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## **Grading and Ranking System**

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### **ABSTRACT**

*The proper organization and management of documents as well as their accessibility have been an ongoing challenge in grading and ranking system. This study designed and developed a Grading and Ranking System it specifically examined the quality of the developed software based on McCall's software quality Model. Based on the researcher's interview with the faculty, they said that the management of the grading system needs a lot of time, effort, and resources. They felt hard to access them excel to aid this problem, the researchers created a grading system and ranking. In terms of generating reports, the system was rated with a Grand Mean four-point sixty-one (4.61) which was interpreted as Very Good. In terms of the level of the quality developed system, it was rated with an Overall Mean of two-point nine (2.9), which was interpreted as Average. The level of the System Acceptability based on, the ISO/IEC 25010 Model of Software Quality in Use. The system determines the quality of the developed software was rated Very Good with a Mean of Four Point forty (4.40) this system is effective in such tasks needed by the grading system result.*

**KEYWORDS:** Calculations, Award, Education, School, Grading.

### **INTRODUCTION**

The review, of College of Cambridge, (Pupils Reviewing Framework, 2011, p. 113) The combination of comprehensive data administration for school. The combination of comprehensive data administration for school and pupils reviewing frameworks user's direct will advantage from this user's guide. The direct guide contains informational for actualizing the pupils reviewing framework, entering pupils' grades, calculating aggregate review point, midpoint, and keeping up understudy transcript.

College of Technology and Innovation ASU Polytechnic Campus. (Song, 2010, pp. 1-14) The Student Grading System (SGS) has been implemented on ASP.NET framework with PostgreSQL server, that can provide interface for instructor to set up coursework such as assignment, project and exams, and the system provides grading criteria, scores and comments on graded work to each coursework submitted by a student.

The class system framework could be a framework that permits instructors to manipulate the system and submit grades. Instructor can get to a list of students to each lesson that they are instructing and perform standard school administration such as transmitting final grades, incomplete, failed data. This data is stored in the database. This data becomes part of student's records.

The College or the school of the institution maintains a staff of instructor and work forces as compared to its developing population. There are instructor dealing with as much as

distinctive subject, aside from being a class adviser and area facilitator. Most of the instructors handle different department levels.

Colleges use the software with the formulas of computing the process grades and including data records of both students and instructors and forward the softcopy to the registrar. The flow involves a lot of effort and by calculating and putting of information manually the procedures is prone to error in the software computing by using the manual way of computing and storing data in the software, being prone to error is possible and just by a single mistake, repeating the process may be required. Developing a Grading and Ranking system for the college would make the task of recording, storing and computing grades easier for the instructors. This will not only benefit the instructors of the school but will also advantage the students since of the enhancement in the exactness of calculations and in the proficiency and efficiency of the instructors.

The Grading and Ranking System have been created to supply the management of the records. The system gave offer assistance to preserve, and to retrieve records. The focus of this system is in to keep the records for the college and the process of moving data that is no longer actively used. This system is design to calculate the performance of the students and to evaluate then rank them for each performance.

The proposed Grading and Ranking System are responsible to improve the consistency and accuracy of grading system. It can to minimize the exactness of time in computing grades and rank of the student. The proposed Grading and Ranking System is a practice to calculate and to sort the grades of the student then keep what are considered to be the most important records of the department and to automate the existing system by the help of computerized equipment, satisfying their necessities, so that their important data/information can be put away for a longer period.

## MATERIALS AND METHOD

This study discussed the methods being used in this study. The researchers explained how relevant the data and information are gathered, analysed, and presented. It includes the Research Design Methodology, System Design and Methodology, and the Rapid Application Development Model, Requirement Specification, and Feasibilities studies. It also discussed the different charts and diagrams presented.

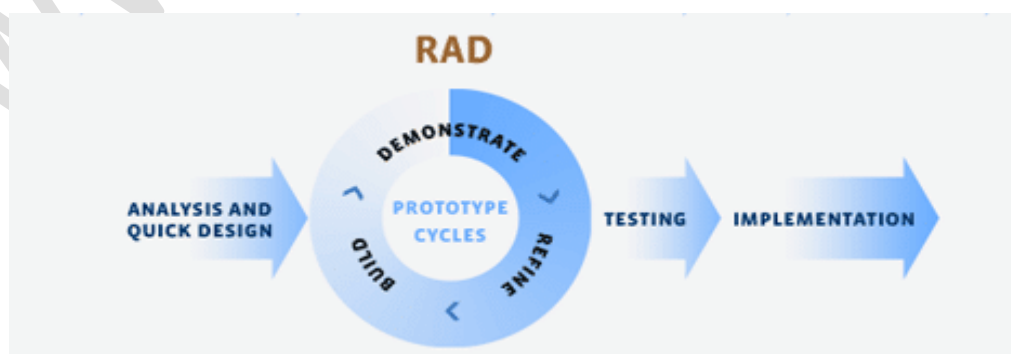


Figure 1. Source (Capterra)

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## **SYSTEM DESIGN/PROCEDURES**

### **Analysis and Quick Design**

This phase includes requirement gathering. The researcher conducted interview to their client so that they can find out their existing problem in their services and one of these is their leave processing. The researcher decided to come up on creating system that gave them a secured, quick and better way on manipulating records. It gave them paperless transactions in applying for leave and keeping the records of leave. In this phase also they planned on what to design for our system, or designing the system.

