Scientific Journal of Impact Factor (SJIF): 4.72

e-ISSN (O): 2348-4470
p-ISSN (P): 2348-6406

International Journal of Advance Engineering and Research Development

Volume 5, Issue 01, January -2018

FACULTY FEEDBACK MANAGEMENT SYSTEM

Shakeel Ahmad Dar

IT Cell Incharge,J&K State Board of Technical Education

Abstract:- *For efficient and quality improvement of an educational institute, feedback plays a key role in it.With a proper feedback mechanism in place, the growth rate of an institute shows an upward movement. The feedback mechanism helps in catering the weaknesses and further strengthening the strengths. The SWOT Analysis of an institute can be done by ensuring a strong feedback system is in place. For a large Institute, it is impossible to manually manage a proper feedback system, hence the need for an automated Feedback Mechanism System.*

Keywords: *Database Design; Interface Development; PHP-MySQL; Feedback Management System.*

Introduction

In today's era, the teacher-student relations in any educational institute play a critical role in the development of the student in particular and the institute in general. To determine the capabilities of students, students are being evaluated by the process of well-defined examination systems. At the same, for determining the capabilities of teachers, a feedback system is required to be kept in place. Feedback mechanism system ensures a detailed analysis of the performance of the teacher's w.r.t the various parameters. The feedback system provides capabilities for selecting a particular course for feedback and then the reports are being generated by the admin. It provides a proper feedback to the concerned teachers and hence can result in good results as the concerned would then work on their weaker points as the same would be reflected from their individual feedback report. The existing manual system for the same would take a lot of time for analyzing the performance and the manual processes are susceptible to errors. The students are being given a proper login and the one who gives the feedback is not stored but only the feedback is being stored. This ensures a fair feedback to the concerned faculty involved. Every time a feedback is given, a counter is stored in the database which gives the information about the number of students who have given feedback and the same counter is used to determine the average performance analysis. The aim of the project is to reduce the time for getting feedback data and provide an in depth analysis about the performance. The system so developed helps in making the decision processes and the selection processes much more effective.

Questionnaires are of primary importance in any feedback mechanism system and in this project, a questionnaire of (thirteen)13 questions is prepared on the basis of which students give feedback on a scale of 1 to 5, with 1 being the poor and 5 being the excellent. The thirteen questions of the Questionnaire are enumerated as below:

1. *Stating Objectives clearly in the beginning of the class.*
2. *Giving Proper Examples and Applications.*
3. *Use of Teaching Aids*
4. *Way of clearing doubts*
5. *Teaching methodology*
6. *Way of putting questions.*
7. *Punctuality.*
8. *Audibility and clarity of voice.*
9. *Command over the subject.*
10. *Control over the class.*
11. *Interaction with Students.*
12. *Completion of theory Syllabus.*
13. *Completion of Practical Syllabus*

For maximizing the benefits of the system, students are being acquainted with the system, and the way results are getting generated and published and the impact of results in the overall quality of the system.

System Implementation

The Feedback Management System has been developed on the concept of 3-tier Architecture. The three levels have been a user interface, the web server and the database server.

Tier-I: User Interfaces

The interfaces have been developed for two(2) types of users, the admin user and the student user and each user has been provided a link for login as shown in Figure-1. Figure-2 shows the login interface for administrator while Figure-3 depicts the interface for student. Student after logging into the system can provide the feedback against the thirteen questions through the interface as shown in Figure-4 and consequently the admin can check the results as shown in Figure-5 in the interface provided to him. All the interfaces have been developed in Html and for styling and scripting , JavaScript and css have been extensively used.

