iJRASET
International Journal For Research in Applied Science and Engineering Technology



INTERNATIONAL JOURNAL FOR RESEARCH

IN APPLIED SCIENCE & ENGINEERING TECHNOLOGY

Volume: 8 **Issue:** IX **Month of publication:** September 2020

DOI: https://doi.org/10.22214/ijraset.2020.31472

www.ijraset.com

Call: 08813907089 | E-mail ID: ijraset@gmail.com

International Journal for Research in Applied Science & Engineering Technology (IJRASET)
ISSN: 2321-9653; IC Value: 45.98; SJ Impact Factor: 7.429
Volume 8 Issue IX Sep 2020- Available at www.ijraset.com

Web Based CSE Department Management System

Dheeraj Menaria[1], Dishant Vyas[2], Ganshyam Vyas[3], Jagdish Meghwal[4], Kalpit Shrimali[5]
[1, 2, 3, 4, 5]*UG Student, Department of Computer Science & Engineering, Geetanjali Institute of Technical Studies Udaipur, Rajasthan 313001, India*

Abstract: ***The project is aimed at developing an application for the "CSE Department Management System" of the college. The system is an application that can be accessed and effectively used throughout the organization with proper login enabled. This system can be used as an application for the teachers in the college to manage the Department. The key feature of this project is that information on the application managed by teachers. Our project provides the facility of maintaining the details of the students. It reduces the manual work and consumes less paper work to reduce the time. This project is developed with ASP.NET , C# and MYSQL.***

I. INTRODUCTION

CSE Department Management System is a formal sociotechnical, organizational system designed to collect, process, store, and distribute information.

In an educational institution, there is a need to record information as pertains to members of the institutions, especially students, so ease is achieved when retrieval of said information is needed.

CSE department management system or Department management system is a management information system for education establishments to manage student data easily and without stress. Department Systems provide capabilities for documenting grades and transcripts, computing results of student tests and other assessment scores; building student schedules; tracking student attendance; and managing many other student related data needs in a department.

II. STATEMENT OF THE PROBLEM

Some educational institutions do not have a computerized Department System that facilitates the capturing, storage and retrieval of relevant information as relates to students of that institution.

This problem is not exclusive to the university, which has been using the paper-based system of capturing and storing information. Students, in order to register courses for a semester, have to obtain a form from the Registry, meet their lecturers one-on-one to get their registered courses signed; meet with their Head of Department and Dean of College to get this form approved with their signature, obtain the Registrar's signature on the form, then make copies of the original copy in some business centre, before returning to finally submit this at the Registry, giving the photocopies to the Head of department, and the Dean of the college; making stressful round trips all the time.

Problems encountered with this method are:

1) A fire outbreak could destroy some or all of the records, sabotaging the university's efforts in managing vital information.
2) Unauthorised personnel access could be made to these records, whereby records could be altered or missing, and jeopardizing information security.
3) Difficulty in auditing records: as information grows the files become too many to start following up or keep track of; this results in a lot of redundant data.
4) Difficulty and delay in locating/obtaining records: human beings are not perfect, and so can mistakenly store a file out of the usual order.
5) Difficulty in capturing needed information: Students would be too stressed carrying out the aforementioned activities in order to register their courses.
6) Computation and compilation of students' results are always delayed and even when available, posted publicly on notice boards for everyone to see.

©IJRASET: All Rights are Reserved

ISSN: 2321-9653; IC Value: 45.98; SJ Impact Factor: 7.429
Volume 8 Issue IX Sep 2020- Available at www.ijraset.com

III. AIM AND OBJECTIVES OF THE STUDY

A. *AIM*

The aim of this research project is to design and implement a CSE Department Management System that will efficiently keep track of and manage the department's students' information, making it easier to update and query it whenever necessary.

B. *Objectives*

The objectives of this research project in achieving this aim are:

1) To implement a system that would automatically compute each student's results and allow them view their respective CGPAs, helping them make strategic plans to improve or stay their performance.
2) To implement a system that would be able to easily capture information and categorize it properly, making it easy to query and/or locate a particular record.

IV. SIGNIFICANCE OF THE STUDY

A computerized CSE Department Management System would aid in capturing data, as well as providing accurate and on-timely information on students, unlike the current paper-based system which would waste time in sorting and crosschecking papers and files. The following are the significances of this research proposal:
Timely and quick retrieval of requested information.
Computation of grades and scores assigned by lecturers to tests and assignments over the system.
It will allow students to view their respective semester results and cumulative grade point average scores.

