Synopsis

Report on

"Evaluation of Academic Performance"

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Session: 2022-2023 (4th Semester)

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(March 2023)

ABSTRACT

The **"Evaluation of Academic Performance"** project aims to develop an online programme or website that will provide faculty with access to a platform where they can easily keep track of the grades that students receive on internal exams, assignments submitted by the students, and their attendance, in order to evaluate students' performance without the hassle of creating time-consuming spreadsheets. It makes life easier for the staff by consolidating all student data onto a single platform. This website will be useful for the students as well because they can monitor their activities.

It aids a teacher in creating the student's final report card based on how well the student performed on the factors mentioned above. Here, the teacher can identify the subject in which the student is underperforming so that he or she can force the student to study on that poor subject by giving him or her more coursework or classes.
It is built using React, Spring Boot, Figma, and MySQL.

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INTRODUCTION

The performance on tests given by universities or institutes is used to gauge a student's academic accomplishment. This system uses a logic-based performance evaluation method to assess students' academic performance. With this methodology, we take into account three factors that go towards assessing a student's ultimate academic performance: attendance, internal grades, and external grades. The fuzzy inference method has also been used to determine student performance for various input values, including student attendance and grades. It's vital to note that the proposed technique's goal is to strengthen the existing system by offering extra information rather than to replace the current traditional method of evaluation.

Students can easily look for project specifics, academic attendance data, and mark/percentage details with the use of this student performance analysis system. Students can use the project title, the guide name, or the academic year to look for projects. The teachers and HODs input all the information regarding the projects, as well as information regarding student attendance and grades. There are three modules in it: student, teacher, and HOD. Students are required to register, log in, fill out their academic information, view projects, check their attendance, and view their grades in a graphed format, along with events and notices. Teachers have access to a secure login page where they may accept students, submit grades, upload attendance, add project details, view scheduled activities, and post notices. HOD can access their account to handle teachers' reports, events, see Attendance, and academic details and manage notice.

LITERARY REVIEW

The features of the existing system are including a user login creator to provide user interface, student performance analyzer, student development card, achieved credit, passing criteria card and wise student performance attribute card.

2.1 Web Based Student Information Management

The design and implementation of a comprehensive student information system and user interface is to replace the current paper records College Staff are able to directly access all aspects of a student's academic progress through a secure, online interface embedded in the college's website. The system utilizes user authentication, displaying only information necessary for an individual's duties. Additionally, each subsystem has authentication allowing authorized users to create or update information in that sub-system. All data is thoroughly reviewed and validated on the server before actual record alteration occurs.

In addition toa staff user interface, the system plans for student user interface, allowing users to access information and submit requests online thus reducing processing time. All data is stored securely on SQL servers managed by the college administrator and ensures highest possible level of security.The system features a complex logging system to track all users access and ensure conformity to data access guidelines and is expected to increase the efficiency of the college's record management thereby decreasing the work hours needed to access and deliver student records to users.

PROJECT OBJECTIVE

Providing the online interface for students, faculty etc. Increasing the efficiency of school record management. Decrease time required to access and deliver student records. To make the system more secure. Decrease time spent on non-value-added tasks.

3.1 Functional Requirements:

Student information management system aims to improve the efficiency of college information management, and the main function is managing and maintaining information. It will be ensured that the information entered is of the correct format.

3.2 Performance Requirements:

The proposed system that we are going to develop will be used as the chief performance system for helping the organization in managing the whole database of the student studying in the organization. Therefore, it is expected that the database would perform functionally all the requirements that are specified.

3.3 Safety Requirements:

The database may get crashed at any certain time due to virus or operating system failure. Therefore, it is required to take the database backup.

MODULE DESCRIPTION

Module framework adopted in this study is outlined in Figure 1.

