

360° Degree Performance Analysis System

Prashant Kanade, PhD
Computer Department
Vivekanand Education
Society's Institute of Technology,
Mumbai, India

Jasmine Dhirwani
Computer Department
Vivekanand Education
Society's Institute of Technology,
Mumbai, India

Tithi Jhamnani
Computer Department
Vivekanand Education
Society's Institute of Technology,
Mumbai, India

Sakshi Bhojwani
Computer Department
Vivekanand Education
Society's Institute of Technology,
Mumbai, India

Nishtha Batra
Computer department
Vivekanand Education
Society's Institute of Technology,
Mumbai, India

ABSTRACT

Everyone in the modern digital world uses the web for social or technical platforms, from office workers to company CEOs. When the work is computerized, it is quicker and easier to see and alter. There is a lot of manual effort and paperwork involved with a university job. Performance analysis is one of the most crucial components of educational universities. The teachers must evaluate the performance and let the parents know how their children did. The 360 Student Performance System will therefore be a digitized version of the students' performance cards, which will take less time and be more accurate and efficient. The parent login will make it easier for parents to monitor their child's progress on this system whenever they wish. In addition to making the job simpler, it will also cut down on paperwork and manual effort.

Keywords

Modern digital world, web, social platform, technical platform, computerized, manual effort, paperwork, university job, performance analysis, educational universities, teachers, performance evaluation, parents, 360 Student Performance System, digitized version, performance cards, accurate, efficient, parent login, monitor progress, simpler job, cut down on paperwork.

1. INTRODUCTION

360 Degree Performance Analysis is an online platform dedicated to evaluating students' academic performance comprehensively. Our website offers a range of resources designed to provide students with a complete analysis of their strengths and weaknesses, helping them identify areas where they can improve and excel. Along with academic success co-curricular and extracurricular activities also play a critical role in students' development process.

Through our platform, Parents can access a wealth of data about their child's academic performance also our website allows parents to add comments and grades for students' personal development from their perspective which enables us to generate charts of a 360-degree view of students' overall progress. We believe that every student has unique talents and abilities that should be nurtured and celebrated. By providing students with a comprehensive analysis of their performance, we aim to help them discover their strengths, overcome their weaknesses, and achieve their full potential.

2. MOTIVATION

The main resource for different universities is their students. Universities and students both contribute significantly to the production of highly qualified graduates who excel in the classroom. Academic performance achievement is the degree of educational goal attainment that can be evaluated and tested through exams, assessments, and other measurement methods. However, there are differences in academic performance achievement because different student types may have varying degrees of performance achievement.

A significant portion of their well-being is required to fairly assess their virtues and examine their development. The system is a cutting-edge way to evaluate how well kids are doing academically. It shows one's development in this world without comparing them to peers.

3. LITERATURE SURVEY

Reference [3]

This is a software for Faculty and Students. It provides a brief overview of the course. It provides information about test performance also updates any current test and respective scores. Analysis is provided in detailed performance sheets. Includes complete academic information of the student. The aim of this system is to allow students to compare their performance in different tests, to provide convenience to faculty to guide and mentor students in their academic performance, to design a user-friendly graphical user interface, to conveniently maintain digital records of students, faculty, and courses. The limitations was that a single student cannot enroll for multiple courses using the same student id. Also, students cannot analyze his grip over subtopics of the same subject.

Reference[4]

In this system a model for academic performance of students is developed. It includes home environment, study habits, hard work, learning skills etc. The fitted model shows that academic performance depends on learning skills and learning skills depends on home environment. Also academic performance depends on academic interaction and academic interaction depends on study habits and home environment. It means academic performance can be estimated for any student by its home environment and learning skills and also by its academic interaction, study habits, and home environment. By examining the three possible paths of estimating academic performance, the strongest path is the home environment which affects the

learning skills and ultimately learning skills lead to affect the academic performance. According to our model students can achieve high academic performance by focusing on home environment and learning skills.

Reference[7]

There is a need to develop an automated tool for student performance analysis that would analyze student performance and will guide them by displaying the areas where they need improvement, in order to contribute to a student's overall growth by generating a scorecard for the same. The proposed system will display results of student performance on a single click action by the user, thus inducing automation and reducing efforts of staff in analyzing student performance manually. The proposed system finds out student trends on the basis of outcomes of students' academic performance, strengths, weakness, hobbies and extracurricular activities. Academic data includes unit tests, student's theory, practical's and term work marks. This data gathered will be processed by a classification algorithm of data mining. A result from the classification algorithm will be recognized as Trend. This trend will help us to track where the students excel and where not and what are their abilities which can be enhanced. The analysis will summarize the outcome and will classify students based on the results. This system will recognize the interest of students in particular areas. The proposed system will also classify the students who are eligible for placements based on the company's criteria.

