

CAMPUS PLACEMENT PREDITION APP USING MACHINE LEARNING

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Email Id:-nagaraju.dnr345@gmail.com**ABSTRACT**

establishments. Admission and name of establishments primarily depends on placements. Hence all institutions strive to Strengthen placement department. The main Objective of this paper is to analyze previous year's student's historical data and predict placement possibilities of current students and aids to increase the placement percentage of the institutions. This paper presents a recommendation system that predicts whether the current student will be placed or not, if the student is placed the company is also predicted based on the data of previously placed students. Here we use two different machine learning classification algorithms, namely Naive Bayes Classifier and K Nearest Neighbors [KNN] algorithm. These algorithms independently predict the results and we then compare the efficiency of the algorithms, which is based on the dataset. This model helps the position cell at intervals a corporation to spot the potential students and concentrate to and improve their technical and social skills.

Keywords: Updation, online training and placement management system, TPO, databases, students, eligibility.

1 INTRODUCTION

Our project is mainly focused on analysis and tracking of student Performance in placement drives. To implement this application, coordinator has to collect the student's data, those who are eligible and qualified for the aptitude and future rounds. The current system is computerized one, but it does not meet the needs of Training and Placement Cell. In existing system, the student's data is maintained in Excel Sheets. According to the Company's Requirement the data is short listed manually by the TPO's. Handling and maintaining of student's data manually is hectic to the T&P Dept and sometimes it might be inaccurate. To overcome these limitations, we proposed a new system called "AN EFFECT OF ERP ON WEB BASED PLACEMENT ANALYSIS AND TRACKING SYSTEM".

The main purpose of this project is to add new features to existing system. The proposed one is an online system which can be accessed throughout the Organization and outside as well with valid login credentials. This system can be used as an application for the Training and Placement Department of the college to manage student's information regarding Placements. The student's record includes personal details, educational qualifications, professional skills and academics, etc. This system acts as central repository for student information.

2. LITERATURE SURVEY AND RELATED WORK

1. Almahdi Alshareef, Ahmed Alkil any basically focuses on providing a simple interface for the easy collation and maintenance of all manner of student information. The creation and management of accurate, up-to- date information

regarding students' academic careers is critical students and for the faculties and administration of Sebha University in Libya and for any other educational institution. A student information system deals with all kinds of data from enrollment to graduation, including program of study, attendance record, payment of fees and examination results to name but a few. All these data need to be made available through an Online Interface.

2. Prabhu T Kannan, Srividya K Bansal focuses on providing information to support the operation, management and decision-making functions of enterprises or organizations. In the face of huge amount of information, it is required to possess the student information management system to improve the efficiency of student management. Through this system, the standardized management, scientific statistics and fast query of student information can be realized, and thus the workload of management can be reduced. In this paper, a typical student information management system will be established to realize the systematization, standardization and automation of student information relationship.

3. S.R.Bharamagoudar, Geeta R.B, S.G.Totad focuses on simple interface for maintenance of student information. The creation and management of accurate, up-to- date information regarding a student's academic career is critically important in the university as well as colleges. Student information system deals with all kind of student details, academic related reports, college details, course details, curriculum, batch details, placement details and other resource related details too. It tracks all the details of a student which can be used for all reporting purpose, tracking of attendance, progress in the course, completed semesters.

4. Shiqiu Huang, R Zhang, Zhengwei Qi investigated on the Dynamic taint analysis is a prevalent approach to protect a program from malicious behaviors, but fails to provide any information about the code which is not executed. This paper describes a novel approach to overcome the limitation of traditional dynamic taint analysis by integrating static analysis into the system and presents framework SDCF to detect of ware vulnerabilities with high code coverage. Our experiments show that SDCF is not only able to provide efficient runtime protection by introducing an overhead of 4.16 based on the taint tracing technique, but is also capable of discovering latent software vulnerabilities which have not been exploited, and achieve code coverage of more than 90%.

