Student Dashboard Management

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Abstract: **Student Dashboard Management (SDM) introduces a system which is used to analyze the performance of a student throughout their academics. It is an online system for both TPO and Exam cell of the institute. This system is mainly based on the credit based grading system (CBSGS). During engineering studies, the students must pass the subjects before entering into the next grade. Thus proposed system is useful for storing student information and annual result in the database and shows the student performance. It is a resource that contains important information useful at different points in the academic year.**

This system can be accessed throughout the institute with proper login provided. The proposed system extract PDF file of mark sheet and stores the student's data into the database. The SDM system helps TPO and exam cell to get the student's academic report about backlog, live KT (keep terms) and when the student has cleared the number of KT (keep terms) and so on. And it also helps the students to retrieve their academic performance.

Keywords: **Student Dashboard Management, Training and Placement Cell, Student Result Analysis.**

1. Introduction

The SDM system can be used as an application for the Training and Placement Office (TPO) of the college to manage the student information with regards to placement. It provides the facility of maintaining the details of the students. It will lessen the paper work and utilize the maximum capability of the setup and institute as well as it will save time and money, which are spending in making reports and collecting data. Integration with the exam cell helps us retrieve the authentic student details and marks. This eliminates the choice of students filling their marks manually and then Exam cell verifying them row-by-row. The records provided by the students may be imprecise. This leads to inconsistency in data and misleading information. This entire integration is not present in the existing implemented system.

The marks of the students are added in the database and so student can also view the marks at whatever time they want. We will provide student with various options like viewing full batch score list, retrieve the data etc. In this software we can register as a user and can provide them with unique login ID and password. In our system, we have the provision for adding the details of the students. The technology is rapid, easy to use and easily store & display the academic report of the students.

2. Review of literature

Automated system for placements is an application to facilitate students in SIESGST to register and search for jobs.

The TPO to take effective actions on the web as follow-on from the information they have viewed. The proposed system aims at managing student information with regards to placement. This system is use to store information of all the students. CVs are categorized according to various streams. Various companies can access the information. Students can maintain their information and can update it. Notifications are sent to students about the companies. Students can access previous information about placement. Also the component is user friendly.

The entire project is built on spring framework and database schema with the help of MySQL Workbench.

A. Student

Student is a very important entity of the ASP system. Student acts as the main user. Therefore, all the data provided to the student should be accurate as well as consistent. Asp aims at providing transparency to student regarding all placement activities. In student module, student is provided with tabs mainly news and events, student profile, resume and training. News and events tab consists of news related to companies and training activities like seminars, pre-placement talks etc. News related to companies' leads to a page, which consists of information about the company, eligibility criteria with display of company logo. Any student who wishes to apply for the company can click on subscribe button provided at the end of the page. The system will then fetch information about the student to verify if the student is eligible to subscribe. If yes, a dialogue box with a message "successfully subscribed" appears and the student details are entered into the database that has all enrolled students. If no dialogue box with a message "not eligible" appears. News related to training can only be viewed and for convenience its details are provided in training tab. A student can view his/her details in student profile. The student can also upload his/her photo on the profile. A student can update his/her marks, number of live or dead kts and other details anytime.

B. Exam cell

Exam cell is also provided with five tabs mainly news and events, view database, resume, calendar and training. News and events can be added or removed by the Exam cell by simply clicking on add or remove option at the bottom of the page. On clicking add, Exam cell is directed to another page where the Exam cell can mention about the event and description including time, date and venue of the event. Exam cell can

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upload resume format as per the company requirement so that the student can just fill in the details in that particular file making the process easier and simpler.

C. Co-ordinator

Co-ordinator can access information only related to their respective branch. Placement reports of each branch are generated as per the number of students placed. The co-ordinator can then analyze the reports and take appropriate action like uploading more number of test papers, asking students for company preference etc. coordinator can also upload necessary documents that are required for training the students for interview and aptitude tests of various companies. A forum is also provided for students to post questions and answers can be provided by respective co-ordinators.

D. Asp Using Hibernate

Hibernate is an object-relational mapping framework for the Java language, providing a framework for mapping an object-oriented domain model to a traditional relational database. Hibernate solves object-relational impedance mismatch problems by replacing direct persistence-related database accesses with high-level object handling functions. Hibernates primary feature is mapping from Java classes to database tables (and from Java data types to SQL data types). Hibernate also provides data query and retrieval facilities. It generates SQL calls and relieves the developer from manual result set handling and object conversion. Applications using Hibernate are portable to supported SQL databases with little performance overhead Mvc model in spring framework has been used. Hibernate resolves the problem of mapping model to MySQL database. Hibernate allows creation of tables in spring itself with its respective table created in MySQL simultaneously. This eliminates the need to create tables separately and then again create a model in spring with respect to that particular table. Queries can be used in hibernate and retrieval of data is also simplified.

