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Web Based Academic Explorer System

M.Harini, P.Keerthana, V.Nivasri, Mrs.S.Shajathi begam

UG Student, Dept. of CSBS., E.G.S Pillay Engineering College, Nagapattinam, TamilNadu, India

UG Student, Dept. of CSBS., E.G.S Pillay Engineering College, Nagapattinam, TamilNadu, India

UG Student, Dept. of CSBS., E.G.S Pillay Engineering College, Nagapattinam, TamilNadu, India

Assistant Professor, Dept. of CSBS., E.G.S Pillay Engineering College, Nagapattinam, TamilNadu, India

ABSTRACT: The Web-Based Academic Explorer System is designed to assist students in making informed decisions about their university majors. It aims to streamline academic information by providing details on colleges, courses, fees, and scholarships. Innovative features like location tracking enhance user experience. The system offers a user-friendly interface for students, educators, and researchers, facilitating easy access to valuable academic resources. It can be adapted by universities with existing academic information systems. The ultimate goal is to minimize failures resulting from students' mistakes in selecting majors. The system includes solutions to aid students in finding the best colleges and avoiding common pitfalls. By leveraging technology, it aims to improve educational outcomes and productivity. Its comprehensive approach addresses various aspects of the decision-making process. Users can access detailed information to make well-informed choices. The system is a valuable tool for prospective students navigating the complexities of higher education. It seeks to alleviate the challenges associated with selecting a university major. Through careful design and implementation, it aims to empower students in their academic journey. The system's features are tailored to meet the needs of diverse users. It serves as a centralized platform for accessing critical academic information. Its incorporation of location tracking adds a unique dimension to the user experience. Overall, the system is poised to revolutionize how students engage with academic resources. Its adaptability makes it suitable for integration into existing university systems. By providing comprehensive support, it aims to improve students' educational outcomes and minimize study major selection mistakes.

KEYWORDS: College website, academic explorer system, College finder,Web application, College finder, major determination.

I.INTRODUCTION

Education encompasses our lives. It is the foundation of our society. Education helps to stimulate our minds and mold inquisitive minds into intellectuals. Higher learningtakes the intellect to the next level,providing a deeper understanding of the world around us.Initially it was a toilsome process to find appropriate colleges in minimum span of time as we need to look out for all aspects/features of colleges like its courses offered,fees, cutoff's and general information about it. By leveraging advanced technologies, this platform seeks to enhance user experience and facilitate informed decision-making in the pursuit of higher education. We will use the concept of multi-tenant database system where in the system will provide multiple tenants to create, store, and access their over the internet. In this paper, we present the conceptualization, development, and features of the Web-Based Academic Explorer System, exploring its potential impact on the accessibility and relevance of academic information.

II. LITERATURE REVIEW

The literature review critically examines current academic systems, shedding light on the hurdles associated with accessing precise and timely information. It underscores the imperative of establishing a centralized platform to address the challenges of data dispersion. Drawing from the broader landscape of recommendation systems in education, the review identifies key insights that can be applied to enhance the efficiency of academic exploration. By delving into the existing literature, the review provides a foundation for understanding the complexities of the academic information ecosystem and advocates for the creation of a unified platform. Additionally, it highlights the significance of incorporating location-based features as a novel approach to further enrich the academic exploration process, acknowledging the potential benefits that arise from tailoring information basedon geographical context. In essence, the literature review not only

identifies the pitfalls of current academic systems but also proposes a comprehensive solution by emphasizing centralization and innovative features such as location-based customization.

III. BACKGROUND ANDRELATEDWORK

The main aim of our project is to develop the website which will be useful in college admission system. As this college management system project includes the admission process of student, starting from when the student takes admission in college in first year till that student completes his course and collect leaving certificate from the college.
The requirement of the student is to:
1. Login to the system through the first page of the website.
2. New student registration after logging into the system.
3. View/change his/her details.
4. Can get help through the help option to view different features of the system.

Admin login should be present who can read as well as remove any uploads.The student details in separate records are tedious task. Referring to all these records and updating is needed. Since the number of students are growing and management has to handle records of all of the students, it is facing the little bit problems inmaintaining the records of students.

IV.SOFTWARE TECHNOLOGY

Front-end Development: HTML5, CSS3, and JavaScript ensure a responsive and visually appealing interface.
Back-end Development: PHP for server-side scripting, MySQL as the database management system for robust data storage.
Location Tracking: Google Maps API integration enhances user experience with location-based information.

