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
The goal of this project is 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.

I. INTRODUCTION
Currently 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 exists much software for these processes, but they are of some generic standards which may not be suitable to any specific university policies. As students of this university, we made an attempt to automate these processes for our College School of Engineering and Technology.

Taking into account the shortcomings of the existing system, 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 acceptance of details of each student and to store it in a database.

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

It’s making possible by just clicking on the required buttons that are displayed on the screen. Separate forms have been designed for each of these options 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. 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 in order 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” in manual. In various department the internal marks of the student are kept in manual records, it is very difficult to maintain the data. 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 omission of information is not possible at all.

C. Drawbacks of The Existing System
The drawbacks of the existing system are
- At present keeping record is manual.
- Large number of records are required.
- Lacks of security.
- Calculation takes more time.
- Chance for getting error is more.

II. METHODOLOGY AND IMPLEMENTATION
The aim of this project is to computerize the SUBJECT ALLOCATION AND INTERNAL MARK ASSESSMENT activities. They can store and manage Student basic information, Internal mark details, 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 the secure communication between staff and student. Each staff has their own username and password to access the application.
B. Registration Module
Student Module contains information about each student. This information includes Personal details of student. In 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 Personal details of staff. In Personal details, Staff can update information like Name, Mobile Number, Date of Birth and Email-Id.

D. Subject Allocation Module
In this Window Based Subject Allocation Management System having subject allocation module to allocate the subject for individual staff. Addition record can be done using this sub module.

E. Internal Mark Assessment
In this Subject Allocation Management System having Student mark Details. It is entering the student internal mark information by individual staff who can be allocated by the above module. Addition record can be done using this sub module.

F. Report Generation
This report is displays the details of student, staffs and all subjects in each course within the organization. It displays the student 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 form of excel file. So that it could be easily send across over network if required.

G. Features Of The Proposed System
The following are the features of the proposed system:
- To reduce the paper work
- To reduce complexity error
- Maintain security
- Avoid Redundancy
- Giving Accurate Information
- User friendly
- Automatic updating,searching of records are made possible
- Enables to view large volume of data in short time.

A. Technical Feasibility
Technical feasibility analysis makes a comparison between 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 is 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 of the project. It is always observed that the benefit overrides the cost. Hence the system is economically feasible.

C. Operational Feasibility
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 very critical role in quality assurance and helps in ensuring the reliability of the software. The purpose of testing a system is to identify various bugs and fix them. The software must be tested with respect to stated functional requirements and also with respect to interaction among the various modules. For discovering 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 the results were verified. 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 errors messages were displayed and entries were not accepted by the application.

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 a 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 planning and execution of functional tests and performance tests to demonstrate that the implemented system satisfies its requirements. Acceptance test are typically performed by the customer organization. This test was performed and the results were satisfactory.

V. RESULT

![Fig:1 Admin Module](image1)

![Fig:2 Student Registration](image2)

![Fig:3 Staff Registration](image3)

VI. CONCLUSION

This application is very user friendly, secure and easy to access by all authorized members. The system has been developed successful 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 sample of data and the performance of the system proved to be efficient and extremely user-friendly.

Future changes can be incorporated easily. Every step has been taken to make the working of the project comfortable to the users. Also reports can be generated according to the user’s requirements. The Major Advantages Are:

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

It makes comprehensive coverage of the most of the activities undertaken in this section. Proper consideration has been given for enhancements in future throughput and the development of the software. The system can be extended, as the software is constantly evolving and always has a scope for future enhancement.
All the functions have been done carefully and successfully implemented in the software, and if any development is necessary in 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 in such a way 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