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Integrated platform of institutional data using university hub

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Abstract

'University Hub' is an integrated platform that provides information about courses offered by Indian universities. There are over 1000 universities in India offering thousands of undergraduate, postgraduate and doctoral programs. Students applying to these universities have to make a lot of comparisons to choose a university/degree based on various criteria. Indian University Information Bank provides access to course details, comparison of courses, facilities and faculty, admissions, student mobility tracking, viewing results, assessment and accreditation, certificate verification, and online collaboration Required for courses (MOOC). It helps communities of both students and faculty to improve themselves through comparison and emulation. Lack of information leads to selfaggregation and inbreeding among college students and university students and faculty. Universities in India offer different degree programs in different majors, so students need to compare these degree programs based on different parameters. The course range includes Bachelor's, Master's and PhD courses. Consolidating these details into a single platform increases transparency and eliminates problems faced by students due to lack of information.

Keywords: MOOC, University Hub, PhD, certificate, Master's, courses, majors

1. Introduction

Deciding the right college and course is one of the most difficult decisions in students life. You have to search from the huge number of options available and make a lot of comparisons based on different criteria. The first thing to consider when choosing a course is your interest. Then think about colleges that offer graduate or postgraduate degrees. However, there are over 1000 universities in India offering thousands of undergraduate, postgraduate, and doctoral programs. It would be a tedious task to visit them individually and compare them with others. It's also possible that after doing a lot of research, you still not able to find the right college. Lack of information leads to self-aggregation and inbreeding among students and faculty. „University Hub“ is an integrated platform that solves these problems up to some extent by helping students and faculty to choose best college from the available options. Anyone can use this website all you have to do is to write the college name in search bar and all information related to it like its location, fee structures, the courses offered etc. will display on your screen. It's a sort of university bank where you can get details about any Indian university and colleges ^[1-3].

To design this platform we have used React, JSX and CSS.

1. React (also known as React.js or ReactJS) is a free and open-source front-end library for building user interfaces based on UI components. React can be used as a base in the development of singlepage, mobile, or server-rendered applications with frameworks like Next.js. However, React is only concerned with state management and rendering that state to the DOM, so creating React applications usually requires the use of additional libraries for routing, as well as certain clientside functionality. This is basically used for creating API calls. it helps in creating virtual DOM where it does all the necessary manipulating, before making the changes in the browser DOM ^[4-5].

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2. JSX React embraces the fact that rendering logic is inherently coupled with other UI logic: how events are handled, how the state changes over time, and how the data is prepared.
3. Instead of artificially separating *technologies* by putting mark-up and logic in separate files, React separate concerns with loosely coupled units called “components” that contain both [6-7].
4. CSS (Cascading Style Sheets), fondly referred to as CSS, is a simple design language intended to simplify the process of making web pages presentable. CSS style definitions are saved in external CSS files so it is possible to change the entire website by changing just one file. It provides more detailed attributes than plain HTML to define the look and feel of the website [8-9].
5. API (Application Programming Interface) APIs let your product or service communicate with other products and services without having to know how they’re implemented. This can simplify app development, saving time and money. When you’re designing new tools and products-or managing existing ones-APIs give you flexibility; simplify design, administration, and use; and provide opportunities for innovation.

Literature review

A literature review is a description of what work has already been done by other researchers related to the present topic. It is conducted using published books, journals and other research papers and is a baseline for present research. The following are the purpose of a literature review:

- To perform critical evaluation of already conducted research to find out their ideas, strength, weakness, and their methodologies.

- To have an overview of already existing suggestions related to the subject, review the findings and views of others.
- To answer certain questions and remove confusions related to the present topic.

