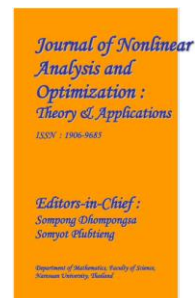


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STUDENT'S CORNER PORTAL

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ABSTRACT: Student's Corner Portal is a website designed to provide a comprehensive learning experience for students. It includes a range of features and functionalities that are designed to support students prepare for their careers. Some of the sections are job postings, interview experiences and placement records. Job posting section provides a database of job openings, allowing students to search and apply for relevant positions. Interview experiences section contains real-world experiences from other students, providing valuable insights and tips for job seekers. Placement records section displays the past placement history of the institution, providing students with a sense of the potential career opportunities available to them. The portal uses React to create dynamic and responsive user interfaces, providing a seamless user experience across different devices and platforms. MongoDB is used as the database for the platform, providing a scalable and efficient storage solution. In addition to these core sections, Student's Corner Portal also incorporates features such as resume builders, career counseling resources, and skill assessment tools to help students enhance their employability. The resume builder allows students to create professional resumes tailored to specific job applications, while career counseling resources offer guidance on career paths, further education options, and skill development strategies. Skill assessment tools enable students to identify their strengths and areas for improvement, empowering them to make informed decisions about their career trajectories. Moreover, the portal fosters a sense of community among students by facilitating peer-to-peer networking and collaboration. Through discussion forums, chat rooms, and mentorship programs, students can connect with their peers, alumni, and industry professionals to exchange ideas, seek advice, and build valuable relationships. This collaborative environment not only enhances the learning experience but also cultivates a supportive ecosystem for career development and growth.

1. INTRODUCTION

A student's corner portal is a website. It's a kind of one-stop destination for all interview preparation needs. That provides resources and support for students. These portals often offer a variety of features, such as :The placement prediction system can help students better understand their chances of getting placed in their desired companies and roles .Student's Corner portal which includes interview experiences, job postings, placement records, and resources for placement exams can be extremely useful for students as they prepare for their job search. Here are some of the ways that such a website can benefit student. Interview experiences: By reading about the interview experiences of other students who have gone through the job search process, students can gain valuable insights into the types of questions that are commonly asked, the skills that employers are looking for, and the overall interview process. This can help students feel more prepared and confident as they approach their interviews. Job postings: A website that includes job postings can provide students with a comprehensive view of the types of job opportunities that are available in their field. By browsing job postings, students can get a sense of the types of companies that are hiring, the qualifications that are required, and the salary ranges that are typical for different types of positions. Placement records: Placement records can provide students with an idea of the types of jobs that graduates from their college have landed, the average starting salaries for these jobs, and the industries and job functions that graduates have entered. This information can help students make informed decisions about their career paths and identify potential employers to target in their job search. Resources for placement exams: A website that includes resources for placement exams can help students prepare for the various types of tests that are commonly used in the job search process, such as aptitude tests, personality tests, and skills assessments. By using these resources to practice and build their skills, students can increase their chances of performing well on these tests and landing their desired job. Placement prediction: The system can help students better understand their chances of getting placed in their desired companies and roles. Overall, a website that combines interview experiences, job postings, placement records, and resources for placement exams can provide students with a wealth of information and support as they navigate the job

search process. By using these resources to prepare for interviews, identify potential employers, and build their skills, students can increase their chances of finding a job that is a good match for their interests and qualifications.

