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COMPUTERIZED COURSE RESULT GRADE SHEET LAYOUT UPGRADE

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ABSTRACT

Result computation occupies an important space in the running of a border university administration as it brings to culmination the exercise for the products' output for which the University is instituted. This paper delves into the analysis and upgrading of the result presentation in some Nigerian Universities with a view to bringing to enhancement the general procedure and dispensation of the exercise which, hitherto, rolls on some mind-bugging handling. The purpose is achieved by some measured upgrade transformation of the existing result sheet to add the task of generating automatically, the percentages of the course examination candidates falling into the grades from A through B, C, D, E to F. With this, it is possible that the labour of the processing staff reduces to mere entering of scores while the system completes the rest in a flashing manner, and ultimately, the consumer finds on the sheet, the clear results and features without mistakes.

Keywords: grade, computation, sorting, learning facilities, graphic distribution.

INTRODUCTION

The result report sheet of the Universities have, over the years, undergone varied changes which showcase it as a product searching for perfection, and maximum customer acceptability. The producers are the lecturers who process and present the course results to the employer for approval before publication.

The students population of the departments of the universities are very high, often exceeding, by four times, the average class population of about thirty to forty students [1]. This presents some mounting manual handling tasks involving marking, sorting, computation and result grading. These tasks give way to preparing results for the employer to see at a glance, the overall performance of the students and by implication, the quality of the lecturer's delivery.

Some Universities always hold that any result carrying over twenty percent overall failure is rejectable as one where the lecturer failed to discharge his work creditably. In reaction the Department involved is usually ordered to go back with the result and amend (review) it upwards. Unfortunately, the review only deals with figures on paper and never cause any change in the knowledge value base of the student. This calls for a proper evaluation of the situation for the application of some solution to the perceived unacceptable percentage failure. A proper evaluation must seek to ascertain the source of the failure which depends on multifarious factors including students' apathy, lecturers' poor delivery, unconducive academic environment up to and including school cultism, force majeure, and other more external limitations imposed by inadequate functional educational facilities like the libraries, laboratories, and even, ordinary limited classroom space. Depending on the actual source of the failure this paper suggests that, since the ultimate aim is to cause a positive change and improvement in the knowledge value base in the student, supplementary examination should be delivered to the failing student/s. The benefit from the approach is four fold:

1) The student realizes that failure is a definite possibility which only hard work can avert and stoops down to learn and improve him- or herself on the knowledge embedded in the course.

2) The student sets out time to discover the gains in consultation with people who know better than him or her to be able to get over the course.

3) The lecturer who finds himself in re-processing and re-assessing of examination scripts for no extra wage discovers the need to put in all possible efforts to

prepare the students well enough to enable all pass the course easily in the first attempt.

4) The University which spends doubly on examination materials discovers the worth of the savings accruable from setting up a proper learning environment, and learning aided facilities and equipment for the students.

DEFICIENCIES IN EXISTING RESULT SHEET

Over the years, the Universities have used, at times variably with different Departments, different formats of result sheets with varying levels of computer application to ease processing and assessment. At an earlier point in time, the result sheet contained columns programmed to give total marks and grades when the in-course and examination scores are entered. With that the lecturers remain charged with counting rows of names to obtain the number of candidates in each grade after which they go about the burden of determining the percentages of the candidates involved in each grade. When the number of students and the pages of the sheet are high, the exercise becomes herculean apart from the human errors inherent on it.

Later, in the grade report sheet were added some cells that contain the total, across sheets, of the candidates per grade, and yet no report on the overall percentages of each grade. In effect, the Committees or Boards appraising the results across many courses in many Departments spend enormous and boring amount of time determining the value of each report as well as the acceptability or otherwise of the presentation. According to the Enugu State University of Science and technology Handbook [2], the statutory functions of the Faculty Board, include inter alia, managing and controlling, within the general academic policy - all matters relating to the education, teaching and research in the subject or subjects of study - and report to Senate.

PROCESSING UPGRADE

The worksheet below (Table 1) enables the result processing staff to, only enter the scores while the total scores, grade and number falling into each grade is automatically generated. This leaves the processing staff with yet another task of manually computing the percentages associated with each grade.

Table 1: Most Recent Result Sheet

S/N	NAME OF STUDENT	MATRIC. NO.	ESUT/FEG/CVE/2013/2014	INCOURSE SCORE 30%	EXAM SCORE 70%	TOTAL SCORE 100%	FINAL GRADE
1	INNOCENT C. NNAJI	ESUT/2009/103115	500/104	20	31	51	C
2	ONYEJI REUBEN O. REUBEN O.	ESUT/2009/103120	500/103	20	43	63	B
3	CHUKWUDI A. OBIDIKE	ESUT/2009/103121	500/077	21	39	60	B
4	EZEKIEL EMEKA NWOGU	ESUT/2009/103124	500/121	26	44	70	A
5	JOHN OME OMOGO	ESUT/2009/103125	500/090	20	54	74	A
6	CHUKWUEBUKA SERGIUS ELO	ESUT/2009/103126	500/075	22	34	56	C
7	AMBROSE CHIBUZO	ESUT/2009/10	500/072	17	28	45	D