V.PROPOSED SYSTEM

To overcome the drawback of existing system we have developed new system, which is a web based system in which the student/parent can simply search or explore the colleges anonymously.

A) Proposed system with architecture
The architecture diagram visually illustrates the interplay of modules, showcasing the systematic flow of data and interactions. This ensures a clear understanding of how the proposed technologies are integrated to create an efficient academic exploration platform.
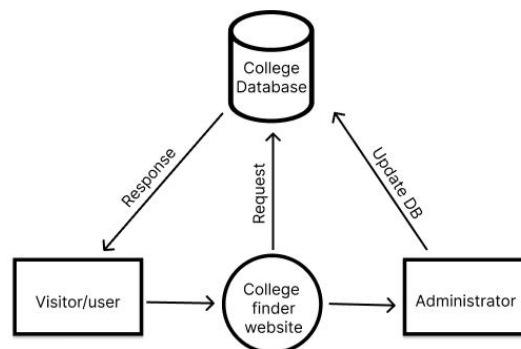

Fig.1.Architecture

The components of the system are as explained below:
College Database: The database is a repository for storing the college details as well as user details. The user related details can be updated through logging in their account.

College Finder Website: The Website acts as an interface between user and database and helps to display information to the user.

User: The user retrieves information from the database about college data and manage their account.

Administrator: The administrator updates the database as well as manage the users.

B) Operations of proposed system

The proposed system has following operations as explained below:

Searching
Searching of colleges is used to find an appropriate college quickly. This feature is used to give accurate search results. The user enters a keyword related to the college and the colleges satisfying that keywords are retrieved.

Filtering
Filtering of colleges is used to find colleges based on various properties. This feature is used to give relevant colleges satisfying one or all the properties. The user enters options that they require (like….Location, Degree offered).

Recommendation
It helps to recommend colleges to user based on the input data provided by the user after logging in their profile. The data of what user expects in the college is saved on the database and the colleges satisfying the data are retrieved.

Wish-List
It helps to add colleges to wish-list so that it is easier to review shortlisted colleges. The user has to login their profile in order to store the colleges to the wish-list.

VI.WORK FLOW

The workflow diagram starts from the homepage, directing users to the login page. Upon successful login, users are directed to different pages based on their roles: students, admin, or office. Each role-specific page contains relevant details and functionalities tailored to the respective user type, providing a streamlined and personalized experience within the system.
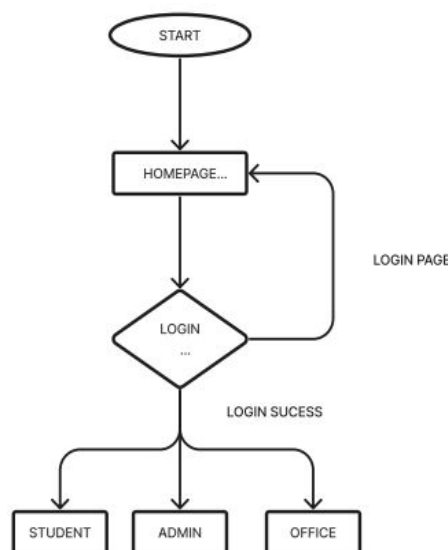

Fig.2.Work flow

VII. SYSTEM DESIGN

The system design for a student explorer website comprises two main databases: the student profile and educational details databases. The student profile database includes fields like name, contact info, and personal details, while the educational database stores information on courses, grades, and academic history.The design aims for a user-friendly, efficient, and secure student exploration experience.
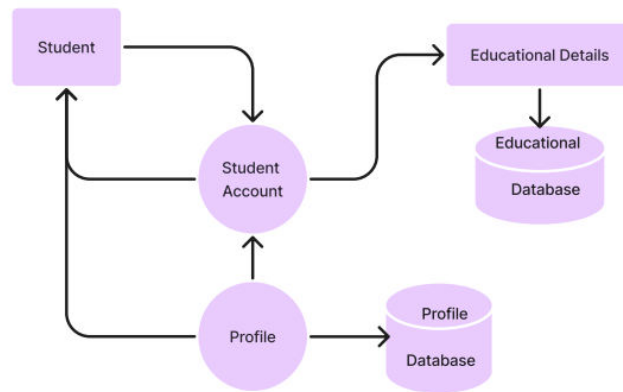

Fig.3.System design

VIII. FUTURE ENHANCEMENT

The system allows for upgrades and the integration of new features, enhancing its functionality over time. It supports the addition of new modules, expanding its capabilities to meet evolving needs. Security measures can be bolstered, ensuring the protection of sensitive data and guarding against potential threats. The system's flexibility enables seamless adaptation to changing security requirements. Additionally, it facilitates the incorporation of new information, keeping the system's knowledge base current and relevant. Users can expect continuous improvement and optimization through regular updates and enhancements. Its scalability accommodates growth and innovation, enabling it to remain effective in dynamic environments. The system prioritizes adaptability, enabling it to stay aligned with emerging trends and technologies. Its modular structure fosters agility, allowing for efficient adjustments and modifications as needed. Overall, the system is designed to evolve, ensuring its long-term viability and usefulness.

