, giving other students some advice on how to do better.

2 Literature Survey

There are websites that help us to give share technical content with each other and answer each other's doubts. The websites which we consider are listed below:

GeeksforGeeks – It is a one-stop destination for programmers. It is a global website used by programmers in which articles and content about technical topics are shared by people all over the world.

[1] StackOverflow – It is a community-based space to find and contribute answers to technical challenges.

LinkedIn – It is the world's largest professional network on the internet to connect with the people you know and be updated about what is happening with their careers.

3 Proposed System

It is an open platform within a closed organization where students can communicate with each other. It is a platform where we get answers to technical questions from our faculty and students. This is a platform that will be exclusively used by the students of our college.

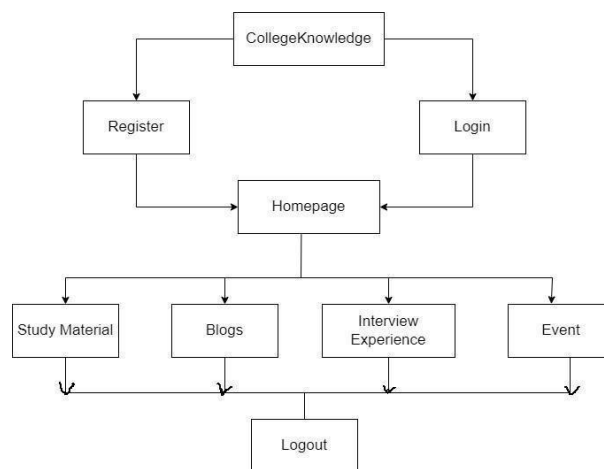


Figure 1:Proposed System of College Knowledge

4 Results and Discussion

4.1. Environmental setup

[2] React.js is utilized as the frontend system to fabricate a quick, responsive, and dynamic UI that can connect with the backend. Additionally, we make use of [3] React Router, a standard library for routing react. In a React application, it is used to move between the views of various components. [4] This application allows users to post blogs and interview experiences. The backend is constructed utilizing [5] Node.js and [6] Express.js, which is a strong mix for making server-side web applications. We have used [7] MongoDB, a well-known NoSQL database, to store the data in a database. The website's smooth operation is due to the integration of the front end and backend. The front end sends the data to the backend, where it is processed, validated, and stored in the database when a user submits a blog post or interview experience. At the point when a client solicitation to see a post, the backend recovers the pertinent information from the data set and sends it back to the front end, where it is shown. React.js, MongoDB, Node.js, and Express.js all work together to create a robust and scalable architecture for a website where users can post blogs and experiences from interviews. A user-friendly, fast, secure, and responsive experience is made possible by the seamless integration of the front end and backend.

Interesting features like, comment and save have also been introduced using some simple algorithms. The most liked posts are shown under the Trending posts block and the most viewed posts are shown under the Popular posts block. Access control has been introduced to protect the data. Admin has access to all the data and information. Students can only write blogs and interview experiences, some students who are the presidents of clubs have some special access rights and can also post about events and happenings in the college, and students can also comment on a post. When a post is reported more than five times the Admin receives an email showing an alert message that there has been some unusual activity, the Admin can take action to either delete the post, warn the user or deactivate the user's account. Faculty has all access rights as a Student and some special access to upload study materials also.

4.2. Results



Figure 4: The home page of the portal: the navigation bar helps to switch between different sections of the portal. We have login/register options on the top right. We have a search bar in the home page which allows us to search by keywords for the content we are looking for.