V. SCOPE OF THE STUDY

This project proposal is aimed at building a Management System that will make life and other educational processes easier and more productive, with limited focus to Geetanjali institute of technical studies, Dabok Udaipur. The system will be accessible to everyone in the CSE department: lecturers, students and other parents of students.
It will make information available to the appropriate personnel: results should be made available to the respective student, not seen by anyone else, etc. Thus proper management of information is a primary feature of the proposed system.

VI. LIMITATIONS OF THE STUDY

The proposed research project will be limited due to the following reasons:

A. This project is web based so proper internet connectivity required.
B. Large number of user may cause delay in loading web pages.

VII. REVIEW OF RELATED RESEARCH WORK

A. *Case Study*

1) *Department Management System:* The Department Management System (SIMS) was developed for Joseph Ayo Babalola University. It was implemented with the use of an object-oriented programming language, Visual Basic 6.0, and a database application, Microsoft Access. These development tools are what make up the Department management system. It was placed on a local intranet, local to the educational institution making use of it, and was built as a desktop application for Windows® Desktop OS only. With Department management system, a user-friendly interface was introduced to make it easy for students' records to be stored in a database, and easily retrieved from the database. A username and password is used to login in order to gain access to the full application.

B. *Features*

The system provided the following features

1) Easy storage of students' records.
2) Easy editing of students' records.
3) Easy deletion of students' records whenever necessary and minimal loss of information due to the backup dialog contained in the application.

©IJRASET: All Rights are Reserved

C. Short Comings

1) It only provided access to an administrator to manage the records.

2) It was only used to manage student records. Other educational processes such as course registration and results provision were not feasible using the system.

Figure 1 below depicts the Department System (SIMS)

