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Campus Career Development: A Web-Based Career Guidance Platform for Students

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ABSTRACT: The goal of the student-centered, web-based Campus Career Development portal is to close the knowledge gap between academic study and professional preparedness. Due to a lack of exposure to formal skill development and real-world recruitment methods, many students struggle to make the transition from school to employment. By offering a single location for peer-to-peer interview experiences, tailored skill recommendations, and goal-oriented activity monitoring, this solution tackles these problems. The platform, which was created with HTML, CSS, JavaScript, PHP, and MySQL, guarantees scalability, security, and responsiveness. Registration, profile management, tailored job recommendations, and real-time updates without page reloads are all available to users. By including community features like the recommendation system and interview experience sharing, students may work together to assist one another's development in a cooperative setting. The skill suggestion module ensures effective upskilling by matching user objectives with pertinent industry demands. Users may efficiently manage their learning and preparation processes with the help of the To-Do list feature. In addition to increasing confidence, this participatory method fosters accountability and professional knowledge. The platform, which is built to change constantly, has the ability to develop AI-based resumes, simulate mock interviews, and provide career path forecasting statistics in the future. The Campus Career Development webpage is a useful online tool for both students and academic institutions since it makes career development a guided and cooperative process.

KEYWORDS:

Career readiness, peer mentoring, skill recommendation, web application, student employability

I. INTRODUCTION

College students are under tremendous pressure to not only gain academic knowledge but also to develop industryrelevant skills and an understanding of recruiting dynamics due to the growing demands of the current labor market. Many students are ill-prepared for real-world job applications, interviews, and career planning, even with the availability of professional development workshops and institutional placement cells. The main causes of this discrepancy between academic education and career preparedness include inadequate support for ongoing upskilling, a lack of individualized assistance, and minimal exposure to real interview situations. The Campus professional Development platform was created as a comprehensive digital solution to address this problem and enable students to more successfully navigate their professional routes. Through registration, profile management, access to individualized skill recommendations, and peer-contributed interview experiences, the platform turns career preparation into an engaging, community-supported experience. With the use of web technologies like HTML, CSS, JavaScript, PHP, and MySQL, the system guarantees dynamic content updates, safe login, and scalability for wider implementation. In contrast to traditional job portals, this platform places a strong emphasis on real-time collaboration, allowing students to share and receive career-related recommendations while also promoting a culture of mutual learning and development. Task management features like goal monitoring and a To-Do list are included to help customers stay focused on their professional growth objectives. Additionally, the platform's real-time data retrieval and display capabilities without page reloads improve user experience by making the system dynamic and smooth.

In addition to assisting students in becoming ready for the workforce, the platform fosters a community of like-minded learners by promoting peer interaction and knowledge sharing. The program highlights the growing significance of incorporating technology into academic support services and is in line with the larger educational goal of holistic development. Through innovation, teamwork, and student empowerment, the Campus Career Development platform seeks to bridge the gap between education and industry demands by becoming an essential tool for institutions seeking

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to improve their students' employability.

II. EXPLORING EXISTING CAREER PLATFORMS AND STUDENT CHALLENGES

Professionals' approaches to career planning and job searching have been greatly impacted by career development platforms like Glassdoor and LinkedIn. Building professional profiles, interacting with possible employers, and having career-related conversations are all made possible via LinkedIn. By providing employer ratings, pay details, and interview experiences from past candidates, Glassdoor enhances this. These platforms frequently fail to meet the needs of students at local or regional academic institutions, despite being strong for seasoned professionals and job searchers in well-connected urban areas.

The absence of focused, student-specific features that address early career issues is a major drawback of most current solutions. Students frequently lack access to mentorship, real-world interview insights, and carefully selected skill development pathways, particularly those attending smaller universities or living in remote locations. Furthermore, students need real-time, grassroots experiences, and the information on major platforms might not necessarily reflect the unique demands of entry-level candidates.