### **Build**

Before creating the design, the researchers conducted interview and gathered information needed for the development, in this process the researchers were built the system based on the design they had made in the first phase. It was also where the coding phase occurred in order for the users to create the interface and integrate it to the backend database.

### **Demonstrate**

In this phase the system was already demonstrated, to see if the result meets the desired outcome that the researchers had been created.

### **Refine**

After building and demonstrating the system, the researcher has polished the system to see if it has some bugs and redundancy, if it does have just go back to the building phase and rebuilt it again until it was fully polished.

### **Testing**

Before implementing the system, the researchers conducted a test to the system for the expert testing user acceptance Faculty and ICT Coordinator/Admin to know if there is still a need to be revised, if there are errors or bugs in the coding, if the users Interface is appropriate and is user-friendly, and to know if it holds the functionality well, by letting the client to use it.

### **Implementation**

Once the new system was developed and tested, it has to be implemented in the organization. This phase includes training the users, providing documentation, and conversation from any previous system to the new system. During this stage preparation of the developed system was being processed and system test was be executed. The researchers should do some training the place of their client to make sure the system was totally working. The researcher was refined the system by client's additional needs.

## **RESPONDENT**

The respondent of the study are the Dean of the College and Faculty, and also the staff of the College.

**Table 1. Population of the Study**

Respondents	No. of Respondents
Dean	1
Faculty	22
Staff	1
Total	24

The researcher used purposive sampling since the total respondent is twenty-four (24) was developed for the college.

### **Data gathering procedures**

The researchers interviewed one (1) of the faculty members in the College of Information Communication Technology and Engineering then after gathering. The researchers also interviewed for the Dean to discuss the research conducted for the college of CICTE and were permitted to gather the information that is the bases for our system. The CICTE/Staff clarified some information we had gathered during our research study. Then the researcher questioned her about the process of grading and ranking system and how it works.

PART I provided a real-time Grading and Ranking System.

PART II Generated reports like generating grade sheets, allowing faculty to record raw scores from different subject activities Generate grades based on encoded data, to rank students according to grade limit.

PART III determined the quality of the developed system based on McCall's Software Quality Model.

PART IV evaluated the system based on the five (5) characteristics from ISO 25010 Quality in Use: Effectiveness, Efficiency, Satisfaction, Safety, and Usability.

## **RESULTS AND DISCUSSION**

### **A. System Interface**

The lay-out or Graphical User Interface (GUI) was created to meet the project's requirements, as indicated below.

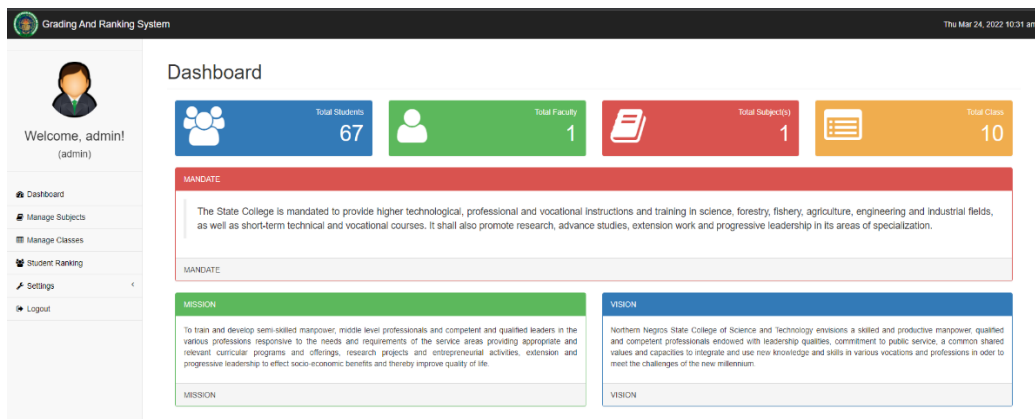


Fig. 2. Admin Dashboard.

