SECURABLE VIRTUAL STUDENT'S FEEDBACK SYSTEM TO PREVENT THE UNETHICAL COMMENTS

Rakesh Kumar Yadav[1], Aayushi Bisaria[2] , Neelesh Oli[3]
[1] Department of Computer Science & Engg., Ajay Kumar Garg Engineering College Ghaziabad, India
[2] Department of Computer Science & Engg., SRM IST, NCR Campus Modinagar, Ghaziabad, India
[3] Department of Computer Science & Engg., SRM IST, NCR Campus Modinagar, Ghaziabad, India
[1] rkycse@gmail.com, [2] as8788@srmist.edu.in, [3] np7265@srmist.edu.in

Abstract—**The Student's Feedback System allows the students to give feedback for their faculties in a virtual manner. In this digital era, where everything is handled online, we have created this system so that students can give feedback by simply filling an online feedback form. Moreover, it is easy to manage large amounts of data and the system is more secure. Besides, we have included an offensive language detection that prevents the use of unethical languages in comments. Hence, the teachers can improve their teaching skills by examining the feedbacks and it saves the complex task of collecting, reviewing, and maintaining the feedbacks manually. This paper implements using various technologies in a real-life project and furthermore, it used the MD5 algorithm for securing the system.**

Keywords—**Feedback, Virtual, Language, Algorithm, Cloud**

I. INTRODUCTION

The Student's Feedback System allows the students to give feedback for their faculties in a virtual manner. In this digital era, where everything is handled online, we need this system in every college and school. Students can give feedback by going to the website and simply filling a feedback form. There are several advantages of the system in various aspects. Some perks of this system are that it does not require the physical presence of a student to give feedback. Earlier, a student needed to be present at the required spot for providing the feedback since he has to fill the form manually. Secondly, it is easy to manage feedbacks and records. Previously, it was really hectic to manage such a large number of paperwork and files manually. Obviously, the number of students in a college is way too large to be handled and hence it's really tough to look after each respective feedback from manually. Moreover, the physical data files can easily be tampered with and hence false feedbacks can be recorded. But, this is not possible in this system as we have secured login for every user no matter if it is a faculty or student.

Furthermore, we have tried to include an interesting feature which is offensive language detection (OLD). This feature basically prevents the use of any false language in the comments section. Students these days try to make use of false language therefore; we have included this feature to maintain discipline and decorum. Therefore, by collecting the feedbacks a report can be generated, and hence, the teachers can improve their teaching skills by examining the feedbacks. They will be able to know their weaker sections and can focus on them more. In this way, the system helps to improve the overall quality of teaching. This in turn affects the quality of knowledge among students and also the overall grade of the college. Being online software saves the complex task of collecting, reviewing, and maintaining the feedbacks manually. So, the college achieves all this with fewer efforts. This work implemented using following languages: PHP, bootstrap, JavaScript, HTML, CSS, and SQL in a real-life project. Furthermore, it uses the MD5 algorithm for securing the system. Besides, the system will be deployed under the secure environment of AWS services. Hence, we ensure safety in every possible way. The paper will divulge further information about the work deeply.

II. RELATED WORK

The earlier system of feedback which uses pen and paper is really hectic to deal with. It is nearly impossible to collect, maintain, and generate reports of such a large number of students manually. The manual system is a very time-consuming task and takes many efforts. Furthermore, the feedback forms can easily be lost, mishandled, or tampered with as there is no proper security. It has quite a lot of disadvantages which in turn resulted in the need for an online student's feedback system. Rajvee Patel et al. [1] said about their project that the 'Feedback management System' is for taking care of the institutional and educational practices and processes. Moreover, it is proposed to deal with the concerns of the students regarding the knowledge they are receiving through the institute. Phani Rama Prasad et al. [2] proposed a similar paper called the Online Student Feedback System. The system generates automatic feedback which helps to give the lecturers proper feedback. Nikhil H.M. et al. [3],