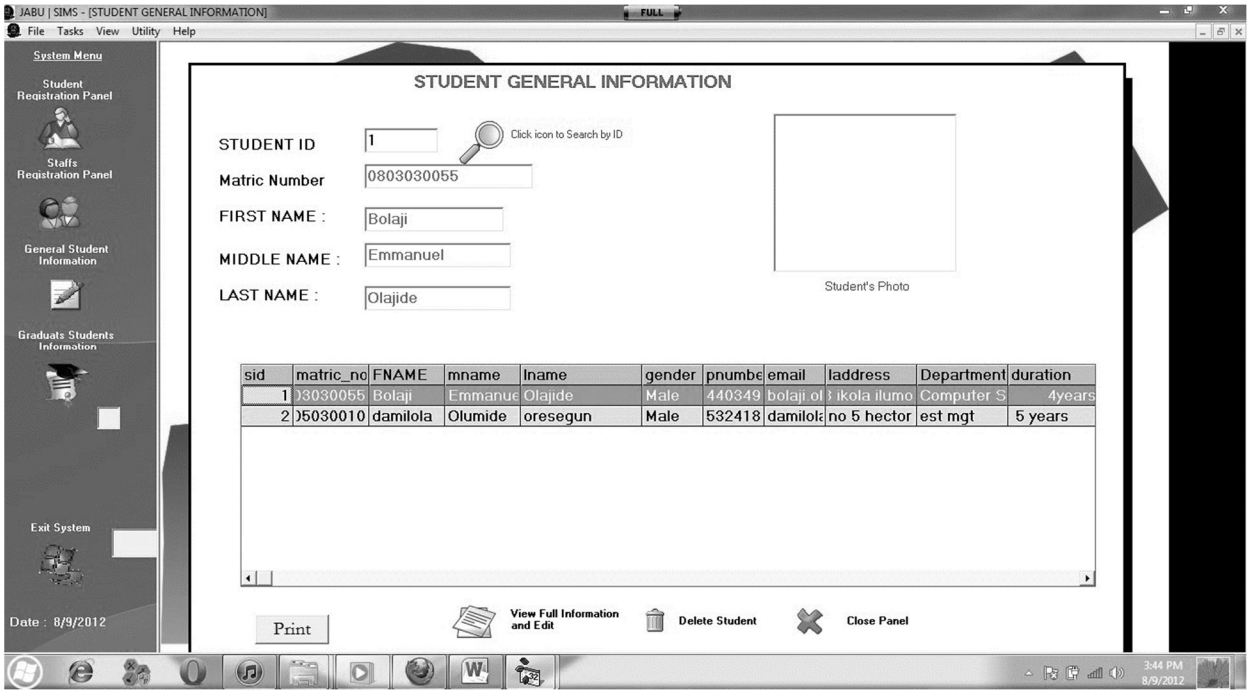


Figure 1: Department Management System

D. Why the use of A Department Management System?

Having defined a Department Management System in the previous, reasons behind its use are stated here. There are a variety of benefits associated with using Department systems for students, educational institutions and their staff. Solutions in this category provide channels for communication between school officials and students, act as a singular source of student-related information, streamline billing processes, and more. The following are the reasons behind the use of Department systems, among others

1) *Information Storage:* System information system software houses many types of Department, consolidating all records in one place so they can be easily accessed by school officials and the students themselves. In a single system, a school official can view student attendance, class rosters, student enrollment, and more. On the other side, students can see unofficial transcripts, enroll in classes, and access a schedule builder. Keeping all Department in a singular system allows users to make and track changes, as well as maintain a holistic view of both individual students and the student body as a whole. Information in a Department system is not siloed in disparate systems, which makes its organization easier overall.

2) *Facilitate Communication Between students and Faculty:* The student portal is a vital part of a quality Department system, particularly at the university level. As college classes tend to be larger and professors are typically less accessible, giving students a direct line of communication to their professor is of increased importance. Students can communicate with both their teachers and the administration in one place, as well as maintain records of those conversations. If a student is reluctant to ask a question about a topic or assignment in class, they can ask it via the portal and receive clarification.

3) *Reporting:* Department officials can use data gathered by Department systems to create data-driven reports on student progress for individuals as well as the whole student body. From the perspective of a designated school official, Department systems provide an easy way to handle Department management. Officials can use the software to create reports on everything from how many students have non-immigrant status to what the average GPA in a given class is; and students can print out their academic records using the reporting feature of the Department system.

©IJRASET: All Rights are Reserved

VIII. EXPECTATIONS OF THE PROPOSED SYSTEM

The aim of the proposed system is to introduce effectiveness, efficiency and quality in the management of Department. The unique features of the system achieve the above aim in the following means:

1) *Accuracy:* Records are not mistakenly saved or retrieved but the exact one requested for, thus ensuring quick processing
2) *Speed:* Processing of Department is done quickly, thus optimizing the time required to process, save or retrieve a needed record. Once a student is added to the system, his/her login details are automatically provided.
3) *Reduced Space Requirement:* The proposed system takes even less storage space than a traditional file system which makes use of file cabinets that take up whole buildings. In an electronic database system, record storage is done on storage devices not larger than the palm of a person's hand.
4) *Information Dissemination:* Students will not have to travel to the registry to obtain or submit course registration forms, rather, they could sit in their hostel rooms, select the courses they are required to offer and send the information to the relevant offices via the system.
5) *Storage Capability:* Because digitalization aims to reduce physical size, while increasing logical capabilities, lots of records could be stored to the system, without any bother to if there's free storage or not.
6) *Convenience:* Because students don't have to wonder about as regards course registration, ease is introduced to everyday processes. Both students and employees are no longer stressed in their daily work routines.

IX. CONCLUSION

The project entitled as College Management System is the system that deals with the issues related to a particular institution.