Reference[8]

There are many techniques being proposed to evaluate students' performance. Data mining is one of the most popular techniques to analyze students' performance. Data mining has been widely applied in the educational area recently. It is called educational data mining. Educational data mining is a process used to extract useful information and patterns from a huge educational database. The useful information and patterns can be used in predicting students' performance. As a result, it would assist the educators in providing an effective teaching approach. Besides, educators could also monitor their students' achievements. Students could improve their learning activities, allowing the administration to improve the systems performance. Thus, the application of data mining techniques can be focused on specific needs with different entities. In order to encounter the problems, a systematic review is proposed. The proposed systematic review is to support the objectives of this study, which are: 1. To study and identify the gaps in existing prediction methods. 2. To study and identify the variables used in analyzing students' performance. 3. To study the existing prediction methods for predicting students' performance.

Reference [2]

The system provides the student with easy and accurate data about projects and academic percentages. It helps to increase quality of education. In This system the students and teachers will have a register and login. They can do the needed work and enter the system. Here the students can view their scores which are uploaded and updated by the respective teachers. The teachers can add project details or details about any possible changes the student has to make. The aim was to analyze the performance of students on a monthly and yearly basis, manage the grades of an entire class in its learning, make the grading process easier, and the teachers have a clearly-set-out overview, and improve efficiency of college information management. One of the disadvantages was adding data

manually which can be a bit tedious for the hod or teacher. Charts can be added for better performance. Backup should be available in case of failure.

Reference [6]

The purpose of the system is to bring about excellence among the students in every possible dimension. It encourages an increase in the current scope of education. The system is designed to automate the solution needed to our faculty. System enables the direct and indirect surveys of students based on their analytical, designing, coding skills and so on. The system has designed the form which contains the personal details, educational details, departmental details, knowledge-based skills, course recommendation, electives, personal abilities, social awakenings, placement, which must be filled by each student. Our system will have each students' academic records. The aim of the system is to analyze the performance of students, give a review based on it, increase the credibility of education and extracurricular activities

The accuracy of the project was not up to the mark, and could've worked better on the improvement side. But overall it was a very innovative project.

Reference [1]

It describes a categorization system on the basis of students' marks for the teacher.

The Scope of this system was filtering the scores according to expected level, below expected level, above expected level.

This system will display the scores in chart format which is easy to view and understand. Here the faculty can login and perform the CRUD operations (create, read, update, delete). The aim was to develop a system for students' performance analysis, to assist the IS lecturers in analyzing and predicting student performance in course by using data mining techniques in the proposed system, to identify the factors that affect the students' performance in course "TMC1013 System Analysis and Design", to assist lecturers in keeping track of the students' progress throughout the semester. The limitation of the system was that there was a constraint on resources used and time. Also one of the major limitations of the system was that inflexible rules were implemented.

4. PROPOSED IDEA

The Proposed Idea for our website is that each student would have a unique profile on the website that would be accessible to both teachers and parents. This profile would contain information about the student's academic performance, extracurricular activities, attendance records, and behavioral attributes. The website would facilitate 360-degree performance evaluation of students, where teachers and parents can provide feedback on different aspects of the student's growth, such as academic performance, social skills, creativity, etc. This feedback can be given in the form of ratings, comments, or feedback forms. Overall, the website would provide a comprehensive platform for teachers and parents to collaborate and track their student's growth.