2. REVIEW OF LITERATURE

In their study titled "Predicting Student-Teachers Dropout Risk and Early Identification: A Four-Step Logistic Regression Approach," Harman Preet Singh and Hilal Nafil Alhulail delve into the complex issue of dropout prediction among student-teachers in public teacher-training institutions, particularly in the least developed economies. Focusing on the context of these countries, the authors explore a plethora of potential predictors of dropout, aiming to understand and address the factors contributing to student abandonment. Through a rigorous four-stage logistic regression process, the study identifies and analyzes variables that influence the graduation rate among student-teachers. By examining previously identified factors in the realm of college dropout, this research contributes to the development of predictive models tailored to optimize dropout prediction and early identification strategies in the challenging educational landscapes of the world's poorest nations. [1], The paper titled "Linear Logistic Regression for Estimation of Lower Limb Muscle Activations" authored by Masashi Sekiya, Sho Sakaino, and Toshiaki Tsuji presents an innovative approach to improving the generalization performance in muscle activation estimation. In comparison to traditional methods like linear regression and artificial neural networks (ANN), the study highlights the advantages of employing a linear logistic regression model. This model demonstrates superior performance by effectively mitigating errors induced by nonlinearities, thereby enhancing the accuracy of muscle activation estimation. [2]. The study titled "Prediction of Recovery From Severe Hemorrhagic Shock Using Logistic Regression" authored by Alfredo Lucas, Alexander T. Williams, and Pedro Cabrales presents an algorithm that utilizes logistic regression modeling (RML) and feature selection techniques to construct a predictive model for the recovery from hemorrhagic shock (HS) in rat experiments. The research not only focuses on the development of the predictive model but also proposes an effective methodology for feature selection and suggests methods for evaluating the performance of predictive models in future studies. [3] The literature review titled "Modeling Mandatory Lane Changing Using Bayes Classifier and Decision Trees" by Yi Hou, Praveen Edara, and Carlos Sun explores the driver's decision-making process concerning the merger of lanes. The analysis considers factors like vehicle speeds, lead and lag gap distances, and distance from the beginning of the merge lane to determine the feasibility of merging schemes. The study highlights the significance of employing machine learning models in developing lane change assistance systems aimed at minimizing the risk of traffic accidents [4].

The literature review titled "Efficient and Secure Decision Tree Classification for Cloud-Assisted Online Diagnosis Services" authored by Jinwen Liang, Zheng Qin, Sheng Xiao, and Xiaodong Lin, presents an innovative approach to enhance the security and efficiency of decision tree classification in cloud-assisted online diagnosis services. The study introduces a method where decision trees are transformed into decision tables, which are subsequently encrypted using searchable symmetric encryption (SSE) [5]. The study titled "Decision Tree-Based Approach for Detecting Protein Complex in Protein Interaction Network (PPI) via Link & Sequence Analysis" authored by Aisha Sikandar, Waqas Anwar, Usama Ijaz Bajwa, Xuan Wang, Misba Sikandar, Lin Yao, Zoe L. Jiang, and Zhang Chunka presents a novel method for identifying protein complexes in protein interaction networks [6]. The literature review titled "A Link Quality Prediction Method for Wireless Sensor Networks Based on XGBoost" by Yi Feng, Linlan Liu, and Jian Shu focuses on the development of a link prediction method aimed at improving communication stability in wireless sensor networks (WSNs). The proposed method, XGB LQP, leverages XGBoost to predict link quality within single-hop WSNs. Through comparative analysis, the study highlights the superior environmental adaptation and prediction accuracy offered by XGB LQP in comparison to other existing models. This research

addresses a critical need in WSNs by providing a reliable method for predicting link quality, which is essential for maintaining stable communication within these networks[7].

By using these resources to practice and build their skills, students can increase their chances of performing well on these tests and landing their desired job. Placement prediction: The system can help students better understand their chances of getting placed in their desired companies and roles. Overall, a website that combines interview experiences, job postings, placement records, and resources for placement exams can provide students with a wealth of information and support as they navigate the job search process. By using these resources to prepare for interviews, identify potential employers, and build their skills, students can increase their chances of finding a job that is a good match for their interests and qualifications.

3. METHODOLOGY

Developing a student placement page involves a systematic methodology to ensure its effectiveness and relevance to students, educational institutions, and employers. Here are some: Machine Learning Algorithms: In the context of the integrated webpage for career development, machine learning algorithms play a pivotal role in enhancing placement prediction accuracy. These algorithms leverage historical data on student achievements, skills, and career outcomes, learning patterns that contribute to successful placements.

Homepage Dashboard: Upon logging in, users are greeted with a user-friendly dashboard providing quick access to resume building, placement prediction, and on/off-campus job postings. expand this one sentence.

Feature Engineering: Relevant features are extracted from the data. This may involve transforming text descriptions (skills, job roles) into numerical formats for machine learning algorithms to understand.

Job Postings Section: The job postings section aggregates on/off-campus job opportunities from various sources, providing users with a centralized platform to explore diverse employment options. Users can filter job listings based on their preferences, such as location, industry, or job type, enhancing the efficiency of their job search.