also made the Student Feedback System so that the feedback generation can be effortless and less time taking. Sivasankari S. et al. [4], developed the Online Student Feedback Analysis System (OSFAS). It generates automatic feedback about the faculties. Moreover, it collects the feedback using various categories and comments such as good, interesting, etc. For any educational institution, it is essential to maintain a link between the teachers and the students. In this way, the feedback of the students can help teachers to improve their teaching skills and performance [5]. This system of online feedback is efficient enough to store and maintain a large amount of data. Moreover, it is secure as everyone has an authorized account [6-12].

II. EXISTING SYSTEM

Currently, the students have to give feedback manually through pen and paper. Hence, it is difficult to collect and maintain so many feedbacks. Also, it is difficult to analyze the report of each teacher individually. Collecting the feedback and analyzing them manually is a very time-consuming task. It is not possible to collect feedbacks manually based on various numbers of parameters as it will require extra effort and time which further increases the workload. As there is no proper security anyone can tamper with the feedback papers and change the information. Moreover, it is difficult to keep the information confidential. Besides, the manual system there are online systems too developed for the purpose of collecting student's feedback. Various systems followed a similar approach as our system. But, we have tried to overcome some demerits of the previous systems. Some of them were lacking proper authorization which leads to security issues. While certain others do not have the proper number of parameters to analyze the teacher's efficiency. Moreover, students tend to make use of foul language in the comments section which is disrespectful and there is no measure in the systems to detect or remove it.

IV. PROPOSED SYSTEM DESIGN

Students can give feedback online from anywhere. There is no need for their physical presence. The system can efficiently record and maintain the database of all the feedbacks, students, and faculties. It includes an offensive language detection feature that allows checking the use of any false language in the comments section of the feedback form. We can easily activate or deactivate a faculty as per the need. There is a separate rating for each different parameter like teaching efficiency, syllabus completion, etc. There is a proper login and authorization for each user. Therefore, no one can tamper with the feedbacks, and hence security is assured. Moreover, the system is deployed on the AWS server which ensures further security. Therefore, the overall objective is to reduce the burden of collecting, maintaining, and analyzing the feedbacks with a more secure and handy system. In fig.1 shows the architecture of proposed system.
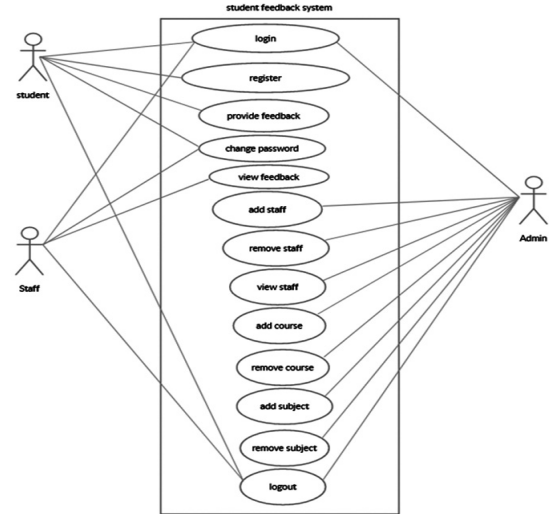

Fig. 1: System Design of Proposed System

A. Brief Description of System Design:

Three basic modules are implemented in the system. They are as follows:

Admin's Module: Admin can view all the feedback. He can view which student has given what feedback to a particular faculty. He can delete, add or modify other features of the system. He can also activate or deactivate a faculty or student as per the need. Moreover, he can update the format of report generation. Besides, he can view the average overall feedback and draw conclusions and reports from it.

Student's Module: This module is used by the students. One can give feedbacks through his profile. Also, he can update the profile and change passwords.

Faculty's Module: In this module the teacher can view his feedbacks given by the students. He can see the different scores/rating given on each parameter separately. He can view the feedbacks of all the students. But, he cannot see the feedbacks for other faculties. Also, he can update his profile and password.

