

Student Result Analysis System

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Abstract -Result analysis is a tedious task for teachers as well as college staff. For students it is easy to check the result, it will simply enter their own roll no and see it, but for the faculty it is really difficult to check every student's result by entering their details manually one by one like roll no wise ect.. This can lead to many issues , which would directly affect the faculties ability to grade a student from the result. We have developed this system that will automatically parse data onto the database from an excel file, which will lessen the time consumption of data analysis. We have used php, my SQL and javascript. The staff will have login credentials to log in to the system , where they can see and manage the student's results. After the teacher logs into the system ,data will be fetched dynamically through the database. For here, parsing will be done using PHP Excel. It is an inbuilt library for php to fetch data from excel files over or within a network. With the help of a sorting algorithm, students' ranking can be found out and overall performance of the class can be analyzed. In order to analyze a students' result, key factors such as student name, roll number, have to be selected

Key Words: Result Analysis, Excel, mysql, php, js etc..

1. INTRODUCTION

In this new age the technology in our world has reached to an extent that it can be used to do day to day work with minimum manual effort. Therefore we are proposing an Online student result analysis system that aims to provide many benefits including proper routing and tracking of results, improved processing efficiency of the system, and increased productivity for both the staff and students for processing of results. It's a web based application which can be accessed from anywhere through a web browser. The faculty are able to see the individual candidate's results separately. This system helps to calculate results fast so it optimizes the manpower hence saving time and manual efforts. This system will also help the college management to take the appropriate actions to improve the quality of education and helps in improving the performance of students.

2. LITERATURE SURVEY

Over the years a lot of studies are done by many authors on the result analysis system. No of various techniques, algorithms have been used to build analysis systems. We

have referred to these research papers which we found relevant to our project.

The Authors Anurag Sharma, Nikhil Gupta, Anamika Tripathi, Monica Sehrawa in this paper the authors have proposed a tracking system which was built to keep track of the students overall academic performance and generate its report. So in this system, all the user should do is to upload the student's result in the PDF form and then the performance report of the student can be seen. In this system the HOD can also keep a track of the student via pictorial representation of overall result, subject as well as section wise.

The authors Prof. Sanjay Kadam, Bhavana Jadhav, Saylee Molawade, Saloni Patil in this paper aim to use data mining to develop a model which can derive the conclusion on students academic success. To construct a model for academic results of students, they need analyzing of data, graphical representation techniques and report generation. This helps to identify weak students and hence can be helped to score better grades.

The authors Dhawal P Atkare, Swapnil M. Waghade, Sameer A. Javed, Anand Shanker for this paper have used a manual method of collecting student results. The obtained results from this system are simple and optimized. An important help for teacher's staff to judge a particular performance in a particular subject and all the subjects must be expressed. Also the Performance of teachers of assorted subjects will be easily compared which is very useful for the Head of department and also for the staff.

The authors Ashwin Mehta, Jugal Patel, Aditya Mewada in this paper aimed to create an internet based system which performs student result analysis. The system takes a file of student results obtained by universities in excel sheet format as an input. This student data is then analyzed based on various aspects like marks , grade, Rank. This system will be designed in such a way that it can be later updated to accept different formats.

The authors Shubhangi Shankar Shinde, Dr. Bhatambrekar S.S, Dipali Mehers goal in this paper is to do analysis of student results as per the credit based system and analyze grade wise. This system uses Microsoft ASP.Net for developing this application. This application is helpful for storing student's information and overall results in the database and shows the student performance.

3. METHODOLOGY

For Result Analysis the user uploads the student result data in the form of an excel file, which is parsed into the database. We have used the SimpleExcel PHP library for parsing the data which is in excel format, the data is then stored in the database. Once the data is parsed into the database it can be displayed on the webpage for the faculty. Queries are run to find result analysis based on various parameters, using this the teachers can find top scoring students, students which are failing and passing various subjects, and subjects in which students are scoring first division i.e. more than 60%. For easy understanding and better user experience we have used google charts which displays the analysis of results in an easy to understand format. The user can download the student result in a pdf format, for this we have used FPDF class which allows us to generate PDF files with straight PHP.