The idea for the development of system strikes the developer while the problems faced by the students applying for the Indian Universities, as there are large number of colleges with the variety of courses in Engineering, Management, Research etc. Students need to visit the colleges physically or through different websites, they have to do a lot of comparison for choosing the university/course on the basis of various criteria. Lack of information is leading to self-glorification and inbreeding among University and College student and faculty members. As the universities in India provide various courses on different disciplines and the students have to compare these courses on the basis of various parameters. The courses range from Bachelor, Masters, and Ph.D. courses. Thus, the idea strike in the mind of the developer to develop an online integrated platform for more than 1000 universities in India with their offerings of thousands of courses for under-graduate, post-graduate, and doctorate degree. This idea provides solutions to the problems faced by the users. This will help both student and faculty communities for self-improvement through comparison and emulations.

As we know everything is available to users at their doorstep so why not the colleges information should be, so an online platform strike the mind of developer for the students which provides them 24/7 access at any place and at any time [10-12].



Fig 1: Website Framework

Website framework

A group of resources and tools that are available to software and web developers are referred to as web development or web application frameworks. These frameworks enable web developers to create and maintain websites, web services, and web applications.

The literature review lays framework for future study by providing an overview of the planned system. The systems that are like to planned system have been examined to provide a baseline to application and what features are difficult to implement and what challenges might be encountered by the developer.

During the examination of the literature, domain, technical, and academic research were conducted to gain a thorough understanding of the characteristics to be incorporated in the

planned system and to investigate the technology used for implementation. As a result, secondary research is carried out as part of a literature review by reviewing other people's work in order to aid the developer in constructing the suggested system.

The proposed system would provide users with important features like remote database backup, push notifications, payment options, online delivery, and many more. The developer must succeed all of the highlight discovered during the literature study; secondary research that must be executed to carry an efficient structure to the end-user.

Result

This is how the front page of our website looks like, On the top you can see various options like colleges, courses,

exams etc. Also there is a search bar where you can type in the college name or course you are looking for. This Websites provides different activities, lectures, or subject specific information that serve as tools to improve learning

and enhance in-person instruction might be considered educational portals. In today's digital age, this website assist in making studying enjoyable and appealing for the learner.



Fig 2: Result Section

Various steps involved in the implementation of the project are-

- First of all you have to click on signup button to create an account if you are a new user.

Fill up the signup details like name, email id, phone number, current city and create a password.

If you already have an account then you are good to go fill up the login details and click on login.



Fig 3: Sign Up page

As you scroll down you can select your study goal like Engineering, Management, arts, and Medical and so on....

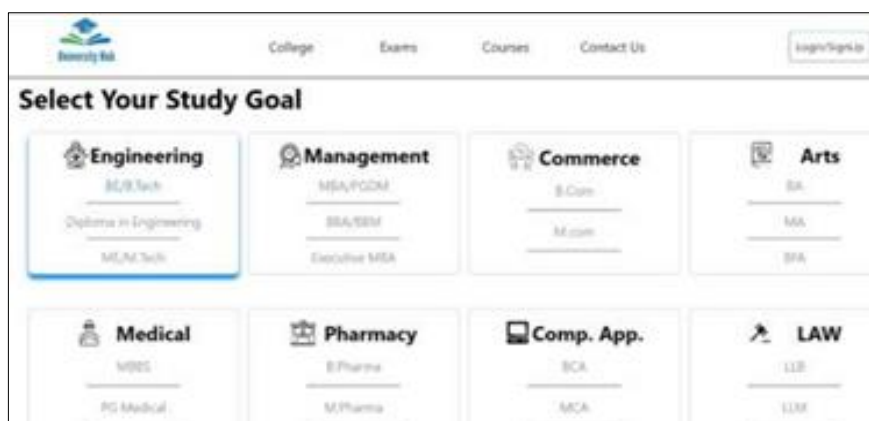


Fig 4: Engineering Section

In the bottom various options related to college ranking are available including the NRF, India today and Business today.