3 EXISTING SYSTEM

Existing system does all process has done by manually. Placement officers maintain the information about students manually. If any modifications or updates are required in their profile of any students, it has to be done manually. This is very difficult task for TPO to maintain the student data and company details as it is time consuming, lack of security of data and also it takes more man, etc.. This is so difficult to the TPO when number of user's increases.

Disadvantages of Existing System:

Manual and Time-Consuming: The existing system relies heavily on manual processes, including resume submission, interview scheduling, and data collection. This consumes a significant amount of time and administrative effort.

Limited Reach: Traditional campus placements are often limited to a select group of students and companies associated with

the institution. This can result in missed opportunities for both students and recruiters.

Subjective Decision-Making: The selection process can be subjective, with decisions based on limited information and biases. This can lead to inconsistencies and unfair outcomes.

Lack of Transparency: Students may not have clear visibility into the selection criteria used by companies, making it challenging to prepare adequately for interviews.

Inefficient Matching: Manual matching of students to job openings may not optimize the best matches based on skills and preferences. This can lead to mismatches and dissatisfaction for both students and recruiters.

Data Management Challenges: Managing and maintaining records of student profiles, interview schedules, and placement statistics.

4 PROPOSED WORK AND ALGORITHM

Advantages Of Proposed System

The proposed website includes the following features:

- Training and placement department maintains the details of each student.
- Students can view the status of their upcoming campus.
- Search feature helps to admin because they check particular student is present or not
- Provides a proper communication channel between student and training & placement department using the SMS.
- Latest information about which company is visiting the campus is provided in the website which helps the students to get updated in-formation quickly
- Website is user friendly with more GUI so that student view the information easily.
- Duplicate registrations can be avoided and hence it provides reliability.
- Only administrator can modify the Placement and organization record if needed.

Website more helps to make a short list of students who get placed in certain Company and who is unplaced. student can manage passwords, access technical papers and view eligibility criteria for on-going recruitments. Coordinators maintaining the attendance records of CRT.

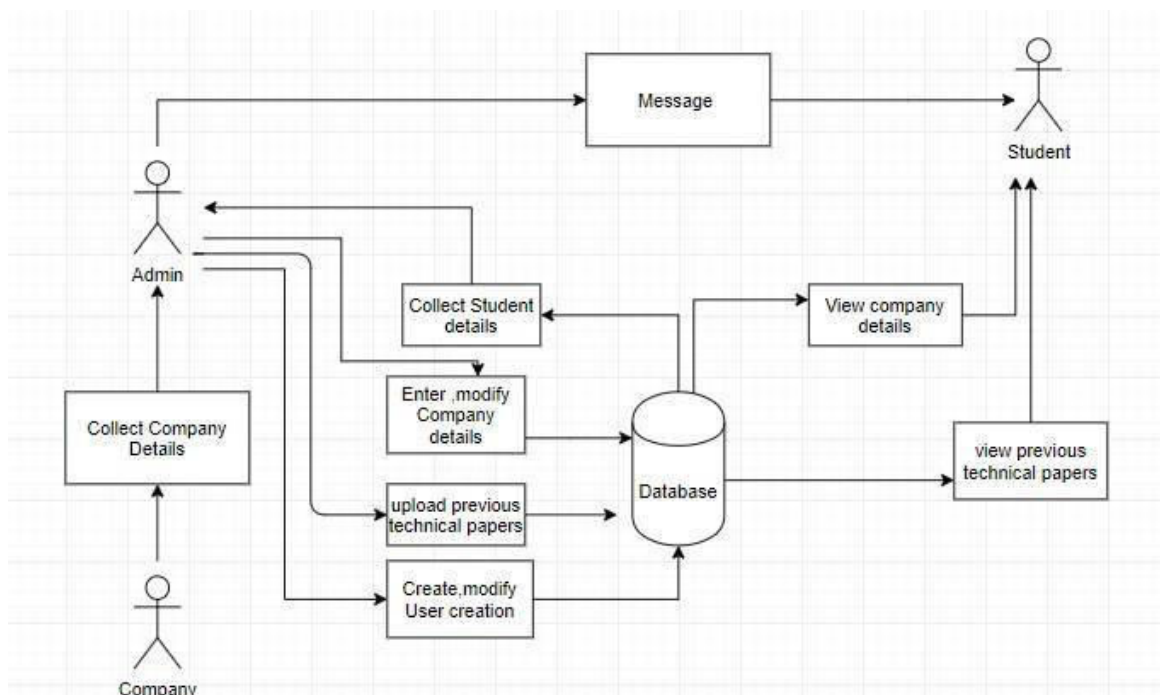


FIG 1 – SYSTEM ARCHITECTURE

5 METHODOLOGIES

DATASET:

This paper utilizes the data set provided by revolution analytics for the detection of the fraudulent credit card transaction from Kaggle. Data set has 51149 legal transactions and 3312 fraudulent transactions. The dataset is divided as 60%, 20% and, 20% in the Train, Valid and Test set, respectively.

DATAPREPROCESSING:

For efficient implementation of the classification algorithm, data preprocessing is performed before feature selection. Under sampling is performed to make the dataset balanced to avoid the biasing of the classification algorithm towards the majority class. Feature Selection is implemented on a balanced dataset.

FEATURES ELECTION METHODS:

Features election methods are used to remove unnecessary, irrelevant, and redundant attributes from a dataset that do not contribute to the accuracy of a predictive model or which might reduce the accuracy of the model. In this paper seven feature selection techniques namely Select K best, Feature Importance, Extra tress classifier, Person's correlation, Mutual Information, Step forward selection and Recursive feature elimination are used.

FEATURE IMPORTENCE:

Feature importance is a class of techniques for assigning cores to input features to a predictive model that indicates the relative importance of each feature at the time of making a prediction . It reduces the number of input features. In this paper, feature importance is implement educing an extra tree classifier from the decision tree. Extra Trees similar to Random Forest ,it builds multiple trees and splits nodes using random subsets of features, but unlike Random Forest ,Extra Trees examples without replacement and nodes are spliton random

6 RESULTS AND DISCUSSION

HOME PAGE:

DATA ENTRY PAGE:

Campus Placement Prediction

Enter Details for forecast.

SSC PR%:[45-100]

80

mba_p:[1-99]

83

hsc_s

Arts

HSC PR%:[45-100]

90

gender

Male

degree_t

Comm&Mgmt

Degree PR%:[35-100]

70

ssc_b

Central

workex

No

etest_p:[1-99]

88

hsc_b

Central

specialisation

Mkt&Fin

Predict

OUTPUT PAGE:

Campus Placement Prediction

127.0.0.1:5000/result

Student will be

Placed

Return

7 CONCLUSION AND FUTURE SCOPE

CONCLUSION:

In the existing system most of the the work will be done manually, as it takes more time for any changes in the system. The major problem with this existing system are notification method available is not available for giving information about student expect the notice board or circulars. The proposed system is online training and placement management system gives the automation in all the process of campus recruitment, searching student details individually. This system in future could be joined to Sms server so that it can notify the message to students via Sms for upcoming companies.

FUTURE WORK :

- In future there is a chance to conduct MR after HR in such cases we can change the application according to the requirements.
- There is a chance to generate graphs on placement procedure on the bases of database.
- In future there is a scope for staff/coordinators to change their passwords. In future we can add an alert domain for the sake of students.
- In future we can add a Feedback from student to faculty.
- In future we can add Company information through company page links.
- In future we can add Chatbot for clarifying our doubts

8. REFERENCE

1. shiqiuHuang, Rzhang, zhengwei Qi: Static program analysis assisted dynamic taint tracking for software vulnerability discovery.
2. Almahdi Alszzhareef, Ahmed Alkilany " Toward a Student Information System for Sebha University, Libya", Fifth international conference on Innovative Computing Technology.
3. Prabhu T Kannan, Srividya K Bansal," Unimate: A Student Information system",2013 International conference on advances in computing communications and informatics.
- 4 . www.php.net
5. SlideShare: <https://www.slideshare.com>
6. wikipedia: <https://www.wikipedia.com>
7. Sql: <https://www.mysql.com>
8. www.guru99.com