To close this gap, peer learning is essential. Students build a database of up-to-date, pertinent information when they share personal experiences, such as interview questions or recruiter expectations. This is improved by real-time updates, which guarantee that consumers always have access to the most recent information without any delays or out-of-date material. In order to meet the unique demands of the student body, a platform that integrates these components is therefore required; this is the goal of the Campus Career Development system.

III. SYSTEM OVERVIEW: DESIGN OF THE CAMPUS CAREER DEVELOPMENT WEB PLATFORM

As a full-stack online application, the Campus Career Development platform was created with a focus on data security, user accessibility, and interaction. using a strong PHP backend backed by a MySQL database, the system combines a responsive frontend created using HTML, CSS, and JavaScript. In order to guarantee compatibility, scalability, and seamless integration between the server-side functionality and the user interface, this technological stack was chosen. Through session-based authentication, dynamic data rendering, and real-time content changes via AJAX, the online platform offers students a smooth experience.

The platform's design philosophy is based on user-centricity and modularity. Even for non-technical users, every feature—from sharing interview experiences to skill recommendations—has been designed to be simple to use and intuitive. Users are taken to a customized dashboard after registering, which shows peer-contributed insights, forthcoming assignments, and customized career recommendations. The ability to manage profiles enables users to keep their academic and professional information current, which feeds into the recommendation engine of the system. Users may access the most recent content without having to reload pages thanks to the backend architecture's structure, which supports real-time database transactions.

Two important factors in the system's architecture are security and performance. The confidentiality and integrity of user data are guaranteed via structured query management, session timeout mechanisms, and encrypted login credentials. Asynchronous operations are also supported by the platform to facilitate seamless page and action transitions. The Campus Career Development platform's overall design strikes a compromise between usability and functionality, with the goal of streamlining the career preparation process while promoting teamwork and lifelong learning.

IV. TECHNOLOGY STACK AND IMPLEMENTATION METHODOLOGY

The ideals of usability, scalability, and maintainability served as the foundation for the development of the Campus Career Development platform, which was backed by a useful and cohesive technology stack. HTML5, CSS3, and JavaScript were used in the frontend's construction to produce an interactive and responsive user experience. A seamless user experience across a range of screen sizes and devices was made possible by these technologies, which also allowed for dynamic content changes. PHP was utilized for server-side scripting on the backend because of its ease

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of database integration and interoperability with web servers. The effectiveness of the MySQL relational database in handling user information, interview experiences, skill recommendations, and other kinds of content within the system led to its selection.

Every essential feature, including registration, profile management, interview sharing, and skill suggestion, is implemented as a separate, controllable component thanks to the architecture's support for modular development. The addition of AJAX (Asynchronous JavaScript and XML) greatly improved user experience by enabling real-time data fetching and updating without the need for full-page reloads. To protect data integrity and privacy, security measures included session validation, access restriction, and encrypted user credentials.

Iterative development was used in the implementation, enabling ongoing integration and testing. Every module was created, evaluated, and improved in response to system performance indicators and usability comments. Effective debugging and feature adaption in accordance with student expectations were made possible by this method. Overall, the platform remained stable, easy to use, and prepared for institutional-scale deployment thanks to the selected technology stack and implementation methods.

V. DATABASE ARCHITECTURE AND ENTITY RELATIONSHIPS

Efficiency and data consistency are key considerations in the design of the Campus Career Development platform's database architecture. Users, user_details, objectives, suggestions, and todo_list are its five main tables. Academic and career interests are stored in user_details, while login credentials are managed by the users table. Learning objectives are captured by goals, peer career advice is managed by suggestions, and task tracking is supported by todo_list. Foreign keys that connect each table to the users table are used to preserve relationships and provide referential integrity. This structure facilitates seamless connection with platform features, modular programming, and simple querying.

Important login information like user IDs, emails, and encrypted passwords are kept in the users table. The user_details table, which contains enhanced profile information such as academic background, LinkedIn URLs, course names, and career goals, is directly linked to it by foreign keys. This division guarantees that descriptive personal data and sensitive authentication data are kept apart.