Also you can check out the latest exams like Jee Mains, Jee advanced, CAT, GMAT, NEET etc. If you have any sort of query feel free to reach out to us:

For admission related details mail us on nancyportworks@gmail.com

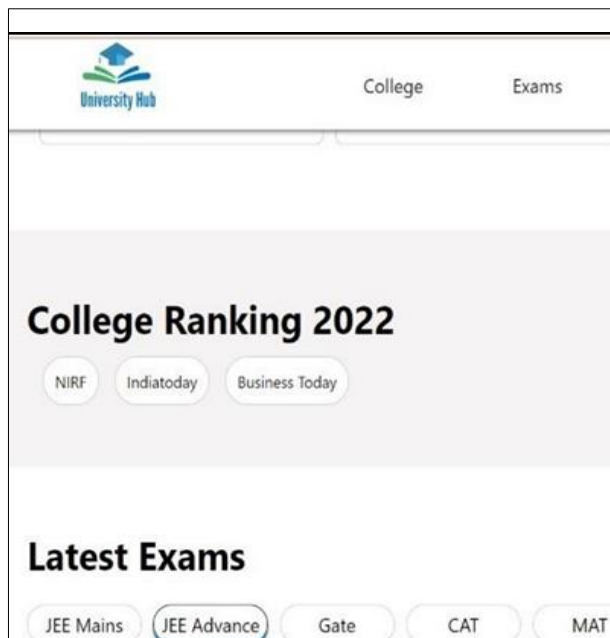


Fig 5: Exam Section

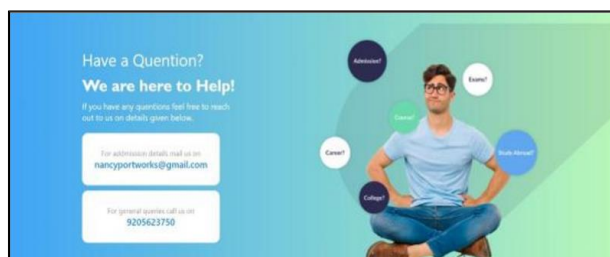


Fig 6: Query Section

Conclusion

The developer has recognized all of the issues faced by users. The troubles are documented together with the justification for every hassle. After all the issues are recognized, the developer's subsequent project turned into to offer suitable answers to clear up the issues. For the identical purpose, the answer similar to every hassle has been documented together with the justification. A feasibility is carried out for the system to make sure that the proposed system is operationally, technically, economically feasible and must be finished within a specific time frame. The feasibility observation is successful, creating an additional direction for the developer to transport beforehand with the project. Using interactive learning methods like lectures, audios, and other content, it is made easier to gain a thorough comprehension of the subject.

The convenience of learning anywhere, anytime is economical because several educational materials are available for free and with updated contents.

References

1. Hu Hongxin, Cui Ming, "Development Scheme of Mobile Campus Information Integration Platform Based on Android
2. Michael Schulze, CAMPUS NEWS - Artificial Intelligence Methods Combined for an Intelligent Information Network, University of Koblenz
3. Application Fundamentals, <http://developer.android.com/guide/topics/fundamentals.html>
4. Garg Twinkle, Rajender Kumar, Jagtar Singh. A way to cloud computing basic to multitenant environment. International Journal of Advanced Research in Computer and Communication Engineering. 2013;2(6):2394-2399.
5. Kumar, Rajender, Jitender Vats, and Arvind Kumar. "A comparative study of routing protocols." vol 2 (2011): 19621964.
6. Kumar R, Khanna R, Kumar S. An effective framework for security and performance in Intelligent Vehicular adhoc network. Journal of Advanced Research in Dynamical and Control System. 2018;10(14):1504-1507.
7. Kumar Rajender, Ravinder Khanna, Surender Kumar. Technological Transformation of Middleware and Heuristic Approaches for Intelligent Transport System. Autonomous Vehicles Using Machine Intelligence. 2022;1:61-82.
8. Kumar R, Soni P, Aggarwal A, Kumar M, Mishra N. Decision Analytics for Sustainable Development in smart society 5.0 using swasthya sahayak application, Springer, Singapore; c2022. p. 131-152.
9. Stefanov Stoyan. Editor. React: Up and Running: Building web Applications. First Edition
10. Stein Johannes, author. ReactJS Cookbook.
11. Masiello Eric, author. Mastering React Native
12. A JavaScript Library for Building User Interfaces