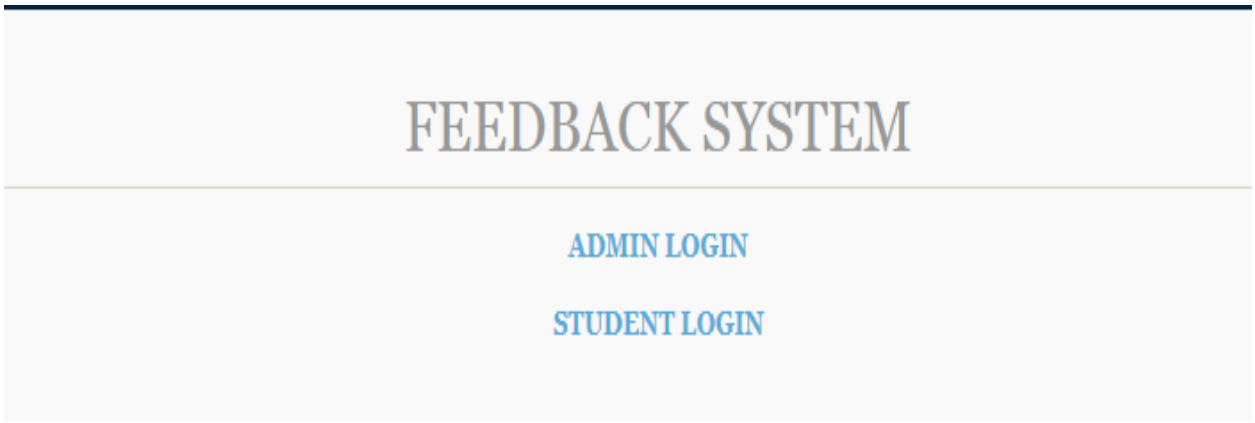

Fig.1: Common Interface

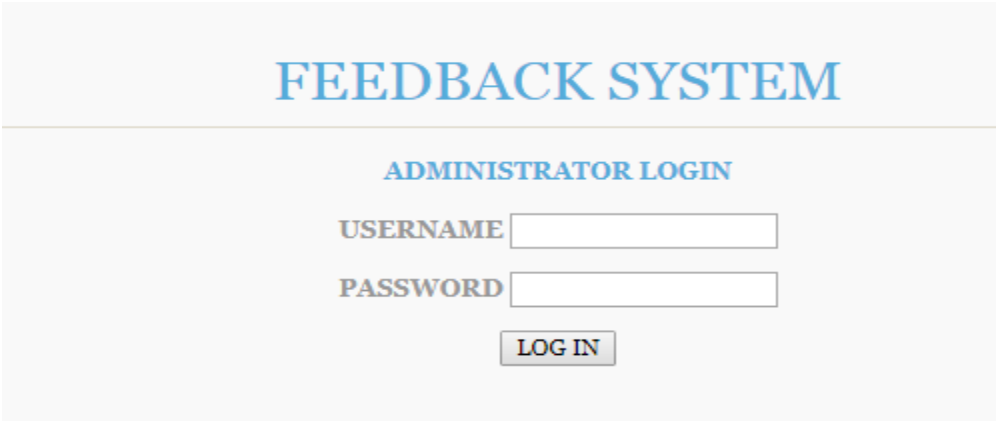

Fig.2: Admin LogIn

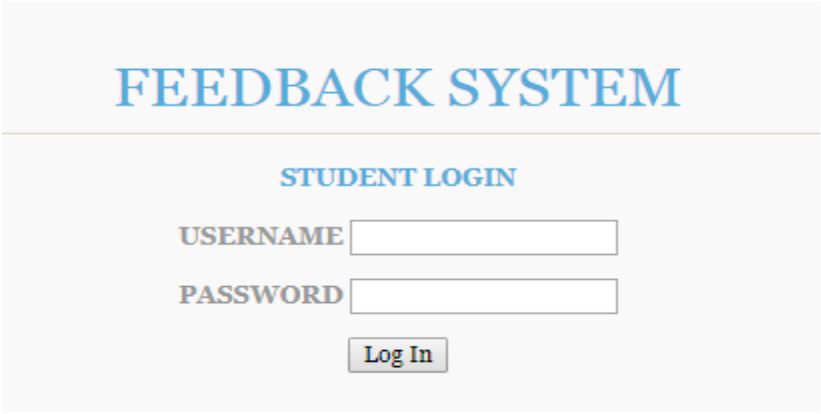

Fig.3: Student LogIn

