Online Mentoring System (An Online Mentor-Student System)

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Abstract

Mentoring is a conventional method of transferring knowledge and ideas from a confirmed professional in an society to an inexperienced member in the sector. Education sector has found mentoring as quite effective tool since long back and with the advent of new technologies, comes an idea of online mentoring, which is also referred to as e-mentoring. Instead of face-to-face meetings, Online Mentoring System (OMS) uses asynchronous, electronic communications to establish and support the relationship between mentor and the student using virtual mode. E-Mentoring uses computerized medium to transfer knowledge and skills from teacher to student. It basically focuses on student and faculty relationship. Online Mentoring System is a Client Server model, which acts as an Interface between Teacher and Student. OMS strives to reduce the work load of students in entering their details and at the same time enable the Mentors to assess their students more efficiently. E-Mentoring is fundamentally developed to improve the performance of students by assisting mentors to understand the problems of students more effectively and easily. In order to achieve this, a rating system is also included using which mentors can easily evaluate and sort the performance of the students and concentrate on those who need there guidance. Matching algorithm is used in this system.

Key Words - *Admin Login Mentor Login, Code Compiler, Student Login , Plagarism.*

I. INTRODUCTION

To Development and securing of excellence human resources under both the internal and external environmental changes are a key deciding factor of the national competitiveness.

However, due to the poor vocational training or career guidance services in college. The colleges have not been playing its role in the transition to the professional world for their students, who consequently cannot meet the demand from industry. Currently, most of colleges provide students with relevant information and vocational guidance via systems such as an on/off-line career information office or consultation center , and an internship. However, since a systematic connection between individual students is not made, its effect is utterly limited. Vocational training or career guidance service in the college is poor, And thus colleges cannot play its right role in the transition of college students to the professionals stage after graduation. Therefore, it is considered that college graduates generally cannot meets the demand from Industry.

II. LITERATURE REVIEW

It makes use of two tire architecture that acts as an interface between the teacher and the student. OMS is developed on a client-server model that has a user application on client side and the data source on the server side. This application is built under java runtime environment using complete object oriented programming techniques to handle the real world issues in the system. The total frontend is planned and developed with the help of J2EE architecture. The backend data is handled by MySQL and We used iReport Designer for generating the needful reports.

Now let us see and have a knowledge in detail how this system is designed and developed in detail. The following figure 3 gives the complete architecture of the system, which depicts all the three users i.e. admin, mentor as Teacher and student and also inter-relationship between them. Overall the system contains like one main admin under which many mentors and each mentor has set of students allocated by admin and at the same time the mentor is willingly taking the students for giving valuable encouraging for the improvement of the student in an academic institute. The architecture of E-Mentoring specified here is specific to the academic institution and if the mentoring is required in other institution or organization this architecture is not applied and has to be changed accordingly.

The user admin is similar to administrator of the system who manages the mentors as well as students. Admin only has the option to create login credentials to both the users and monitor over the actions performed by them. The whole system is controlled by the admin user. The better the process of mentoring goes on, the better results can be expected. The mentors also play a critical role by giving their right feedback to right students. The mentors are mediators between the admin users and the student user of the system. Mentors also provided with the login credentials by admin to login and check the

information of the students and do analysis of each and every student assigned to him for mentoring then give his valuable feedback. Student user has his login for viewing the feedback given by their mentors. All these credentials
and feedback information is maintained in the database server. There are many important processes that are used in developing this system. Here we are going to discuss about two processes out of them and going to understand how they really work 1) Creation of Student entities by the admin of the system 2) Adding remarks on the students by the mentor.

Advantages are:
1.It is easier method for efficient interaction between student and mentor.
2.The conventional method is time consuming and often prove inefficient. Hence this system manages time more effectively.
3.It bridges the gap between mentor and the student.
It encourages doubts and hence enhances the knowledge level of student.
4.Mentors are able to give assignments online, thereby providing an online platform.

III. PROPOSED METHODOLOGY

The objective of this methodology is to develop an Online Mentoring System to promote and encourage students to actively participate in the academic activities.
Our project replaces the conventional and inconvenient method by this system of clearing doubts in classes which involves the mentor and student to be physically present at the same time.
This context increases the importance of this project. This project bridges the existing gap between a mentor and students due to the time constraints.

A. User Classes and Characteristics:

In the proposed system, we intend to develop a web-based application providing the necessary services and online training to empower students.
Students are assigned frequencies automatically based on the marks obtained by them.
The registered teachers can post assignments for each grade and value them.
The registered students can post queries online and get their responses from the mentors.
The students should post their answers for the assignments given to them within the specified date.

Assumptions and Dependencies
Assumption: Here we assume the admin user have to know the information about each teacher and student ID.
Dependencies: When student makes registration then teacher doesn't need to check the information for the student.

B. Functional Requirements

1. System Feature :

In this proposed system teacher has to upload the lab assignments and students have write the code for that particular lab assignment in text section.

2. Performance

The performance of the system will depend upon the correct answers given by students on time. Also the plagiarism is used to check whether the code is copied or not. This also enhances the performance of system.

3. Capacity:

Capacity of the number of students is limited as it will has certain limit.

4. Availability:

Student has allowed to interact with mentor after the registration process . After this only student can be able to see the assignments and submit the codes.

5. Reliability

System is reliable to type the code and submit it to teachers section properly.

6. Security:

The system is secure because no student can directly interact with teacher without registration. As during registration, college ID is compulsory so no other students from different colleges can register.

Facilitating other Documentation :
The SRS forms the basis for checking for the plagiarism.

7. Validation:

It basically helps for the yearwise distribution of students. Means the second year student after getting in third year will be automatically get removed from that group.

C. Characteristics of a Software Requirement Specification:

1. Accuracy:

This is the first and foremost requirement. The development team will get nowhere if SRS which will be the basis of the process of software development, is not accurate.

2. Completeness

The software requirement specification should not be missing any of the requirements stated in the business requirements documentation that the user specified.

3. Prioritization of Requirements:

Software Requirement Specification should not simply be a wish list. The requirements should follow the order of priority and preference.

IV. CONCLUSION & FUTURE SCOPE

As stated before, this project enhances the communication between student and mentor there by improving the academic performances of the student. Each student is graded according to their Performances and they receive questions based on these grades. Their grades may improve or fall based on their performances. Hence varying levels of attention can be given to the students.

By this work, we conclude that e-mentoring in an academic institute can be developed and tremendous System which is easily accessible to parents as well as the mentors and students. Hence it will allow the mentors to dedicate more time whenever they wish and can give much precise feedback that will give proper guidance and right solution to the problems of students. The primary focus of this entire work is heart felt pain for the student life and to reduce suicide attempts made by students due to academic stress or other problems.

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