B. Implementation of MD5 in Proposed System:

We will now read how the MD5 is implemented in our system and what is the advantage and use. The points are as follows:
- MD5 algorithm is basically used in this system for password privacy.
- The system contains very essential and delicate information therefore, it is quite necessary to protect it.
- The password is saved in encrypted form during the registration.
- Even during the login the password is verified in encrypted form.
- Not even the admin can see the password.
- Hence, a better password protection is provided in the system.

V. IMPLEMENTATION AND RESULTS

Here, we have implemented the features and properties described above. Let us look at their implementation and evaluation one by one. As shown in fig. 2, this is the front-end of the website. On opening the website the user will see this page. Further, he can perform the other tasks by clicking on the options on the page.
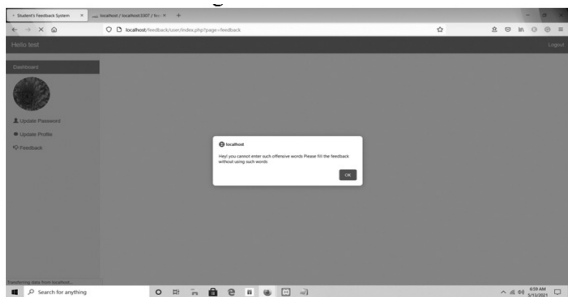

Fig.2: Front-End

Fig.3: Offensive Language Detection gives warning

A. Offensive Language Detection (OLD): The detector catches any false words in the comments with proper accuracy. As shown in above mentioned fig.3, the user tries to enter a bad word and when he submits the form the system gives warning (as shown in fig. 8) and returns to the feedback page.

B. Report Generation: The admin is able to view all the feedback of students for all the faculties effortlessly. As shown in fig. 4, all the details of feedback are shown in the admin's profile.

Fig.4: Report Generation data

VI. OVERALL COMPARISON

In this section, we would like to display the comparisons on how our system is different from the existing system. We have shown the comparison from both manual as well as the online system. Table 1, shows how our system is different from the existing online systems.

VIII. CONCLUSION AND FUTURE SCOPE

Thus, the motive of the system is to enhance the value of education. In today's era where education is a basic necessity, it is very important to value the quality of knowledge among the students and learners. Hence, this is a small effort to implement the idea. The system is very handy and can be used in various ways in any type of the educational institute. Moreover, the feedback form can be changed as per the necessity of the institution. It is a very secure and efficient way that collects feedback and helps to generate reports according to the average ratings, with much less time and effort.

The project is flexible enough to make constructive adjustments to the advancements without changing the existing structure. It may be possible to modify the inquiry in the future and insert fresh understudy names and personnel via the web. Additionally, it is designed to run the program on several other portable platforms, such as iOS and Windows. This represents the project's potential scope. The screen layout may

TABLE 1: COMPARISON BETWEEN EXISTING ONLINE AND PROPOSED SYSTEM

S. No.	Characteristics	Existing Online System	Proposed System
1	Login and Authorization	Login and authorization & Many systems are devoid of a proper login system which is a threat to security.	Our system is properly secured through authorization and every user has a proper account.
2	Average Rating	The system proposes only the facility of feedback collection.	Our system calculates an average feedback rating for each faculty.
3	Password Encryption	The person having access to database can see the passwords of each user which can impose a security threat.	Even the admins cannot see the passwords as they are secured with md5 encryption.
4	Detection of false language	Children sometimes use false language which ruins the decorum and disrespect the faculties.	Our system has an offensive language detector which avoids the use of any false language.

be improved much further. Additionally, additional feedback forms can be included to help you more easily identify the finer points of criticism. For the venture to be easier to use, more options may also be provided.