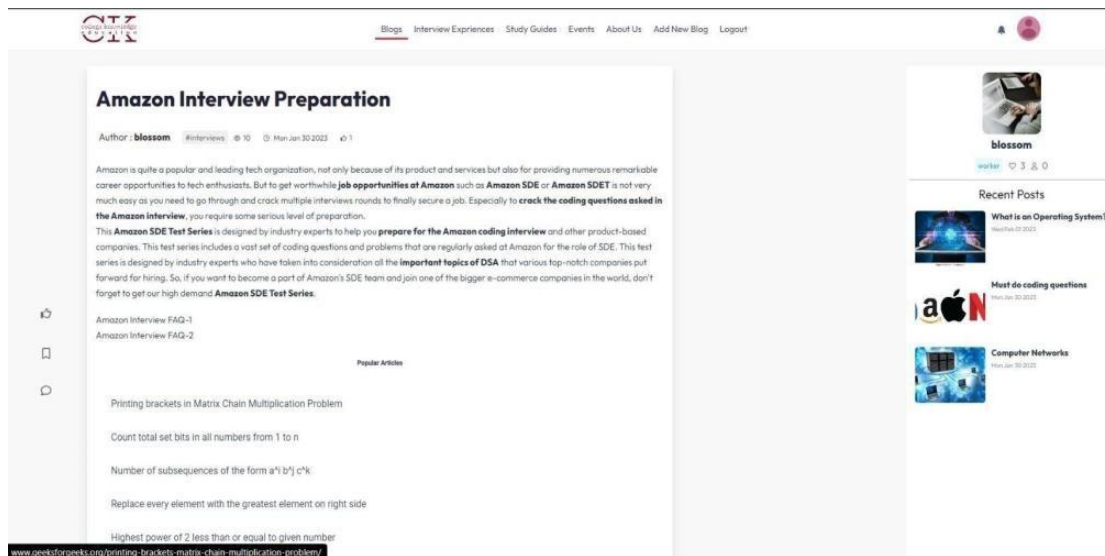


Figure 5: Detailed view of the blog: When we click on a blog and open it, we can view the blog completely, author name, number of likes and views. To the left most side we have options to Like, save and comment.

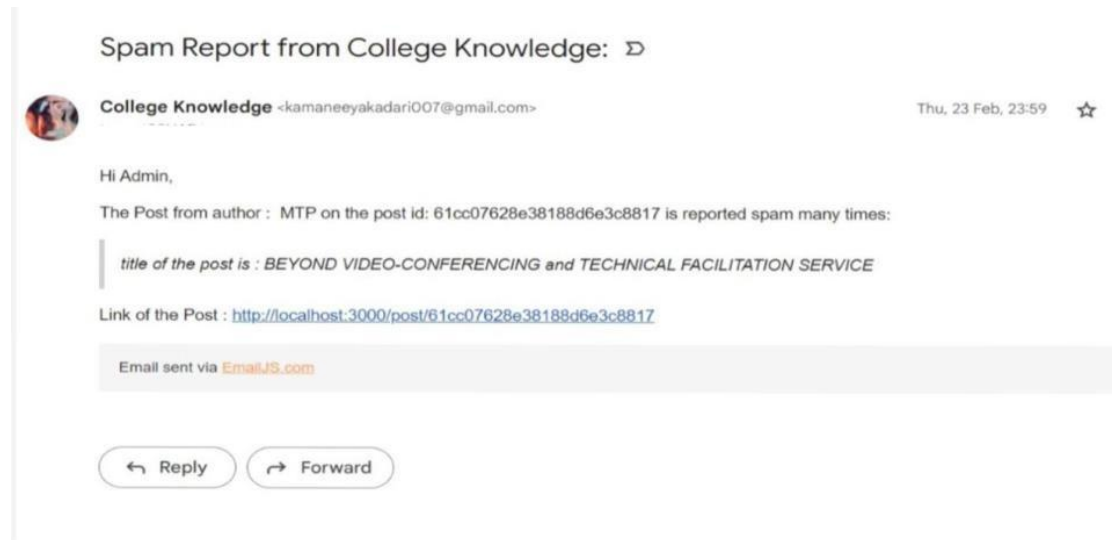


Figure 6:Report page of College Knowledge:This is a screenshot of the email which the Admin would receive when a post is reported more than 5 times by different users