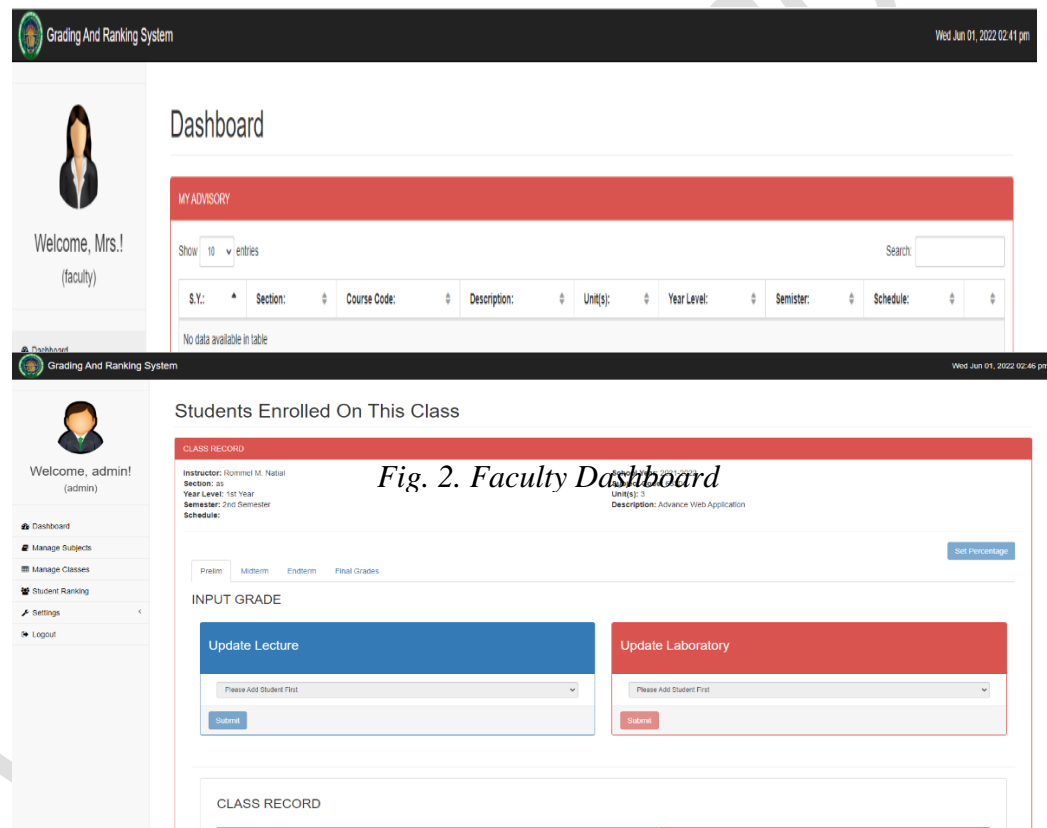


Fig. 2. Faculty Dashboard

Fig. 3. Student Home

## Evaluation Results

Based on detailed presentation, discussions, interpretations and analysis of research findings, the following summary was hereby presented:

**Table 2.** Five-point Likert Scale with the mean range interpretation

Mean Score	Verbal Interpretation
4.21 – 5.00	Excellent
3.41 – 4.20	Very Good
2.61 – 3.40	Good
1.81 – 2.60	Fair
1.00 – 1.80	Poor

1. The quality of the system in terms of providing a real-time grading and ranking using the Grading and Ranking System was rated with a Grand Mean of four-point forty-five (4.45) which was interpreted as Very Good.
2. In terms of generating reports, the system was rated with a Grand Mean of Four Point Sixty-One (4.61) which was interpreted as Very Good.
3. In terms of the level of the quality developed system, it was rated with an Overall Mean of Two Point Thirty-Nine (2.9), which is interpreted as Average
4. The level of the System Acceptability based on, the ISO/IEC 25010 Model of Software Quality in Use. The system determines the quality of the developed software was rated Very Good with a Mean of Four Point Forty-Two (4.42) indicating that the system has been accepted by the end-users

## CONCLUSIONS

The results of the study proved that using the Grading and Ranking System provides advantages to The faculty for their process of solving the grades of the students.

1. The system has been provided the real-time Grading and Ranking System.
2. The system has generated needed reports by the faculty.
3. The system has passed the evaluation based on McCall's Criteria, thus, considered as of good quality.
4. The system has passed all the characteristics from ISO/IEC 25010; thus, it is considered usable.

## RECOMMENDATION

Based on the results presented, the Grading and Ranking System met the requirements that the Faculty need to have a system in computing the grades of the students. The Researchers would like to recommend the following:



1. The College of Information Communication and Technology of Information Technology may provide the Grading and Ranking System for those faculties who compute the grades of every student.
2. It is also recommended that a similar study may be conducted to assess further the effectiveness and usefulness of the system.

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