International Journal of Computer Trends and Technology
ISSN: 2231-2803 / https://doi.org/10.14445/22312803/IJCTT-V67I4P106
Volume 67 Issue 4, 29-32, April 2019

Original Article

Enhanced Subject Allocation and Internal Mark Assessment using .Net Framework Technology

D.Gaya

Assistant Professor , Department of Computer Science, Pondicherry University Community College, Puducherry.

Abstract *- This project aims to create a window-based application that will capture subject allocation for faculties and internal mark assessment of the student performance. A faculty typically keeps records of subject allocation of each faculty and manually calculates the number of hours taken, and stores this data in and document file. So this application provides a comprehensive solution to manage and enhance the subject allocation and internal mark assessment.*

Keywords *- Student registration,Staff registration, Subject Allocation,Internal Mark Assessment Report Generation*

I. INTRODUCTION

In any education system, the subject allocation for individual faculties and internal mark assessment for individual students are processed manually. If we look into the literature, there is much software for these processes, but they are of some generic standards that may not suit any specific university policies. As students of this university, we attempted to automate these processes for our College School of Engineering and Technology.

Considering the existing system's shortcoming, a new computerized system was proposed with C# as front and MS Access server as backend. High speed and ease of use are the main features of the proposed system. The proposed system allows the acceptance of details of each student and stores them in a database.

It prevents unauthorized access. We can record the Student details, Internal Mark details, and Search details using the system. Using the system, we can easily search the details of a particular student. We are providing the help facility for accessing in a user-friendly manner.

It's made possible by just clicking on the required buttons displayed on the screen. Separate forms have been designed for each option presented on the screen. These are specific and easy to understand

A. Problem Analysis

The manual way of keeping track of records is highly cumbersome. The manual way of tracking the records is time-consuming, and sometimes it may be prone to errors. Maintenance of Student details and Staff details, internal marks details, Staff entry details, and Subject allocation details is difficult in manual maintenance. So to reduce the manual work, we have to computerize the transactions.

B. Existing System

The existing system in "To Implement Subject Allocation and Internal Mark Assessment using .Net Framework Technology**"** is manual. In various departments, the internal marks of the student are kept in manual records, and it is very difficult to maintain the data. At the same time does not provide security of data. If we want to get the details of a particular student, we have to search the entire records. Computerization reduces the gap because anything is programmed as per schedule, and omitting information is impossible.

C. Drawbacks of The Existing System

The drawbacks of the existing system are

- At present, keeping a record is manual.
- A large number of records are required.
- Lacks security.
- The calculation takes more time.
- The chance of getting an error is more.

II. METHODOLOGY AND IMPLEMENTATION

This project aims to computerize the SUBJECT ALLOCATION AND INTERNAL MARK ASSESSMENT activities. They can store and manage students' basic information, Internal mark details, and subject details.

The proposed system includes the following modules.

- Admin
  - ✓ Student registration
  - ✓ Staff registration
- Subject Allocation
- Internal Mark Assessment

- Report Generation
- Exit

A. Admin Module

Admin Module provides secure communication between staff and students. Each staff has a username and password to access the application.

B. Registration Module

Student Module contains information about each student. This information includes the Personal details of the student. In terms of Personal details, Students can update information like Name, Mobile Number, Date of Birth, and Email-Id.

C. Staff Module

Staff Module contains information about each staff. This information includes the Personal details of the staff. In Personal details, staff can update information like Name, Mobile Number, Date of Birth, and Email-Id.

D. Subject Allocation Module

This Window Based Subject Allocation Management System has a subject allocation module to allocate the subject for individual staff. Addition records can be done using this sub-module.

E. Internal Mark Assessment

In this Subject, Allocation Management System having Student mark Details.
The student internal mark information is entered by individual staff who the above module can allocate. Addition records can be done using this sub-module.

F. Report Generation

This report displays the details of students, staff, and all subjects in each course within the organization. It displays the student's internal marks, subject code, subject name, semester, and department. Individual staff can generate the report based on these given criteria and can save it in the form of an excel file. So that it could be easily sent across over network if required.

G. Features Of The Proposed System

The following are the features of the proposed system:

- To reduce the paperwork
- To reduce complexity error
- Maintain security
- Avoid Redundancy
- Giving Accurate Information
- User friendly
- Automatic updating and searching of records are made possible
- Enables to view a large volume of data in a short time.