The goals table is set up to monitor student-defined goals for job readiness or skill development. A dynamic learning loop can be created by updating each goal over time and connecting it to peer feedback. Sender and receiver IDs, date metadata, and the type of proposal are all stored in the suggestions table, which keeps track of career recommendations made by other users. The todo_list serves as a central location for managing tasks, allowing users to add, edit, and mark skills as finished. Foreign keys are used to enforce relationships between these tables, guaranteeing traceability and consistency.

In addition to facilitating scalability and data standardization, this structure also makes the system adaptable to changing student needs. The software guarantees both usability and analytical traceability for future improvements by rationally connecting user interactions with data on academic and career growth.

VI. FUNCTIONAL MODULES AND KEY FEATURES

Several modules are integrated into this platform to support students' career development. Users can share and peruse actual interview experiences through the Interview Experience Sharing section. Users can turn peer recommendations into attainable objectives with the use of the Suggestion-Based To-Do List. Students are encouraged to set goals and gain feedback by using the Goal Posting tool. Personalized recommendations are influenced by updated academic facts made possible by profile management. In an approachable setting, every module encourages student participation, teamwork, and organized career planning.

The Suggestion-Based To-Do List, which allows students to get suggestions from mentors and peers, is another essential component. These recommendations can be immediately added by users to their own to-do list, turning suggestions into achievable objectives. The ability to cross off tasks from the To-Do list gives you a sense of



accomplishment and encourages you to keep learning.

Students can openly announce their learning goals and professional aspirations on the platform using the Goal Posting and Feedback section. Others may respond to these posts with support, ideas, and helpful critique, which promotes responsibility and teamwork. Last but not least, the Profile Form and Data Management module guarantees that users can keep up-to-date and accurate records of their interests, desired job roles, and academic standing. Other modules use this data to ensure that recommendations and skill-building pathways are tailored to each individual. These characteristics work together to form a robust, peer-supported ecosystem for all-encompassing professional growth.

VII. RESULTS, CHALLENGES, AND FUTURE ENHANCEMENTS

Initial testing confirmed positive feedback from users, who found the platform helpful for organizing interview prep and tracking goals. Users appreciated real-time updates and peer-shared content. Challenges included managing simultaneous data requests and refining skill suggestions. Planned enhancements include an event calendar, resume builder, and admin dashboard. Long-term goals involve integrating AI-driven mock interviews and career guidance, expanding the platform's usability and institutional value.

The platform has a ton of room to grow in terms of features in the future. An interactive event calendar to monitor webinars, placement drives, and deadlines is one of the upcoming improvements. Additionally, a resume builder is planned, enabling students to use pre-made templates to construct professional resumes. Academic institutions will be able to keep an eye on student involvement and results with the inclusion of admin dashboards for institutional control and analytics. In the future, machine learning-based mock interview simulations and AI-based customisation for job recommendations will further expand the platform's functionality and give students access to a more thorough and sophisticated career development environment.

The platform's capacity to provide a collaborative learning environment was identified as one of its main strengths. In addition to consuming information, students actively participated by offering ideas, objectives, and thoughts. The system's ability to create a network of peers who support job preparedness is demonstrated by this active participation. Relevant resources and industry expectations were much more visible thanks to the dashboard, which was filled with peer-driven updates and individualized skill recommendations.

Nevertheless, there were certain functional and technological difficulties. The sporadic repetition of skill recommendations brought on by course-specific data overlaps was one problem. To improve suggestions, more filtering techniques were needed. Ensuring data integrity during concurrent submissions was another difficulty, especially in the goal and recommendation modules.

The development roadmap contains a number of improvements for the future. These include an AI-assisted CV creator, an administrative backend for faculty monitoring and content control, and the integration of an event calendar to keep track of webinars and employment fairs. The platform is positioned to develop into a full, institution-grade career guidance solution by resolving existing issues and adding new features.