PASSING											
ID	Admission_No	Student_Name	Roll_No	Department	Maths	Mechanics	ISE	Physics	Chemistry	Percentage	
1	2019PE0001	Abhinav Arora	1	IT	76	86	60	72	78	302	76.4
2	2019PE0070	Nagabh Acharya	2	IT	89	86	60	75	81	399	79.9
3	2019PE0074	Arpit Agarwal	3	IT	86	77	63	82	74	384	80.9
4	2019PE0002	Nahko Chaudhary	4	IT	95	90	63	75	80	354	79.0
5	2019PE0004	Tanvi Chavan	5	IT	82	78	72	75	68	376	75.2
6	2019PE0008	Mohar Dobade	6	IT	76	86	62	79	82	387	79.4
7	2019PE0009	Chaitan Chavan	7	IT	89	86	72	84	92	379	85
8	2019PE0008	Chaitan Kulkarni	8	IT	80	82	89	78	75	409	81.9
9	2019PE0003	Shruti Kulkarni	9	IT	92	86	79	85	90	434	86.9
10	2019PE0048	Tanvi Kulkarni	10	IT	71	78	76	80	88	373	74.9
11	2019PE0001	Nahko Kulkarni	11	IT	82	86	75	87	72	384	80.9

FAILING											
ID	Admission_No	Student_Name	Roll_No	Department	Maths	Mechanics	ISE	Physics	Chemistry	Percentage	
4	2019PE0003	Iqbal Bhatia	4	IT	52	59	62	39	71	283	56.6
6	2019PE0008	Satish Chandra	6	IT	29	39	63	67	75	203	50.6
10	2019PE0009	Sandeep Gokhale	10	IT	36	46	57	59	62	260	52.0
11	2019PE0002	Mohar Kulkarni	11	IT	36	45	51	55	60	259	51.9

Fig 3. Our system representing no of passing and failing students

Sem 01											
ID	Admission_No	Student_Name	Roll_No	Department	Maths	Mechanics	ISE	Physics	Chemistry	Percentage	
1	2019PE0001	Abhinav Arora	1	IT	76	86	60	72	78	302	76.4

Sem 02											
ID	Admission_No	Student_Name	Roll_No	Department	Maths	ISE	IPA	Physics	Chemistry	Percentage	
1	2019PE0001	Abhinav Arora	1	IT	49	55	63	67	70	304	60.8

Sem 03											
ID	Admission_No	Student_Name	Roll_No	Department	CSA	DBMS	PCE	LD	Maths	Percentage	
1	2019PE0001	Abhinav Arora	1	IT	76	86	68	72	78	382	76.4

Sem 04											
ID	Admission_No	Student_Name	Roll_No	Department	CSA	CN	OS	AT	Maths	Percentage	
1	2019PE0001	Abhinav Arora	1	IT	76	86	88	72	68	372	74.4

Sem 05											
ID	Admission_No	Student_Name	Roll_No	Department	WEP	IP	ADBT	ECOM	OS	Percentage	
1	2019PE0001	Abhinav Arora	1	IT	58	68	68	72	78	364	72.8

Sem 06										
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Fig 4. Here one can view as well as download a student's result in pdf form.

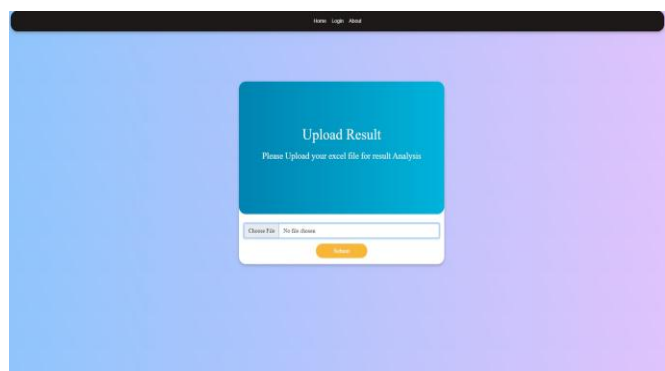


Fig 1. This is where the excel file is to be uploaded for analysis

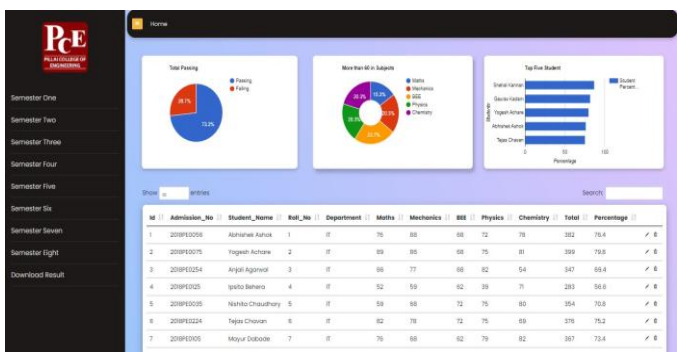


Fig 2. Display of the analysis in chart format for easy and better understanding

4. CONCLUSIONS

Our goal of building this system is achieved and difficulties are solved. The project is built in such a way that it is very user friendly. It helps the college staff in properly maintaining the students' data. This application only requires the user id and password to get access to the data. We have made sure that the analysis is displayed in a proper format. The results of the study show that our proposed system is very helpful to analyze student's results on behalf of their performance.

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