III. FEASIBILITY STUDY

The feasibility study is an important factor that analyses the capability of a project. The main objective of the feasibility study is to weigh up three types of feasibilities.

- Technical Feasibility
- Economical Feasibility
- Operational Feasibility

A. Technical Feasibility

Technical Feasibility analysis compares the levels of technology available and the technology that is needed for the development of the project. The level of technology is determined by factors such as the software tools, machine environment, platform, etc. Since the resources required for the development and operation of this project are available, this project is technically feasible.

B. Economic Feasibility

Economic feasibility is the most important characteristic that has to be evaluated. This is necessary to give the justification for the project. It is always observed that the benefit overrides the cost. Hence the system is economically feasible.

C. Operational Feasibility

An operational Feasibility study is necessary as it ensures that the project developed would be used by the user as an integral tool for routine work. The operational feasibility of this project is high since it is user-friendly and easy to operate. Hence, the entire system is feasible.

IV. SYSTEM TESTING

Testing plays a critical role in quality assurance and helps ensure the software's reliability. Testing a system is to identify various bugs and fix them. The software must be tested concerning stated functional requirements and interaction among the various modules. To discover maximum errors, the developer must generate all test cases. The developed system is subjected to various strategies before it is brought into operation.

A. Unit Testing

The candidate system was subjected to this test and verified the results. Unit testing focuses on testing the individual modules developed. Each module was checked for its consistency. The modules were also checked by giving some unexpected values for which the appropriate error messages were displayed, and the application did not accept entries.

B. Integration Testing

The testing operation conducted after combining all the subsystem modules to check for the correctness of the output is integration testing. Even

though successful unit testing is performed, it is necessary to check the integration since the integration links may lead to erroneous results. This test was performed, and the results proved to be consistent.

C. Acceptance Testing

Acceptance testing involves the planning and executing of functional tests and performance tests to demonstrate that the implemented system satisfies its requirements. The customer organization typically performs acceptance tests. This test was performed, and the results were satisfactory.

