Analyzing Trends of Companies on Placement Analytics Website Using Power BI

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Abstract: *The Analytical Trend Placement Website project aims to bridge the gap between students and placement by providing a one-stop platform for identifying placement trends. The project aims to address the challenges faced by students in securing suitable employment that aligns with their academic achievements and career aspirations. It includes features like job-matching algorithms, user-friendly design, and trend analysis modules. The project also emphasizes assessing the effectiveness of theplatform, analyzing user behavior, and tracking long-term career outcomes for those who secure employment through the website. The project involves developing a detailed guide, creating a functional prototype, and employing rigorous evaluation methods to gauge the platform's impacton student job placements. The project aims to enhance student job placement rates, align educational institutions with modern job market dynamics, and empower students to pursue their career aspirations.*

Keywords: *Placement Analytical Website, Job placement, Student*

I. Introduction

The job market is constantly evolving, with the demand for skilled professionals and effective onboarding procedures becoming critical. Schools have traditionally prepared students for the workforce, but the transition from education to employment is still challenging due to the rapid expansion of education and shifting economic demands. Traditional job placement processes often fall short in terms of speed and efficiency, resulting in suboptimal outcomes for students and employers. The Web Research Institute has established the Placement Analytics website to revolutionize job placement by leveraging data analysis, machine learning, and interactive visualization. The platform aims to provide students with high-quality professional experiences and personalized guidance, particularly for students from underrepresented backgrounds or non-traditional pathways. Key objectives include developing an intuitive dashboard interface, aggregating and visualizing key performance metrics, facilitating informed decision-making, and ensuring seamless accessibility and functionality. The Placement Analytics platform aims to transform the employment landscape by providing instant insights, personalized recommendations, and efficient hiring processes, improving outcomes for students, educational institutions, and employers. Collaboration and innovation can harness the full potential of technology to create a more inclusive workforce and a stronger business ecosystem.

II. Research Methodology

The process of identifying companies providing web analytics involves collecting data from various sources, cleaning and sanitizing it, and processing it using tools like Pandas. This is followed by exploratory data analysis (EDA), which uses descriptive statistics and visualizations like histograms and boxplots. Power BI is used to create interactive dashboards, enhancing user experience. Different diagrams are used to communicate effectively. Regular updates to the Position Analytics website provide users with new insights and trends, making it useful for marketing professionals, recruiters, and job seekers. This approach ensures the robustness and relevance of the company's business analysis.

1. Algorithm

III. Literature Review

Online job platforms like LinkedIn, Indeed, and Glassdoor use data analytics to match job seekers with suitable opportunities. Machine learning algorithms analyze job market trends and predict future job openings. Interactive visualization tools aid in informed decision-making. Educational institutions use technology to track student performance and align training programs with industry needs. Data-driven platforms provide personalized career guidance, improving student outcomes. Successful integration requires careful planning and collaboration between stakeholders, resulting in an efficient job placement process.

1. Research Problem

- Alignment with Industry Trends: Staying abreast of evolving industry trends, changing job market dynamics, and emerging technologies poses a continuous challenge. The placement system app must adapt to new requirements, integrate innovative features, and provide relevant insights to meet the evolving needs of students and recruiters.

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- User Adoption and Engagement: Encouraging active participation and engagement from students, faculty members, placement officers, and recruiters can be challenging. Designing an intuitive user interface,
- providing relevant features and functionalities, and offering comprehensive training and support are essential to drive user adoption and engagement.
- Data Accuracy and Integrity: Ensuring the accuracy and integrity of the data within the placement system poses a significant challenge. Inaccurate or outdated information can lead to flawed decision-making and undermine the credibility of the system.
- Matching Students with Company Needs: Matching student's skills, qualifications, and career aspirations with the requirements and preferences of different companies can be a daunting task. The system must efficiently match candidates to suitable job opportunities while considering factors such as academic performance, experience, and personal interests