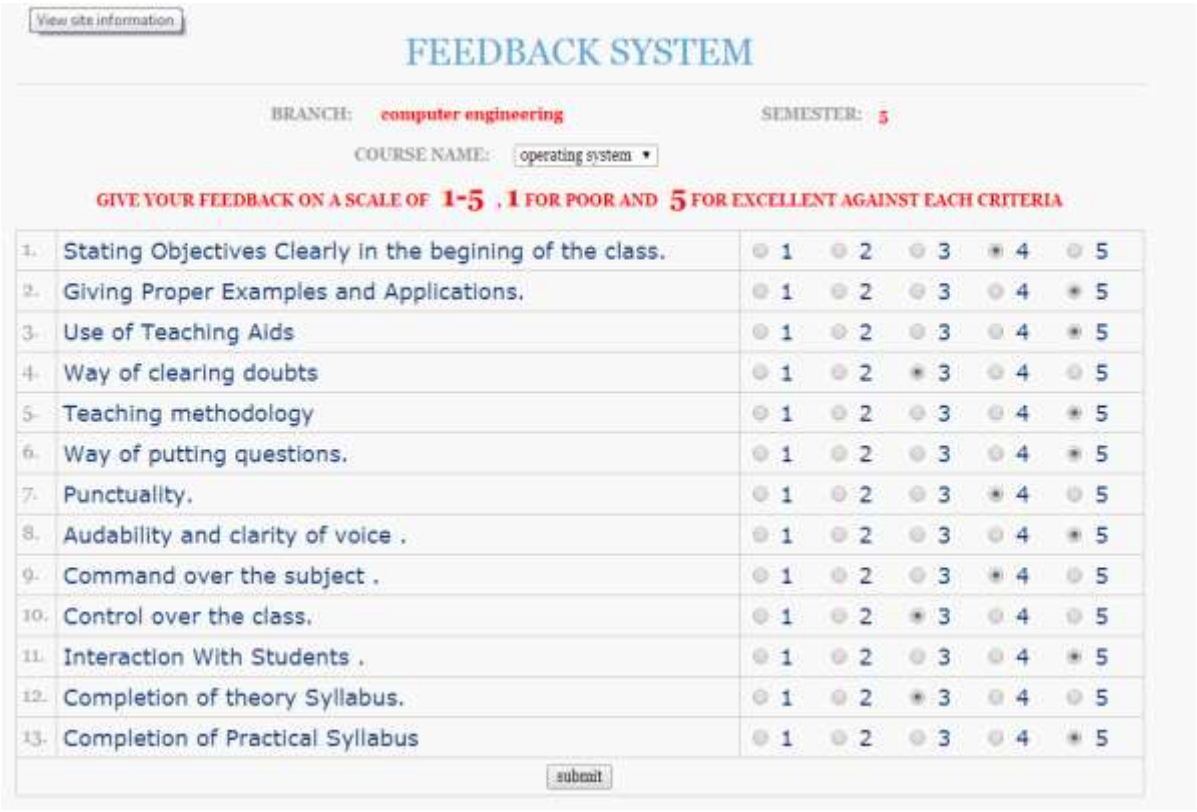

Fig.4: Interface for Giving Feedback on various parameters.

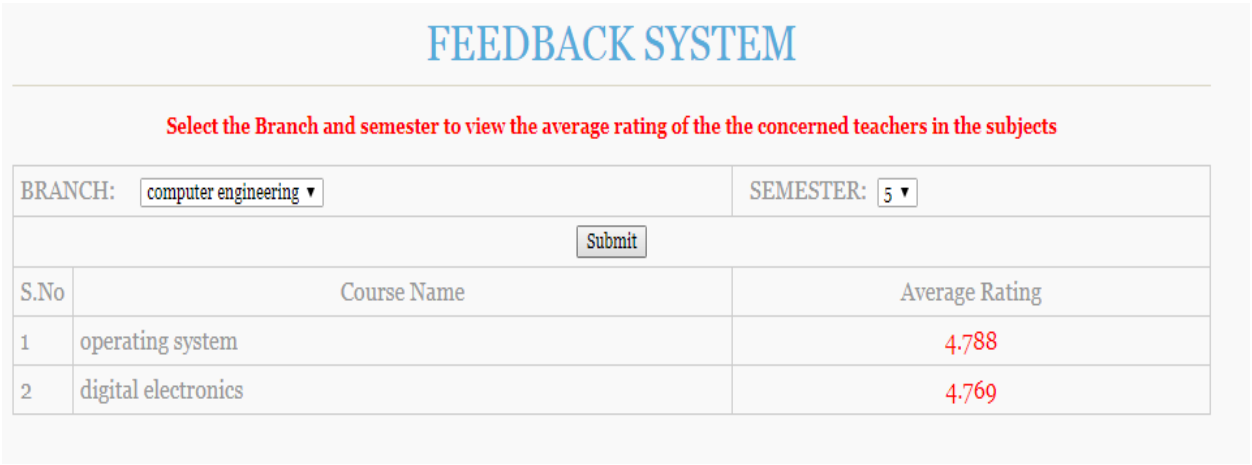

Fig.5: Interface of admin to view the result of the feedback.