V. RESULT

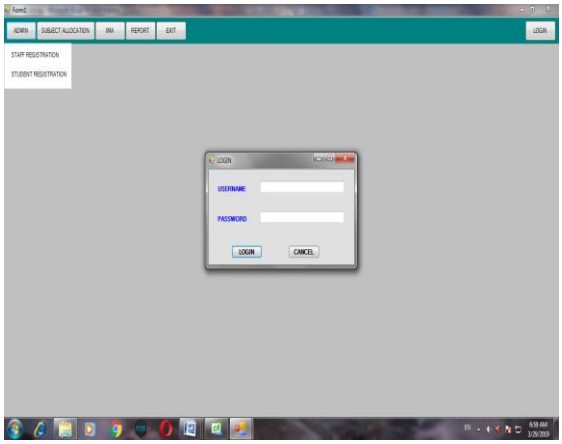

Fig.1 Admin Module

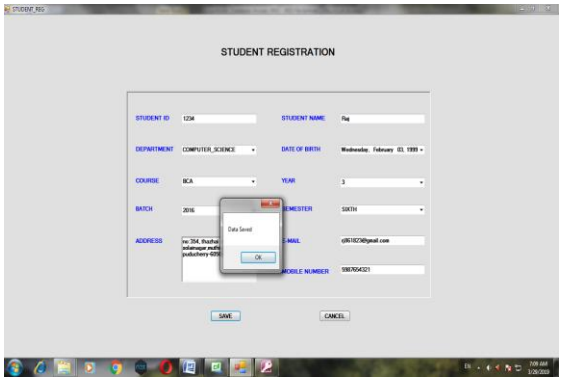

Fig. 2 Student Registration

Fig. 3 Staff Registration

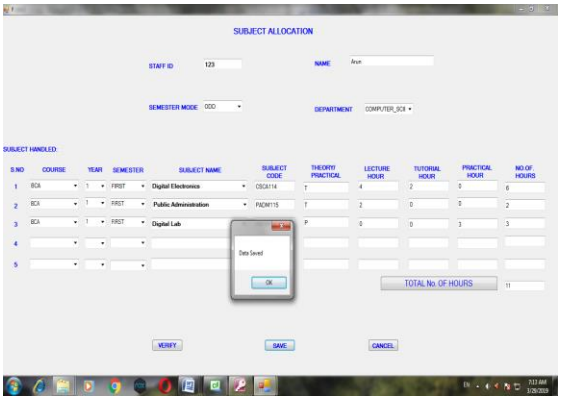

Fig. 4 Subject Allocation

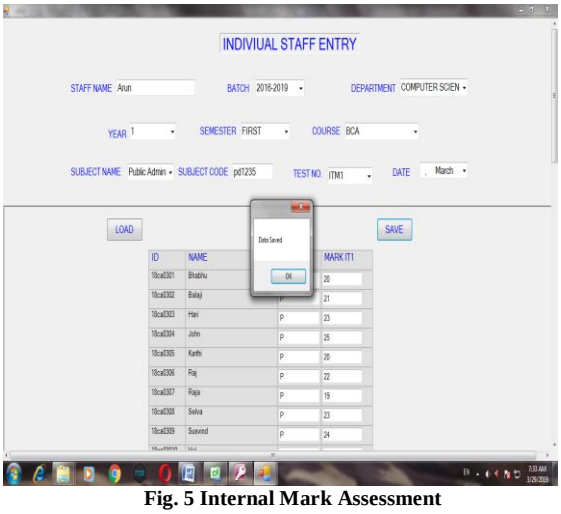

Fig. 5 Internal Mark Assessment

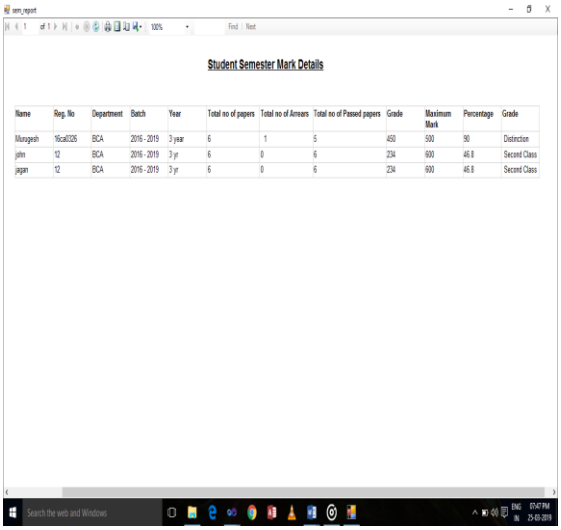

Fig. 6 Report Generation

VI. CONCLUSION

This application is user-friendly, secure and easy to access by all authorized members. The system has been developed and successfully implemented at visual studio 10. In this various information of each staff and student, mainly subject allocation and internal marks, details have been maintained

efficiently. The system has been thoroughly tested with a sample of data, and the system's performance proved to be efficient and extremely user-friendly.

Future changes can be incorporated easily. Every step has been taken to make the project work comfortably for the users. Also, reports can be generated according to the user's requirements. The Major Advantages Are:

- Easy retrieval of data available in the database
- Quick implementation of results
- Very user friendly
- Does not require a large amount of memory
- Very less manual work is needed
- Very cost-effective

It makes comprehensive coverage of most of the activities undertaken in this section. Proper consideration has been given for enhancements in future throughput and software development. The system can be extended, as the software is constantly evolving and has a scope for future enhancement.

All the functions have been done carefully and successfully implemented in the software. If any development is necessary for the future, it can be done without affecting the design by adding additional modules to the system.

.

VII. FUTURE ENHANCEMENTS

The improvement requires that the system should be flexible enough for further modification. Considering this important factor, the system is designed so that further enhancements can be done without affecting the system presently developed.

A few of the improvements that can be made to the system are

- Various graphical Representations can be generated to show
- Reports can be exported to various formats for data transfer with other applications.

REFERENCES

[1] Paul Deitel& Harvey Deitel, “C# 2010 for Programmers”, Pearson Education, 4thedition, 2011.
[2] Abraham Silberschatz, Henry Korth, and S. Sudarshan, "Database System Concepts," 6th edition, McGraw Hill, 2010,
[3] Bulusu, "Oracle PL/SQL Programming," OReilly, 5th edition, 2009.
[4] Steve Bobrowski, “Hands-On Oracle Database 10g Express Edition for Windows”, Tata McGraw Hill, 2010.
[5] KK.Aggarwal &Yogesh Singh, "Software Engineering," New Age International Publishers, 2012.
[6] Roger S. Pressman, "Software Engineering: A Practitioner's Approach," McGraw Hill, 7th edition, 2010.
[7] Jack T.Marchewka, "Information Technology and Project Management," John Wiley & sons P.Ltd,2003