2. *Research Gaps*

- Predictive Analytics for Placement Success: Implement predictive analytics models to forecast students likelihood of placement success based on historical data, academic performance, extracurricular activities, and other relevant factors. Provide actionable insights to students and placement officers to enhance placement strategies and outcomes.
- Skills Gap Analysis and Training Recommendations: Conduct skills gap analysis based on industry requirements and students' skill profiles. Recommend targeted training programs, certifications, and workshops to bridge the gap between students' existing skills and the demands of the job market.
- Personalized Career Path Recommendations: Utilize machine learning algorithms and data analytics to provide tailored career path suggestions.
- Company Performance Metrics: Gain insights into key performance metrics such as the number of job offers extended, average salaries offered, types of roles available, and geographic distribution of companies.
- Comparative Analysis: Conduct comparative analysis between companies based on various performance parameters, enabling stakeholders to identify top-performing companies and emerging trends in hiring practices.

IV. Algorithm

STEP 1: The process begins with the user logging in, who authenticates by entering the required information to access the portal.

STEP 2: After authentication, users specify their interests and relevant information they want to search.

STEP 3: Once logged in, users can access the control panel screen, which provides a more intuitive and interactive experience.

STEP 4: Users can use dashboards to get an overview of selected years, allowing them to search for detailed information.

STEP 5: Finally, after the desired views are received, the user leaves the portal.

V. Results

The Placement Analytics website represents a revolutionary change that simplifies the placement process for students, schools and employers. Leveraging the power of data analysis and machine learning, the platform provides students with personalized advice, instant insights, and actionable guidance, allowing them to make informed decisions about their studies. Schools benefit from the ability to track studentperformance, measure performance, and tailor lessons to business needs.

1. *Dashboard Results*

Fig 1.1 Student Placement and Internship Dashboard

Fig 1.2 Company Placement and Role Analysis Dashboard

Fig 1.3 Skills and Certification Requirements Dashboard

2. Aggregated Results

Fig 2.1 Student Placement and Internship Dashboard (Output)

Fig 2.2 Company Placement and Role Analysis Dashboard (Output)

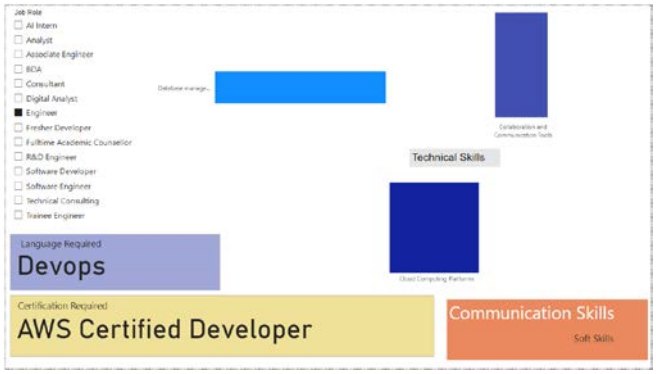

Fig 2.3 Skills and Certification Requirements Dashboard (Output)

CONCLUSION

In summary, the development and implementationof web analytics is an important factor in the evolution of the workplace. The platform provides solutions for students, schools and business employers using technology, data analysis and machine learning. The platform provides personalized advice, instant insights and career guidance, enabling students to make informed decisions about their careers. Schools benefit from better visibility into student outcomes and project effectiveness, allowing them to better meet business needs. In addition, employers gain accessto a variety of organizational skills and insights into new activities, speeding up the hiring process and making organizing completion easier. The Site Evaluation website embodies the principles of transparency, efficiency and integration, creating agreat opportunity for all stakeholders. As we continue to embrace digital innovation and data- driven approaches, collaboration, innovation and integration must be key elements that ensure platform success. By working together, we canunlock new possibilities and create a future where everyone has the opportunity to succeed at work. Business analytics not only represents advances in technology, but is also a force for positive change in the business ecosystem, paving the way to have a fair and prosperous future.

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