VIII.COMPARATIVE ANALYSIS WITH EXISTING CAREER PLATFORMS

Although professional networking, job listings, and recruiter insights are offered by sites like LinkedIn, Glassdoor, and Handshake, their primary audience consists of seasoned professionals and general job searchers. For students who are just beginning their career journey and need specific, preparatory tools, these platforms are of limited use. Glassdoor concentrates on employer ratings and wage comparisons, whereas LinkedIn prioritizes professional networking and brand promotion. Despite being student-focused, Handshake frequently lacks elements for peer involvement and independent study and is highly reliant on institutional collaborations. The Campus Career Development platform, on the other hand, was created specifically to assist students with the crucial shift from school to the workplace. Through real-time information updates, a task planner based on suggestions, and peer-shared interview experiences, it emphasizes collaboration. By enabling users to post, communicate, and monitor goals in a safe and user-friendly setting, it promotes active engagement. The platform is a more accessible and effective instrument for early career development because of its ease of use, regional relevance, and educational integration—especially in universities with little access to conventional placement infrastructure or corporate exposure.

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IX. SCOPE FOR INSTITUTIONAL INTEGRATION AND SCALABILITY

Both students and faculty administrators can benefit from the Campus Career Development platform's high degree of adaptability for integration into educational institutions. With features like goal-setting, profile customisation, and peer knowledge access, it serves as a one-stop shop for career readiness from the standpoint of the student. It supports strategic placement initiatives and acts as a data-driven framework for schools to track engagement. Admin dashboards allow faculty and placement officers to monitor recommendations, check material, and monitor students' progress over time. The platform's cloud-based, modular architecture guarantees that it may be expanded across campuses and departments without requiring significant infrastructure modifications. Additionally, it can be included into already-existing digital ecosystems, such LMS portals or student management systems, enabling a smooth exchange of academic and professional data. Institutions can determine which students require more assistance and adjust interventions accordingly by using analytics dashboards.

The flexibility to alter platform features in accordance with institutional needs is another significant benefit. Administrators have the ability to set up filters, categories, and reporting features that complement their institution's distinct academic offerings and industry outreach objectives. Using the platform to overcome regional constraints and expose students to a greater range of options might be especially advantageous for institutions situated in rural or semiurban locations. Furthermore, the platform's worth might be increased by integrating with national job databases or outside career resources. Faculty can integrate the system into in-class career counseling sessions or workshops with the right training and onboarding. In the long run, the platform's longitudinal data may also support academic studies on graduate success indicators, employability trends, and curriculum alignment with industry demands. In the end, the platform offers scalable, research-based career counseling that can improve student outcomes and academic programs.

X. CONCLUSION

The Campus Career Development platform provides a workable solution to the persistent problem of students' readiness for the workforce. By providing an organized, individualized, and collaborative environment for skill development, interview preparation, and career planning, it closes the gap between academic education and industrial demands. The website turns job preparation from a solitary endeavor into a helpful, community-driven process by enabling students to exchange real-world experiences, monitor progress using goal-setting tools, and get peer recommendations instantly. While future additions like AI-powered resume builders, mock interview simulations, and administrative dashboards will increase its reach and impact, the use of scalable web technology guarantees its portability across institutions.

Additionally, the platform's peer-to-peer learning paradigm encourages information sharing and active participation, both of which are essential for boosting self-esteem and promoting holistic development. Compared to conventional, top-down approaches, its focus on real-time updates, individualized mentoring, and collaborative goal setting gives students a more engaging and powerful career development experience. The system gives institutions a strong tool for tracking student preparedness, creating placement plans, and collecting information for long-term program enhancements. These platforms, which promote skill development and professional flexibility, will become essential to higher education frameworks as the labor market continues to change. The Campus Career improvement platform has the potential to become a standard solution for academic career support systems with ongoing improvement and integration of user feedback.

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