IX. CONCLUSION

The Web-Based Academic Explorer System represents a significant leap forward in redefining the academic exploration experience. By addressing the challenges posed by information overload and incorporating location-based features, this platform provides a holistic solution for users navigating the diverse educational landscape. As technology continues to evolve, the system remains flexible for future enhancements, positioning itself as a valuable resource for students, educators, and researchers seeking to make informed decisions in the pursuit of higher education.

REFERENCES

[1] M. Hasan, S. Ahmed, D. M. Abdullah and M. S. Rahman, "Graduate school recommender system: Assisting admission seekers to apply for graduate studies in appropriate graduate schools," 2016 5th International Conference on Informatics, Electronics and Vision (ICIEV), Dhaka, 2016, pp. 502-507.

[2] . S. G. Martinez, A. H. Lhadj, Educational Recommendation Systems: "A Pedagogical-Focused Perspective", Springer International Publishing, Vol.25 , pp. 113-124, 2018.

[3] M. H. Ansari, M. Moradi, O. NikRah and K. M. Kambakhsh, "CodERS: A hybrid recommender system for an E-learning system," 2016 2nd International Conference of Signal Processing and Intelligent Systems (ICSPIS), Tehran, 2016, pp. 1-5.

[4]   E. Soldatova, U. Bach, R. Vossen and S. Jeschke, "Creating an E-Learning recommender system supporting teachers of engineering disciplines," 2013 International Conference on Interactive Collaborative Learning (ICL), Kazan, 2013, pp. 811-815.

[5]   D. Rodriguez-Cerezo, M. Gomez-Albarr´n and J. Sierra, "Supporting Self-Regulated Learning in Technical Domains with Repositories of Learning Objects and Recommender Systems," 2011 IEEE 11th International Conference on Advanced Learning Technologies, Athens, GA, 2011, pp. 613-614.

[6]   X. Wan, Q. Jamaliding, F. Anma and T. Okamoto, "Applying Keyword Map Based Learner Profile to a Recommender System for Group Learning Support," 2010 Second International Workshop on Education Technology and Computer Science, Wuhan, 2010, pp. 3-6.

[7]   M. Hassan and M. Hamada, "Smart media-based context-aware recommender systems for learning: A conceptual framework," 2017 16th International Conference on Information Technology Based Higher Education and Training (ITHET), Ohrid, 2017, pp. 1-4.

[8]   H. Samin and T. Azim, "Knowledge Based Recommender System for Academia Using Machine Learning: A Case Study on Higher Education Landscape of Pakistan," in IEEE Access, vol. 7, pp. 67081-67093, 2019.

[9]   S. V. Aciar, G. I. Aciar, C. A. Collazos and C. S. González, "User Recommender System Based on Knowledge, Availability, and Reputation From Interactions in Forums," in IEEE Revista Iberoamericana de Tecnologias del Aprendizaje, vol. 11, no. 1, pp. 18-
22, Feb. 2016.

[10]   C. Romero, S. Ventura, P. G. Espejo, C. Hervs, "Data Mining Algorithms to Classify Students", 1st International Conference on Educational Data Mining (EDM'08), Montral, Canada, 8–17, 2008.

[11]   T. Saito and Y. Watanobe, "Learning Path Recommender System based on Recurrent Neural Network," 2018 9th International Conference on Awareness Science and Technology (iCAST), Fukuoka, 2018, pp. 324-329. M. H. Mohamed, M. H. Khafagy and M. H. Ibrahim, "Recommender Systems Challenges and Solutions Survey," 2019 International Conference on Innovative Trends in Computer Engineering (ITCE), Aswan, Egypt, 2019, pp. 149-155.

[12]   Aishwarya Nalawade, Bhavana Tiple, "The University Recommendation System for Higher Education",International Journal of Recent Technology and Engineering (IJRTE) ISSN: 2277-3878, Volume-8 Issue-6, March 2020

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