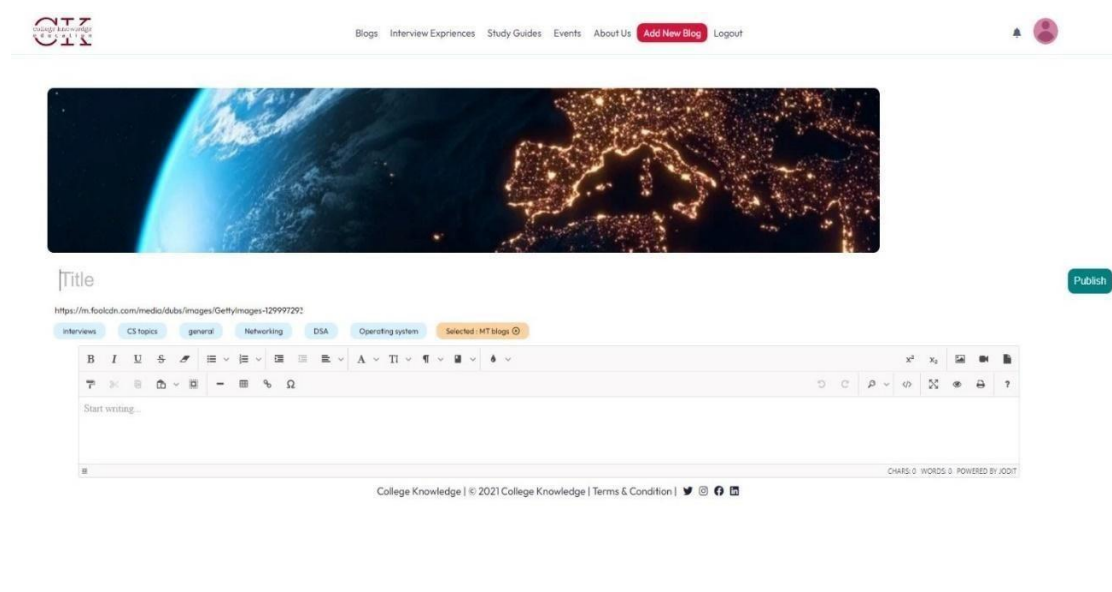


Figure 7:the figure shows the add blog page of the website, where the user can choose their appropriate filter and make their post.

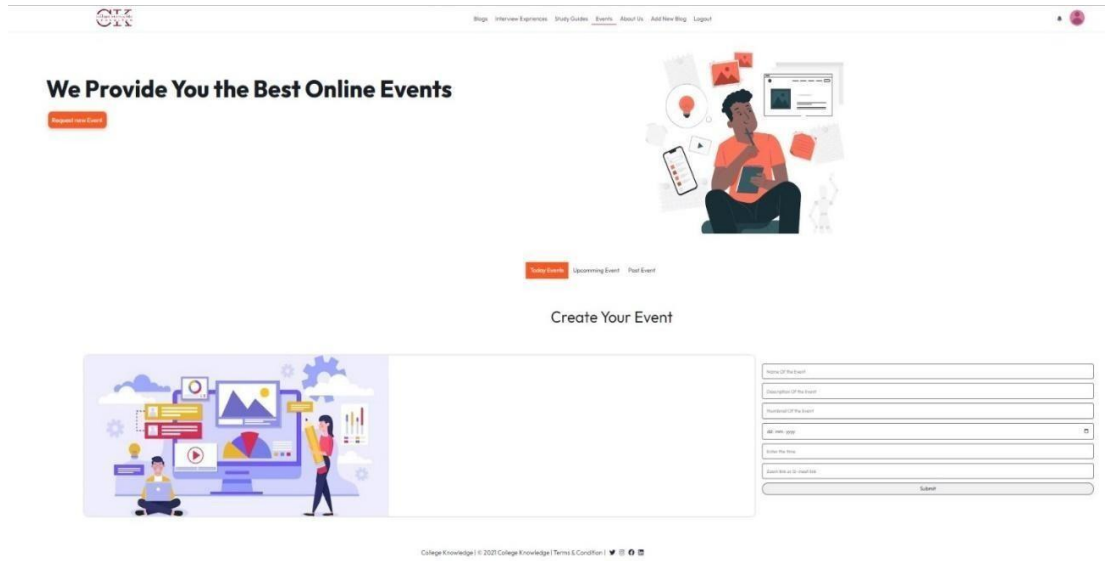


Figure 8:Events tab of the website, students with special access can create new events, while others can view it

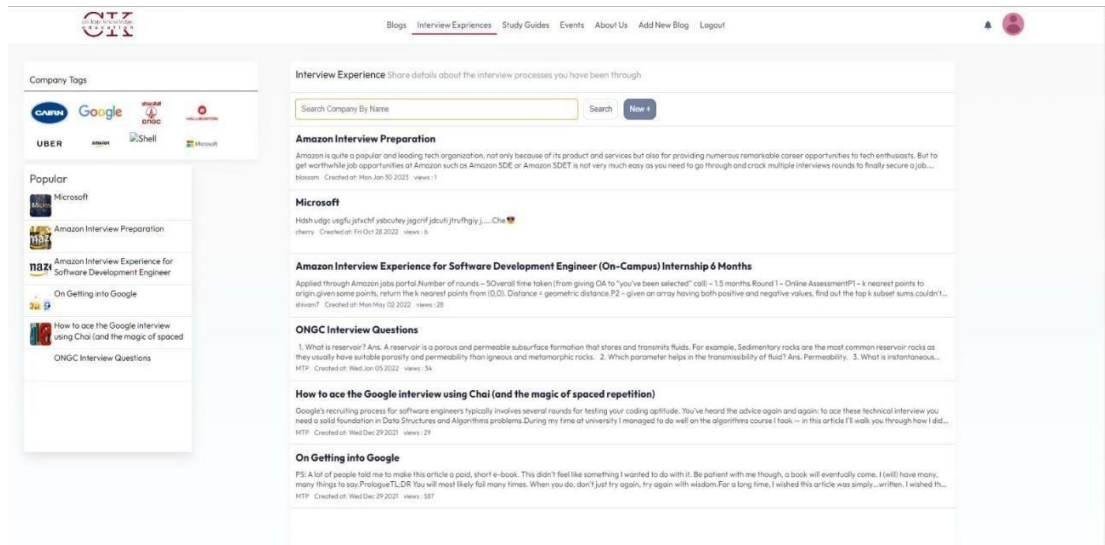


Figure 9:Interviews Experience tab in the website, this tab has all the interview experiences uploaded by all the users, we can also search for interview experiences by Company name