	ODOH	3128					
8	NWANI KELECHI KELECHI	ESUT/2009/10 3129	500/183	5	17	22	F
9	CHINEDUM JUDE ODIMGBE	ESUT/2009/10 3130	500/169	20	34	54	C
10	BENJAMIN CHIBUEZE UGWU	ESUT/2009/10 3132	500/175	20	51	71	A
11	MAXWEL NNAEMEKA OZOUME	ESUT/2009/10 3133	500/174	20	35	55	C
12	OBINNA M. ANYAEGBUDIKE	ESUT/2009/10 3135	500/078	20	43	63	B
13	CHRISTIAN OGBONNA	ESUT/2009/10 3136	500/106	20	40	60	B
14	ILO INNOCENT UCHECHUKWU	ESUT/2009/10 3137	500/064	16	64	80	A
15	FRANKLIN OBINNA UGWUEZE	ESUT/2009/10 3138	500/120	16	34	50	C
16	OGBONNA INNOCENT IFEANYI	ESUT/2009/10 3139	500/151	20	42	62	B
17	EMMANUEL EZE OGWUDU	ESUT/2009/10 3140	500/193	12	48	60	B

RESULT

NAME OF ECTURER:…………………..   **SUMMARY**

SIGN/DATE:………………....   **45-49-D**

                                    70-100-A = 4   **= 1**

SIGN/DATE OF   **40-44-E**

HOD:…………………….......   **60-69-B = 6**   **= 0**

SIGN/DATE OF   **00-39-F**

DEAN:…………………..   **50-59-C = 5**   **= 1**

To surmount the above problem by this work, a program was constructed in the spaces created on the top row of the first page for the generation of the percentage values of the number of students belonging to each grade in the overall course grade (Table 2). The action is automated as it is accurate and displays at a glance, the percentages of the different categories of the grades, for the consumer to capture at first glance (Table 2 - Modified Result Sheet). The program applies the **COUNTIF**(**range**,**criteria**) functional utilities of the Visual Basic tools to automate the computations of the output data. The **Range** is the one or more cells to count, including numbers or names, arrays, or references that contain numbers. Blank and text values are ignored. **Criteria** stand for the form of a number, expression, cell reference, or text that defines which cells will be counted. For example, criteria can be expressed as 32, "32", ">32", "apples",

Table 2: Modified Result Sheet

	A%=23.52	B%=35.29	C%=29.41	D%=5.88	E%=0	F%=5.88
S/N	NAME OF STUDENT	MATRIC. NO.	ESUT/FEG/CVE/2013/2014	INCOURSE SCORE 30%	EXAM SCORE 70%	TOTAL SCORE 100%	FINAL GRADE
1	INNOCENT C. NNAJI	ESUT/2009/103115	500/104	20	31	51	C
2	ONYEJI REUBEN O. REUBEN O.	ESUT/2009/103120	500/103	20	43	63	B
3	CHUKWUDI A. OBIDIKE	ESUT/2009/103121	500/077	21	39	60	B
4	EZEKIEL EMEKA NWOGU	ESUT/2009/103124	500/121	26	44	70	A
5	JOHN OME OMOGO	ESUT/2009/103125	500/090	20	54	74	A
6	CHUKWUEBUKA SERGIUS ELO	ESUT/2009/103126	500/075	22	34	56	C
7	AMBROSE CHIBUZO ODOH	ESUT/2009/103128	500/072	17	28	45	D
8	NWANI KELECHI KELECHI	ESUT/2009/103129	500/183	5	17	22	F
9	CHINEDUM JUDE ODIMGBE	ESUT/2009/103130	500/169	20	34	54	C
10	BENJAMIN CHIBUEZE UGWU	ESUT/2009/103132	500/175	20	51	71	A
11	MAXWEL NNAEMEKA OZOUME	ESUT/2009/103133	500/174	20	35	55	C
12	OBINNA M. ANYAEGBUDIKE	ESUT/2009/103135	500/078	20	43	63	B
13	CHRISTIAN OGBONNA	ESUT/2009/103136	500/106	20	40	60	B
14	ILO INNOCENT UCHECHUKWU	ESUT/2009/103137	500/064	16	64	80	A
15	FRANKLIN OBINNA UGWUEZE	ESUT/2009/103138	500/120	16	34	50	C
16	OGBONNA INNOCENT	ESUT/2009/1	500/151	20	42	62	B

	IFEANYI	03139					
17	EMMANUEL EZE OGWUDU	ESUT/2009/1 03140	500/193	12	48	60	B

NAME OF LECTURER:…………………..

RESULT SUMMARY

SIGN/DATE:………………....

SIGN/DATE OF HOD:…………………….......

SIGN/DATE OF DEAN:…………………..

70-100-A = 4

60-69-B = 6

50-59-C = 5

45-49-D = 1

40-44-E = 0

00-39-F = 1

CONCLUSION

The greatest advantage of the automated nature of this presentation is the editability or editing ease and high power of precision in result modification at the same time as any bit of change is introduced by way of change in the input data. Also one could go on to move the exercise into the sheets of the general result outlay which may involve the display of the students' Cumulative Grade Point Average, any desired graphic distribution charts, etc, including other required formats and graphics based on any desired sorting and arrays.

REFERENCES

[1] Tanner, C. K. (2000) Minimum Class Size and Number of Students Per Classroom, University of Georgia, USA.
[2] Enugu State University of Science and technology Handbook (2012).
[3] Julia Case Bradley and Anita C. Millspaugh (2002), Visual Basic Programming 6.0, Mac-Graw Hill, Irwin, Boston Burr Ridge.