3. Design phase

The project aims at developing an automated system which can be used in TPO and Exam Cell. The technology is rapid, easy to use and easily generate, store & display the academic report of the students. Also the students who require an urgent copy of previous semester marks sheet and he/she has to make a whole round of application writing to receive copy of that. This motivated us so that he/she can get full record of their semester. The objective of the student dashboard is that it lets you visualize the academic report of the students and other TPO related data of the organization at a glance. In our system software, we have the condition for adding the details of the students. The marks of the students are added in the database so that students can also view the marks whenever they want.

A. Block diagram

The Block diagram shows the overall architecture of the system and also it gives a short perception about the implementation of the system. This architecture contains two actors: Exam cell and Student who can login and interact with the system through the internet. The data of the system can be stored or retrieved from the database server.

Fig. 1. Block diagram

B. Use case diagram

Use Case diagram represent the various function that active in the system. Every actor performing some functionality. In SDM system the Student can login with correct credential and view, update his information and Exam cell can perform his functions.
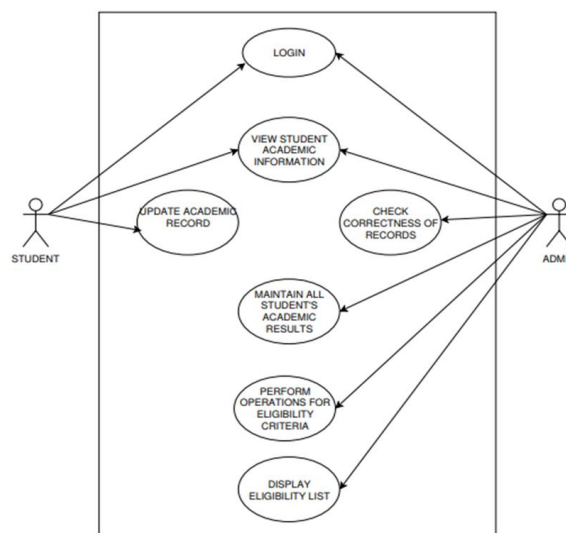

Fig. 2. Use case diagram

4. Implementation

It contains three login namely TPO, Student and Exam cell. TPO user can access the system by using their TPO_ID and the password which provided by the authorized person. The student whose enrollment no. is there in system database can only access the system. If the student whose enrollment no is not in the system database but they are using the system for the first time, then in such condition they have to first Register before logging to the system. While registering their Enrollment no is their user_ID and they have to select the password. Exam cell can view the student and faculty details. He/she can add or modify the Student details. He/she can also find the Student or

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the Faculty from the entire database. Exam cell also has the authority to view and update the report card.

Once the database is created, Exam cell is able to manage all the academic details of the students.

A. Student

Student is a very important entity of the SDM system. Student acts as the main user. Therefore, all the data provided by the student should be accurate as well as consistent. SDM aims at providing transparency to student regarding all placement activities. In our system the student requires providing basic information and has to upload the mark sheet. Gets it verified from the Exam cell. Once verification is done student waits for the Exam cell to perform eligibility criteria and provide a list to the students. Student can then apply for those companies that the student is Eligible for.

B. Exam cell

Exam cell is another most important entity of the SDM system. Exam cell verifies the personal details of the student and the mark sheet they upload. If the Exam cell notices any fault in the data provided by the student. The Exam cell will inform the student about it. Once the student rectifies it then the Exam cell provides a message to the student that the details are correct. Then the Exam cell moves on to perform the eligibility criteria and creates a list of students eligible to apply for a particular company. This list is stored in the database and displayed to the students.

C. TPO

Our System plans to be useful to the training and placement office as it will make the eligibility criteria easy. The TPO module has an authority to add student and Company to the system and provide their valid id and password. The main user of the admin module is TPO of the college. Company options display the details of the company name and website of that company. TPO will be able to send the notification to the student regarding the placement dates of various companies which the students can view on the dashboard.

5. Conclusion

This system helps to compute result fast so it optimizes the manpower. In today's world, smooth functioning of an institute cannot simply rely on paper work. Manual work of a department makes functioning of that department error prone and time consuming. The proposed system will help in eliminating all the drawbacks of the current online system and also automate most of the manual work the faculties used to conduct.

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