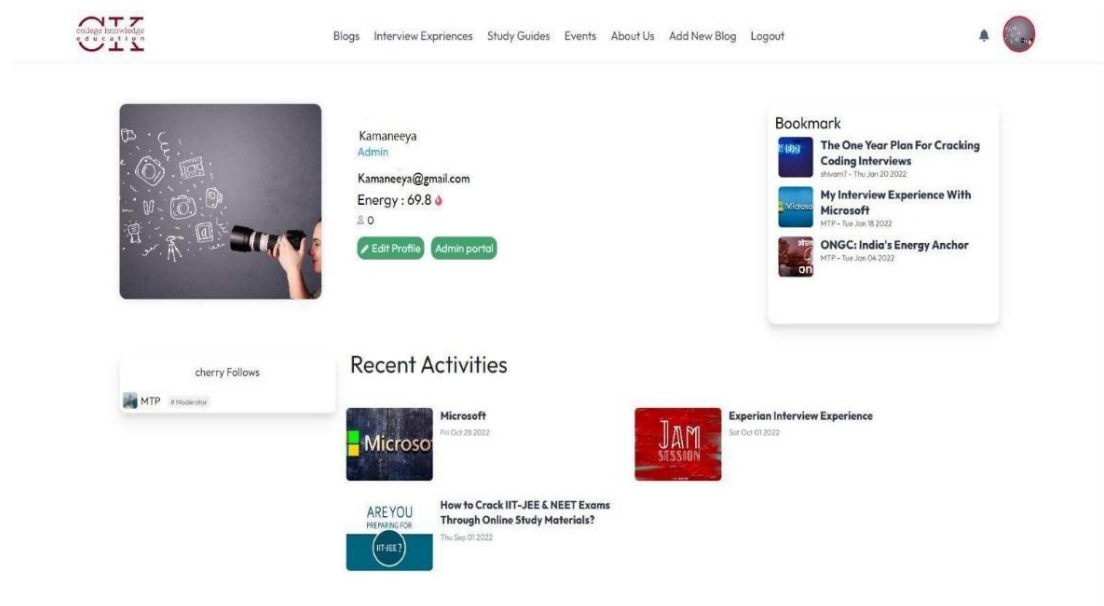


Figure 10:User profile page, the current user is a student. It shows the user details like email id, username and energy and the posts saved by the user.

4.3. Discussion

The article discusses College Knowledge, a gateway for colleges that helps to strengthen their internal network. This website is comparable to many others that already exist, but it also offers some unique features. The answers provided by scholars and technical experts on the well-known website Stack Overflow, which is used to answer technical queries, are frequently difficult for students to understand because they are new to the field and have a limited grasp of the subject matter. Students can submit questions using this site, and their peers and college instructors will respond. Another website that solely provides content through searches is geeksforgeeks.com, where trending posts and popular posts are shown while taking into account the most liked and most watched posts. While this portal is solely for students and faculty members within a college to communicate with one another, LinkedIn is a social media platform used by seasoned and business professionals that would be challenging for novice users.

5 Conclusion & Future Scope

The application is user-friendly and is used to improve the network within the organization and be updated with all the opportunities around. The application is built with basic functionalities fulfilling the required objectives. The application is validated and the users are provided with minimum security. The application is built such that it is user-friendly for naïve users also. The application has features like, save and comment options. Trending posts and Popular posts are displayed on the main page depending on the highest number of likes and views respectively. Proper access control

is provided to different stakeholders depending on their designation in the organization. Overall, the application is suitable for an organization to improve the network between the members of the organization. However, the scope of the application can be further extended by improving the security and privacy of the application. Future scope by improving the privacy of user data and security of the data can be increased by making servers handling database access more secure. All creating multiple levels of database access so that any error created while running the website should not get affected. The application can also be made portable and can be made accessible on any type of device with any software – Android/iOS. The application is currently running on a single server; this can be extended to multiple server applications.

6 References

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