4. EXISTING SYSTEM

Existing student training and placement portal web page applications serve as vital resources for students navigating their career paths. These portals typically offer a range of features such as job postings, internship opportunities, resume builders, and interview preparation materials. Students can explore job listings tailored to their field of study and interests, facilitating the job search process. Additionally, these platforms often provide access to industry insights, career counseling services, and networking opportunities, enabling students to make informed decisions about their futures. Through interactive elements like discussion forums and chat rooms, students can engage with peers, alumni, and professionals, fostering collaboration and knowledge-sharing. Furthermore, these portals often track placement records, showcasing the success stories of past graduates and illustrating the potential career trajectories available to current students. Overall, student training and placement portal web page applications play a crucial role in empowering students to enhance their employability, connect with industry professionals, and secure meaningful career opportunities.

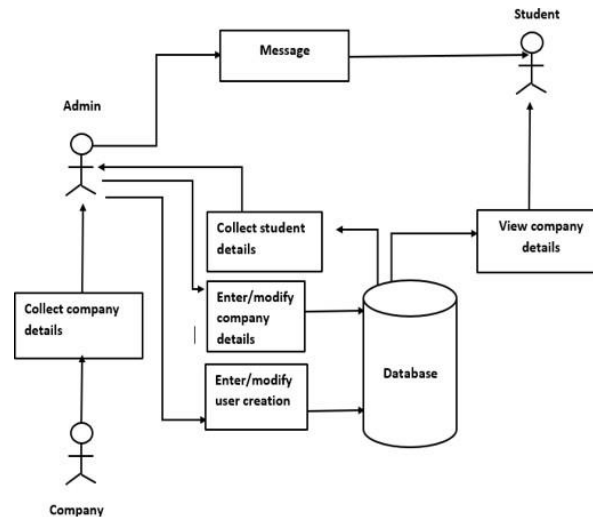


Fig 1: System Architecture

Fig-1: Existing student corner portal

5. WORKING PROCESS

The integrated web page offers a streamlined and comprehensive solution for individuals navigating the complex landscape of career development. Users gain access to a centralized platform that seamlessly combines resume building, placement prediction, and on/off-campus job postings within a single website. The resume building feature empowers users to create polished and tailored resumes, optimizing their professional presentation. Simultaneously, the placement prediction tool leverages advanced algorithms to forecast the individual's likelihood of success in various job placements, providing valuable insights for strategic career planning. The on/off-campus job postings section aggregates a diverse array of employment opportunities, facilitating efficient job searches. This holistic approach not only saves users time but also enhances their overall career management by providing a unified platform for all essential aspects of the job-seeking process. The all-in-one web page revolutionizes the job search and career development experience by seamlessly integrating resume building, placement prediction, and on/off-campus job postings.