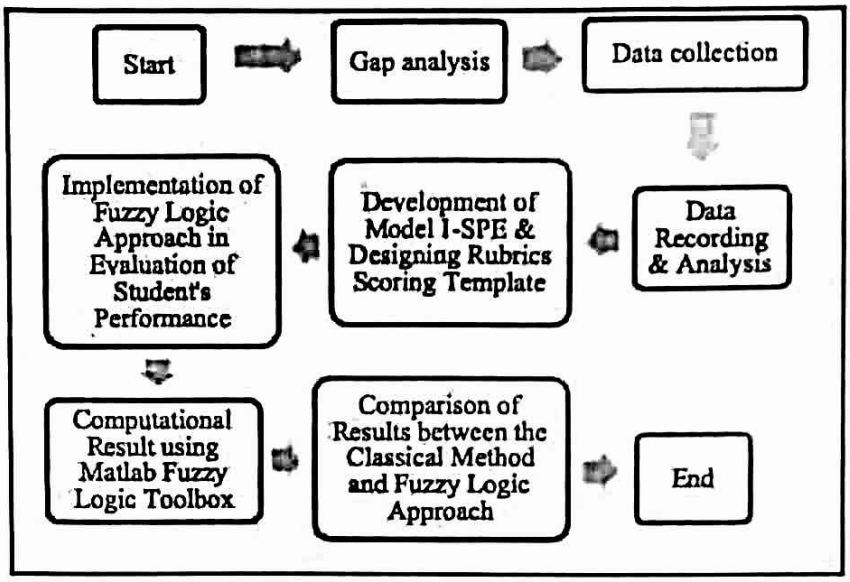


Fig. 1 Flow chart for the Module framework

This model were based on five selected attributes, which are leadership, communication, teamwork, discipline and CGPA. Figure 2 below shows the Rubric Scoring Template that is useful as a clear guideline to the evaluators. It is designed specifically to assist the evaluators in classifying the score input range for each criterion obtained by the respective candidates.

Attribute	Sub attribute	RATING (1-10)				
		1-2 POOR	3-4 UNSATISFACTORY	5-6 SATISFACTORY	7-8 VERY SATISFACTORY	9-10 OUTSTANDING
Leadership	Knowledge and skills in leadership	No clear evidence of knowledge and understanding skills in leadership	Able to demonstrate knowledge and understanding in leadership but require improvements	Able to demonstrate knowledge and understanding in leadership and require minor improvements	Able to demonstrate knowledge and understanding in leadership well	Very clear evidence of knowledge and understanding demonstrated in leadership
Teamwork	Foster good relationship	No clear evidence of ability to foster good relationship and work together effectively with other group members towards goal achievements	Able to foster relationship and work together with other group members towards goal achievement but with limited effect and require improvements	Able to foster relationship and work together with other group members towards goal achievement with some effect(s) and require minor improvements	Able to foster relationship and work together with other group members towards goal achievement	High ability to foster relationship and work together effectively with other group members towards goal achievement
	Group participation	Not able to collaborate, contribute and cooperate in group	Limited ability to collaborate, contribute and cooperate in group	Able to collaborate, contribute and cooperate in group	Able to collaborate, contribute and cooperate well in group	Able to collaborate, contribute and cooperate well in group
	Respect and accept opinions	Not able to respect and accept opinion of others that leads to conflicts	Limited respect and acceptance of others opinions in achievement group's objective	Able to respect and accept opinion of others in achieving group's objective	Able to well respect and accept opinion of others in achieving group's objective	Able to very well respect and accept opinion of others in achieving group's objective
Discipline	Practice of self-restraint and follow course of action	Not able to practice self-restraint and learning to follow the best course of action towards goal achievements	Limited ability to practice self-restraint and learning to follow the best course of action towards goal achievements	Able to practice self-restraint and learning to follow the best course of action towards goal achievement	Able to well practice self-restraint and learning to follow the best course of action towards goal achievement	Able to very well practice self-restraint and learning to follow the best course of action towards goal achievement
Communicati on	Clear delivery of ideas	Not able to deliver ideas clearly and require major improvement	Able to deliver ideas and require further improvements	Able to deliver ideas fairly clearly and require minor improvements	Able to deliver ideas clearly	Able to deliver ideas with great clarity
	Confident delivery of ideas	Not able to deliver ideas confidently	Able to deliver ideas with limited confidence and require further improvements	Able to deliver ideas fairly confidently and require minor improvements	Able to deliver ideas confidently	Able to deliver ideas with great confidence
	Effective and articulate delivery of ideas	Not able to deliver ideas effectively	Able to deliver ideas with limited effect and require further improvements	Able to deliver ideas fairly effectively and require minor improvements	Able to deliver ideas effectively and articulately	Ability to deliver ideas with great effect and articulate
	Understand and respond to question	Not able to understand and respond to a question	Able to understand and answer questions but not able to accurately answer the question	Able to understand and answer the questions satisfactorily	Able to response to questions well	Able to fully understand and respond to questions very well
	Adapt delivery to audience level	Not able to deliver appropriately to the audience level	Able to deliver ideas with limited appropriateness to the target audience and require further improvements	Able to deliver ideas appropriately to the target audience satisfactorily	Able to deliver ideas appropriately to the target audience well	Able to fully deliver ideas appropriately very well
CGPA	Academic achievement	0.00 - 1.99 POOR	2.00 - 2.49 UNSATISFACTORY	2.50 - 2.99 SATISFACTORY	3.00 - 3.49 VERY SATISFACTORY	3.5 - 4.00 OUTSTANDING