REFERENCES

[1] R. Patel, O. Agrawal, and Y. Gangani, "College Feedback System", International Research Journal of Engineering and Technology, Volume: 05 Issue: 01, pp. 1351 – 1353, 2018.

[2] P. Rama Prasad, C. Sailatha, and V. Gangapratima, "College Student Feedback System", International Journal For Technological Research In Engineering, Vol. 4, Issue 9, pp. 1686 – 1688, 2017.

[3] H. Nikhil, S. kumar, S. Shruti Basapur, and R. Vinil Shah, "Design and Implementation of Student Feedback System at Education System", International Journal ofEngineering Research in Computer Science and Engineering, Vol 5, Issue 4, pp. 563 – 565, 2018.

[4] S. Sivasankari, P. S.Srimathi., S. Ramya, and G. Fathima, "Online Feedback System for Educational Institutions for Better Evaluation of Faculty's Performance Using Semantic Web (SW) Technology", International Journal of Innovative Research in Science, Engineering and Technology, Volume 5, Special Issue 2, pp. 275 – 279, 2016 .

[5] H.Khanna, S. Panigraha, D. Madeira, and S. Shaikh, "Semantic based Automated Feedback System", Under Graduate project report 2013–14, Don Bosco Institute of Technology.

[6] M. Tarare1, M.Manwani, A. Paidlewar, S. Maturkar, and P. Chaudhari, "Feedback Management System for Evaluating And Generating Monthly Report", International Journal of Emerging Technology and Advanced Engineering, Vol 4, Issue 3, March 2014.

[7] M. Oloyede, I. A. Sikiru, Maryam A. Brimmo, N. Balogun, and A. Sanni, "Development of A Web-based Feedback System for Academic Staff Assessment", International Journal of Research in Engineering and Technology, Vol 9, Issue 6, pp. 1544 – 1551, 2020.

[8] R. Abu Kassim, J. Johari, M. Rahim, and N. Buniyamin, "Lecturers' perspective of student online feedback system: A case study", Engineering Education, 9th IEEE Int. Conf. on, pp. 163-168, 2017.

[9] Sherwan,:https://www.researchgate.net/publication/338517787_student_feedback_system, 2020.

[10] Tarare, M., Manwani, M., Paidlewar, A., Maturkar, S., Chaudhari, P., and Shiral, J., "Feedback management system for evaluating and generating monthly report," International Journal of Emerging Technology and Advanced Engineering, 4(3), 519–522, 2014.

[11] Rekha Baghel, 2Tarushi Khanna, et al., "Malicious URl Detection", GLIMPSE - Journal of Computer Science • Vol. 2(2), pp.19-24, July-December 2023,

[12] P. K. Adhikar, "Message Security Using PGP with Two Stage Steganography," GLIMPSE - Journal of Computer Science • Vol. 1(2), pp.14-18, July-December 2023.

ABOUT THE AUTHOR

Dr. Rakesh Kumar Yadav, received Doctor of Philosophy (Ph.D) degree in CSE from SRM Institute of Science & Technology, Chennai, currently working as Associate Professor in CSE department at AKGEC, Ghaziabad.
He received M.E., Degree in CSE from NITTTR, Chandigarh and the B.E., degree in CSE from Dr. KNMIET, Modinagar, Gzb. He has more than 17 years teaching experience in the field of CSE Dept. He has published more than 40 research papers in SCI, Scopus journals & conferences. His fields of interest are WSNs, MANET & IOT. He is a member of various professional societies are: ISTE, CSI, IACSIT, and IAENG etc.

Aayushi Bisaria, received B'Tech degree in the department of CSE from SRM Institute of Science and Technology, NCR Campus Modinagar, Ghaziabad. Currently employed by a reputable international firm as a Quality Engineering Analyst at Accenture.

Neelish Oli, received B'Tech degree in the department of CSE from SRM Institute of Science and Technology, NCR Campus Modinagar, Ghaziabad. Currently working as Associate Consultant at Capgemini.