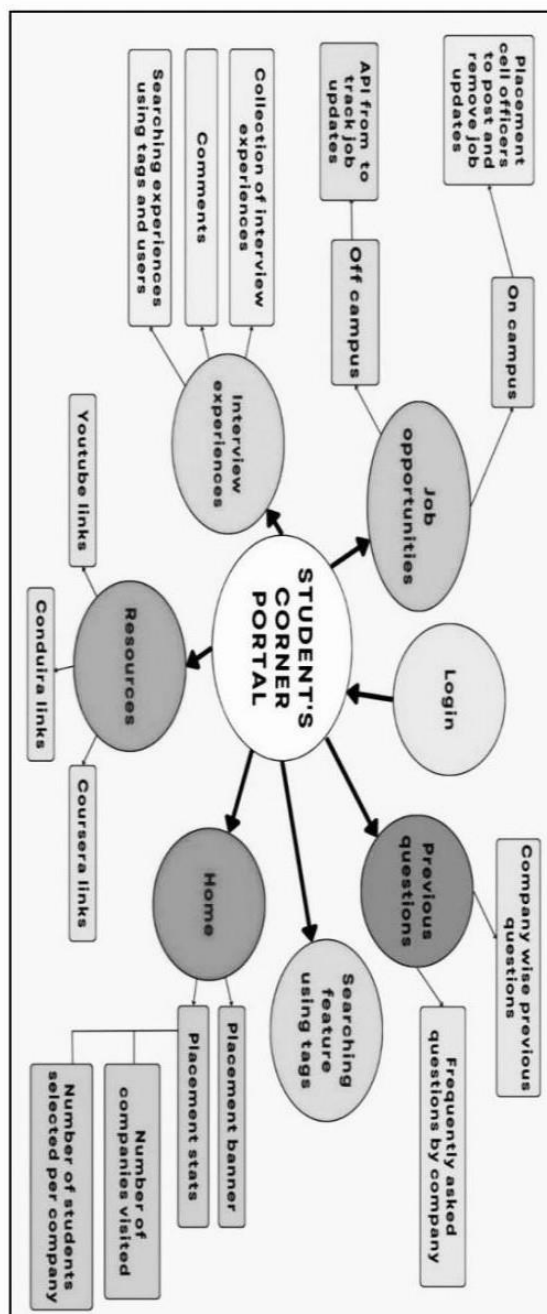


Fig-2: Working Of Student's Corner Portal

6. Logistic Regression

Logistic Regression is frequently employed for classification tasks, such as predicting whether a student will be placed in a particular job or not. In the context of a student placement website.

Once trained, the Logistic Regression model can predict the likelihood of a student being placed in different job opportunities based on their profile.

This prediction can then be used to provide personalized recommendations to students or assist recruiters in identifying suitable candidates for job openings.

Other machine learning models commonly used in student placement website projects include decision trees, random forests, support vector machines (SVMs), and neural networks, depending on the complexity of the prediction task and the available data. In addition to Logistic Regression, various other machine learning models are frequently employed in student placement website projects to cater to diverse prediction tasks and datasets. Decision trees offer a straightforward and interpretable approach, making them suitable for

initial analysis and feature importance determination. Random forests, which consist of an ensemble of decision trees, provide improved accuracy and robustness by reducing overfitting and variance. Support Vector Machines (SVMs) are effective for both linear and non-linear classification tasks, offering flexibility in modeling complex decision boundaries. Furthermore, neural networks, particularly deep learning architectures, have gained popularity for their ability to learn intricate patterns and representations from large-scale data, thereby enhancing prediction accuracy in student placement scenarios. By leveraging these diverse machine learning techniques, student placement websites can effectively match candidates with job opportunities, optimize recruitment processes, and ultimately facilitate successful career transitions for students.

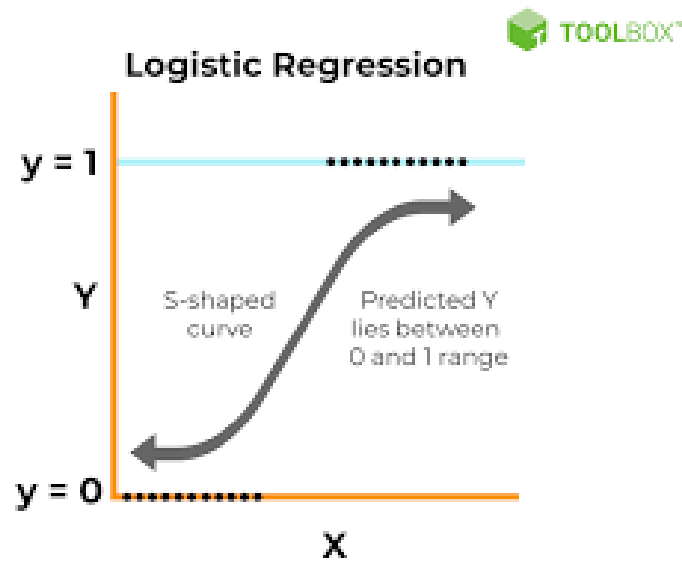


Fig-3: Logistic Regression

7. Decision Tree Algorithm

A decision tree is one of the most powerful tools of supervised learning algorithms used for both classification and regression tasks. It builds a flowchart-like tree structure where each internal node denotes a test on an attribute, each branch represents an outcome of the test, and each leaf node (terminal node) holds a class label. It is constructed by recursively splitting the training data into subsets based on the values of the attributes until a stopping criterion is met, such as the maximum depth of the tree or the minimum number of samples required to split a node.

In a decision tree, for predicting the class of the given dataset, the algorithm starts from the root node of the tree. This algorithm compares the values of root attribute with the record (real dataset) attribute and, based on the comparison, follows the branch and jumps to the next node.