Fig. 2 Rubric scoring template for input value

PROJECT OUTCOME

The suggested system gives the student quick access to precise project and grade point data. Students may quickly and easily read all the material with only one click. The suggested system keeps an information database where all the data is kept. There is zero danger of data loss with this system. It is quite simple to add information and search for it, and it doesn't take much time or physical work. The system is made up of the following three major components and their supporting modules:

1. Dashboard
2. Academics
3. Attendance marks
4. Internal marks
5. Assignment
6. Final Report

1. Student

• Sign up: Students can sign up and get credentials.
• Login: Students can use their credentials to log in.
• Profiling and Academic Information: Students may enter their personal and academic information.
• See Projects: Students may look at the completed work.
• See Attendance & Academic Marks: Students have the option to view their attendance and grades as a graph.
• See Events: Students may view events currently taking place or upcoming events.
• See Notice: The notification is also available to students.

2. Teacher

• Login: Teachers can access the website by entering their login information.
• Approve Students: They are able to do this.
• Add Student Marks: Students' academic marks may also be added.
• Upload Attendance: Students' attendance can be uploaded.
Also, they can add project specifics.
• See Assigned Events: The assigned events are visible.
• View Notice: The notification may also be viewed by them.

3. HOD

• Login: The HOD may log in with their credentials.
• Managing Teachers: HOD has management capabilities.
• Manage Event: The HOD can assign students to events.
• See Attendance & Academic Information: The HOD can view the students' attendance and academic information.
• Control Notice: HOD has control over notice.

A login and password are issued to authorised administration, test section, and other faculty members so they can access the Student Performance Analysis System.

HARDWARE AND SOFTWARE REQUIREMENTS

Operating System: Microsoft Windows

Front End: React

UI/UX: Figma

Software Requirements:

- Windows 10/11 or equivalent
- React
- Spring Boot
- RDBMS (Back end): MySQL

Hardware Requirements:

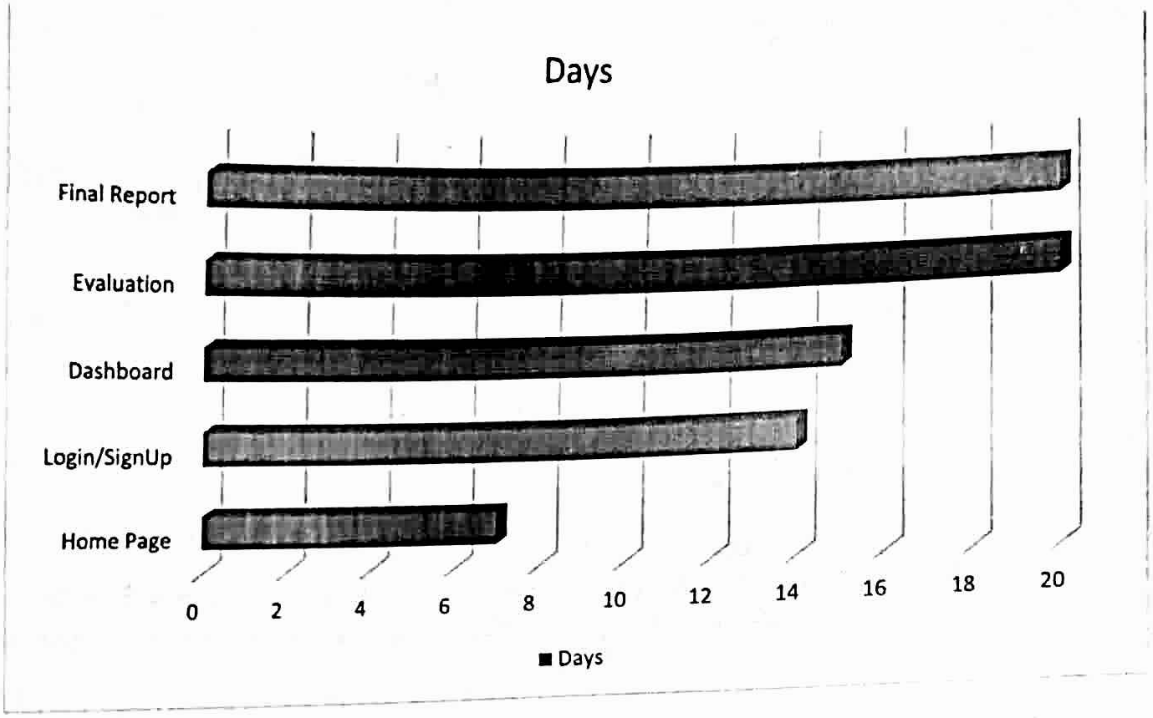
- Processor – Intel i3 5th generation or higher
- RAM – Minimum 4 GB, recommended 8 GB
- Disk space - Minimum 10 GB of free disk space
- Network Connectivity

CONCLUSION

When there are a variety of factors used in the evaluation, qualitative evaluation involving assessment is typically subjective, which can cause issues with opinion and make it difficult to determine which pupils do better. Also, compared to the current existing traditional method practises, it simplified the work of the assessors because they were not required to do the difficult and time-consuming operation.

In the end, the systematic system that is being offered is created expressly to guarantee fairness and transparency throughout the assessment of student performance. Hence, it is possible to avoid any unfavourable and unethical behaviour on the part of the evaluators, such as bias, favouritism, stereotypes, unfairness, and prejudice. By utilising a system that is not just reliant on human judgement, it is possible to reduce student dissatisfaction since they understand that the method of choosing the best student is fair and transparent.

PROPOSED TIME DURATION



REFERENCES

[1] Ch. Aswani Kumar; K. Sumangali," Performance evaluation of employees of an organization using formal cept analysis", International Conference on Pattern Recognition, Informatics and Medical Engineering (PRIME-2012)

[2] Shaomei Yang; Qian Zhu, "An Evaluation Model on Employee Performance Based on Improved BP Neural Network", 2008 4th International Conference on Wireless Communications, Networking and Mobile Computing.

[3] TANG Yu-fang, ZHANG Yong-sheng,,—Design and implementation of college student information management system based on the web servicesI. Natural Science Foundation of Shandong Province(Y2008G22), 978-1- 4244-3930-0/09 2009 IEEE.

[4] TANG Yu-fang, ZHANG Yong-sheng,,—Design and implementation of college student information management system based on the web servicesI. Natural Science Foundation of Shandong Province(Y2008G22), 978-1- 4244-3930-0/09 2009 IEEE.