Tier-II: Web Server (Scripting):

The entire datahandling at the server has been done through PHP. There are various handlers that have been developed for the successful implementation. MySQL queries are embedded in php for communication with the database server.

a) LogIn: The Login handler checks the authentication of the users and the passwords have been stored in the database using hashing functions for further strengthening the security.
b) User Count Handler: Every time a student gives a feedback, the user count is updated to get the information regarding the number of users who have given feedback.

c) Data Insertion Handler: This handler is used to insert the feedback data in the database.

$sql= " INSERT INTO `rating` (`user_number`, `course_code`, `q1_score`, `q2_score`, `q3_score`, `q4_score`, `q5_score`, `q6_score`, `q7_score`, `q8_score`, `q9_score`, `q10_score`, `q11_score`, `q12_score`, `q13_score`)

VALUES ('$user_number', '$course_code', '$q1', '$q2', '$q3', '$q4', '$q5', '$q6', '$q7', '$q8', '$q9', '$q10', '$q11', '$q12', '$q13') ";

d) Data generation Handler: This handler is used to analyses the data submitted by the users.

Tier-III: Database

For database development, the relational model of database has been used in the feedback system and same has been developed is MySQL. The ER-Model of the database system is as shown in Figure-6.

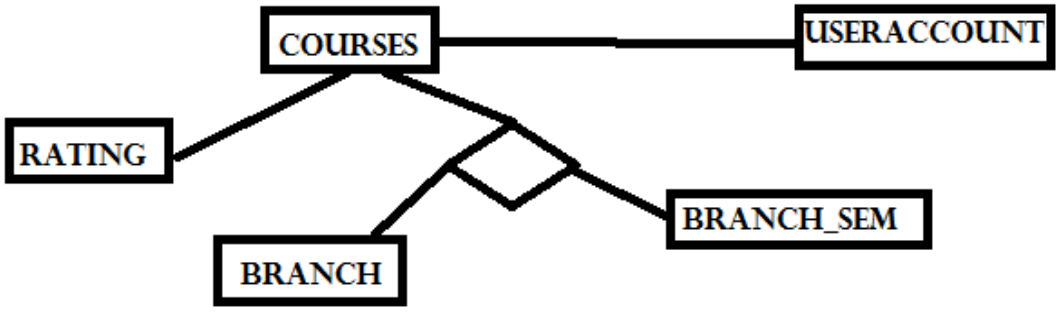

Fig.6: ER Model

The various Entities used in the model are

a) Courses (for storing the information about the various subjects being taught at the institution)
b) Rating, the entity used to store the actual rating points for each question in the questionnaire.
c) User-account, the entity used to store the log in details.
d) Branch & Branch-Sem: It is used to store the data related to branches.

Conclusion

The aim of the study was to improve the quality of teaching by introducing students' feedback as a teachers' evaluation system in polytechnic colleges of Jammu and Kashmir. Students' feedback is an effective tool for teachers' evaluation resulting in faculty development. In a short duration the factors and processes that contribute to an effective feedback system, paying particular attention to how the system affects early career teachers.

References

[1] M. Tarare1, M.Manwani2, A. Paidlewar3, S. Maturkar4, P. Chaudhari5, J. V. Shiral6," Feedback Management System for Evaluating And Generating Monthly Report", International Journal of Emerging Technology and Advanced Engineering, Volume 4, Issue 3, March 2014.
[2] J. Hatie, H. Timperley, "The power of feedback", J. Review of Educational Research, 87(1), pp. 81-112, 2007
[3] http://www.slideshare.net/akshaysurve53/student-feedback-system
[4] https://en.wikipedia.org/wiki/Student_information_system
[5] "Judy Donovan", "E. Mader", "John Shinsky", Ph.D. Grand Valley State University," Journal of Interactive Online Learning" Volume 5, Number 3, Winter 2006.