Training: Training a decision tree algorithm involves several steps to create a predictive model based on historical data. In the context of a student placement page, this process can be applied to predict the likelihood of students being successfully placed in job opportunities.

Scalability and Efficiency:

The scalability and efficiency of decision tree algorithms depend on various factors such as the size of the dataset, the complexity of the tree, and the specific implementation of the algorithm.

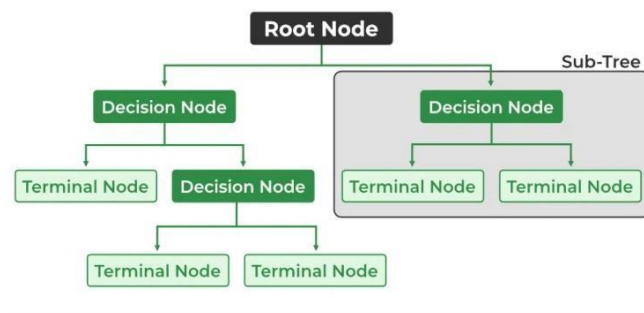


Fig-3:DecisionTreeAlogorithm

8. RESULTSANDDISCUSSIONS

The discussion section delves deeper into the implications of the findings, discussing factors influencing placement outcomes such as academic performance, skill development initiatives, and industry partnerships. It also explores strategies for improving placement rates and enhancing the employability of students, such as curriculum enhancements, internship programs, and career counseling services. Moreover, the analysis may compare Vignan's placement outcomes with national or regional averages to benchmark its performance and identify areas for improvement. It may also highlight success stories of individual students or alumni, showcasing the impact of the university's education and training on their career trajectories.

The implementation of a web-based resume builder within a training and placement web portal has yielded promising results and discussions. Firstly, the integration of this feature has significantly enhanced the user experience for students seeking career opportunities. By providing a user-friendly interface and customizable templates, students can easily create professional resumes tailored to their skills and experiences. Moreover, the resume builder has facilitated the organization and presentation of students' qualifications, making it easier for recruiters to assess their suitability for job openings. This has led to increased efficiency in the recruitment process, with recruiters being able to quickly identify relevant candidates based on their resumes.

The results and discussions concerning campus placement training for a training and placement web portal typically revolve around the effectiveness of the platform in enhancing students' employability, facilitating job placements, and optimizing the recruitment process for employers. Here are some key points that might be discussed: **Placement Success Rate:** Analysis of the percentage of students successfully placed through the portal compared to those who secure placements through traditional methods can provide insights into the platform's efficacy. **Feedback and Satisfaction:** Surveys or feedback from both students and recruiters can gauge their satisfaction with the portal's services, including the quality of training materials, ease of navigation, and overall user experience.

The interview experience sharing area within a training and placement web portal serves as a valuable resource for students preparing for job interviews. Through this platform, students can access firsthand accounts and insights from peers who have undergone various interview processes. The results obtained from this section demonstrate its significance in providing practical knowledge and guidance to students. By sharing their experiences, students contribute to a collective pool of information that can help others understand the interview dynamics, question patterns, and overall expectations of different companies and industries..

9. CONCLUSIONANDFUTURESEARCH

The student corner portal serves as a one-stop solution for student's academic needs, providing them with access to interview experiences, placement records, resources, and academic support. Additionally, the

placement prediction system can help students better understand their chances of getting placed in their desired companies and roles. The implementation of a student corner portal can lead to improved academic outcomes for students, better career prospects for graduates, and enhanced reputation and placement records for institutions.

By leveraging the power of technology and data, institutions can create a more personalized and effective learning experience for students and can prepare them better for their future careers.

With the increasing demand for skilled professionals in various industries, such a portal can play a vital role in bridging the skill gap between job seekers and employers. The portal can help students acquire the necessary skills and knowledge required for their desired job roles, and can also help them stay updated with the latest job opportunities and industry trends. Here are some potential future scopes for a student corner portal. Integration with virtual and augmented reality technologies for immersive learning experiences. Collaboration with industry experts and professionals for mentorship and real-world project opportunities. Integration with blockchain technology for secure and tamper-proof storage of student records and certificates. Personalized learning paths based on student interests, strengths, and weaknesses. Integration with artificial intelligence and natural language processing for personalized career guidance and job search assistance.

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