4.1 Block diagram

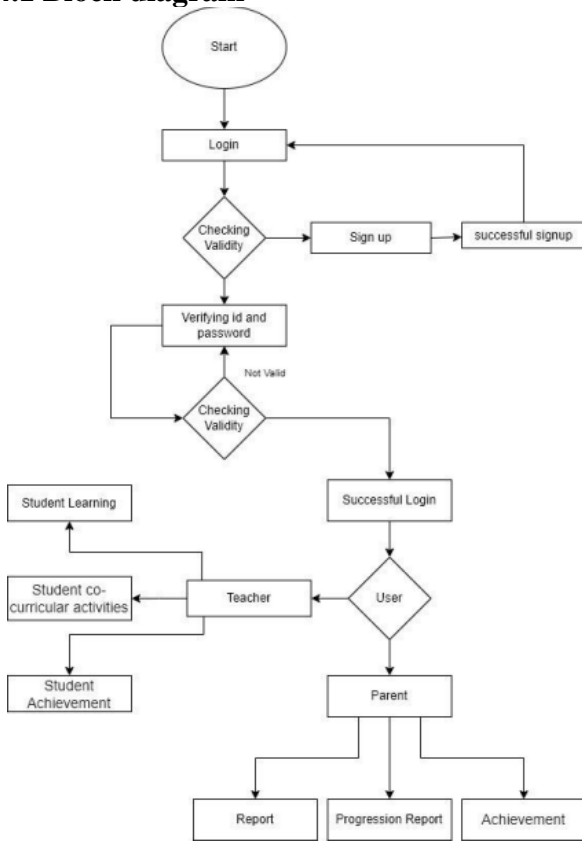


Fig No. 1: Block diagram

After a successful login, our website is split into two sections: one is for teachers and the other is for parents. The following features are available on the teacher dashboard: a teacher can check a student's profile, as well as add ratings and view students' performance by creating performance charts. Parents may access a lot of information about their child's academic success through the parents dashboard, and they can also submit comments and grades for students' personal growth from their perspective, allowing us to create charts showing a 360-degree view of students' entire progress.

4.2 Modular diagram

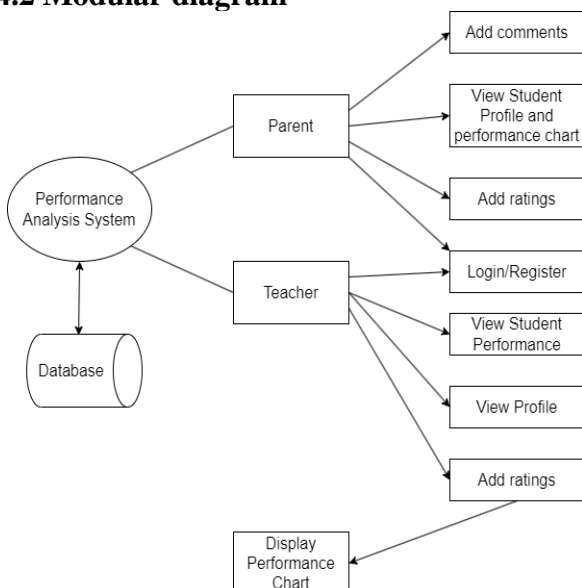


Fig No. 2: Modular diagram

In order to give the audience insightful information on what they are doing and performing, as well as to give users a better user experience. In order to create a unified data visualization chart for the 360 degree performance analysis system, a challenging process that combines data input from multiple parties is required. In this section of the article, we'll discuss each element of the modular diagram of our system and how it helps parents, teachers, and other stakeholders draw inferences about a child's performance.

1) Performance Analysis (Admin/System)-

An organization called admin is in charge of managing the system. The administrator can add logins for teachers or parents who can use the system and change the visualization charts or performance measures. This model component ensures that the system operates effectively and without glitches in order to deliver correct results.

2) Database-

The database records all pertinent information about the pupils, performance indicators, and system-provided features. The database entity provides the infrastructure needed for the system to run efficiently and quickly.

3) Parent-

In addition to the admin login, the system has two other logins, one of which is the parent login. The performance of their children and how their development is going at home can be noted by the parents, adding to the final evaluation chart. In complement to this, they have access to the student's profile and progress bar graphs.

4) Teacher-

The user with the second login will be the one who manages students' system profiles and grades them on their performance in class.

5) Add Comments-

In this section, users can write comments regarding a specific kid who is being watched in the text space.

6) Add Ratings-

The user has the option to mark performance indicators as ratings with varying points values.

7) Login/Register-

The Login/Register entity allows the user to sign up for the system and log in to see the profile and assessment charts. The login/register entity is crucial for ensuring that the system is secure and that only authorized users can access it.

8) View Profile -

This function allows the user to examine their profile, which contains all of their personal information, including name, gender, and for students, division and section.

9) Show Performance Chart-

The charts, which come in the shapes of a pie chart and a circle graph, show the child's development and achievement across a range of academic and extracurricular activities. This provides an overall assessment of the student's performance.

5. CONCLUSION

The project's main objective is to assist educational institutions in analyzing students' performance. It will facilitate effective and speedy functioning by assisting teachers in keeping current with student information. Because of this approach, parents will always be aware of the pupils' personality qualities and be able to guide them. The teachers can be monitored by the

parents to make sure they are operating legally and within the confines of the school. Following this performance review, the students will be better able to identify their strengths and weaknesses and request the appropriate support.

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