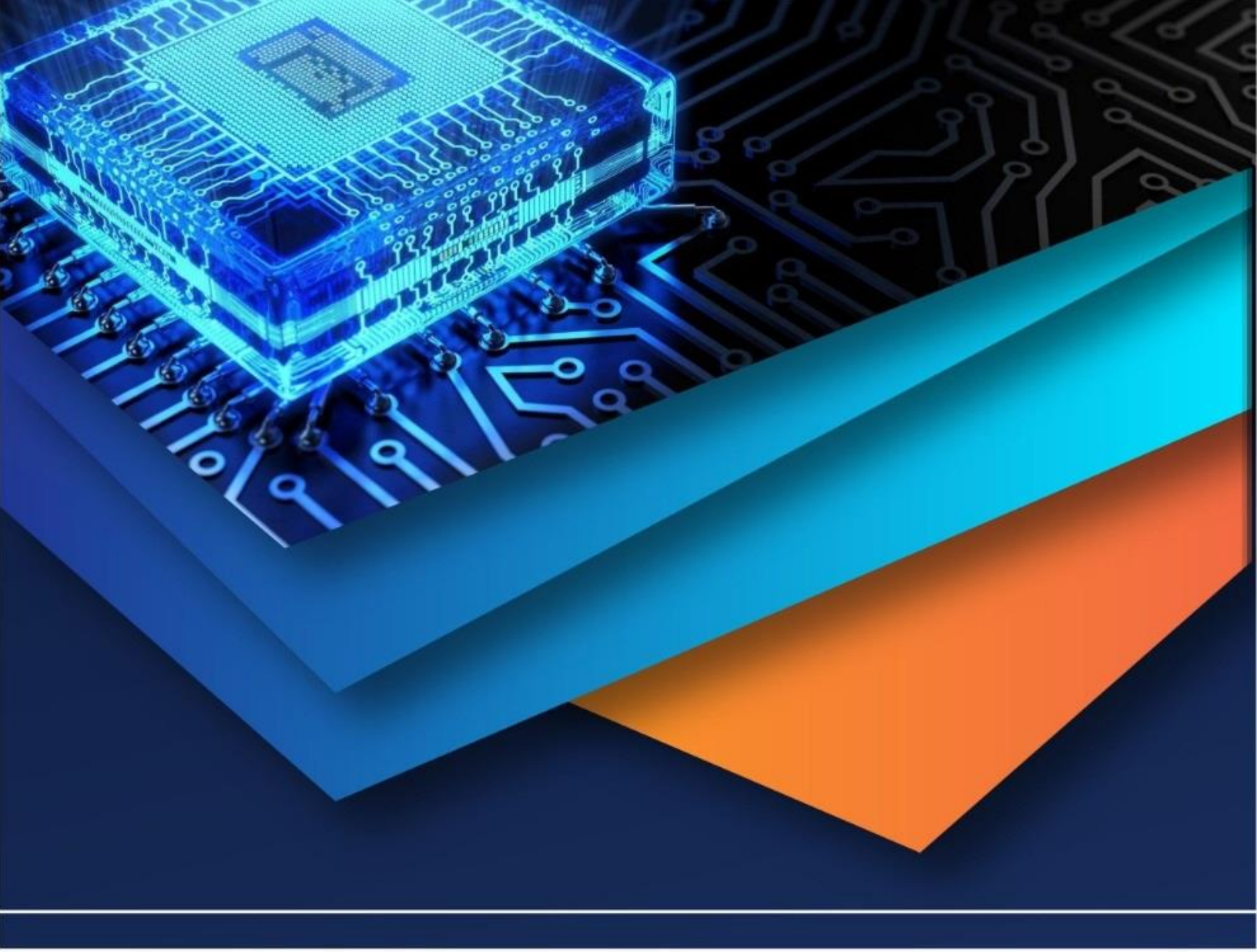
A. This project is successfully implemented with all the features mentioned in system requirements specification.
B. The application provides appropriate information to users according to the chosen service.

The project is designed keeping in view the day to day problems faced by a college.

REFERENCE

[1] Microsoft, "ASP.NET overview," . [Online]. Available: https://msdn.microsoft.com/en-us/library/4w3ex9c2.aspx.
[2] "ASP.NET," in Wikipedia, Wikimedia Foundation, . [Online]. Available: https://en.wikipedia.org/wiki/ASP.NET.
[3] "ASP.NET Tutorial," www.tutorialspoint.com, [Online]. Available: http://www.tutorialspoint.com/asp.net/.
[4] "SDLC -Iterative model," www.tutorialspoint.com. [Online]. Available: http://www.tutorialspoint.com/sdlc/sdlc_iterative_model.htm.
[5] "Software development methodologies," [Online]. Available: http://www.itinfo.am/eng/software-development-methodologies/.
[6] "SQL INSERT INTO statement,". [Online]. Available: http://www.w3schools.com/sql/sql_insert.asp.
[7] "Introduction to HTML,". [Online]. Available: http://www.w3schools.com/html/html_intro.asp.
[8] "JavaScript data,". [Online]. Available: http://www.w3schools.com/js/js_datatypes.asp.
[9] "CSS backgrounds,". [Online]. Available: http://www.w3schools.com/css/css_background.asp.
[10] "JavaScript data,". [Online]. Available: http://www.w3schools.com/js/js_datatypes.asp.
[11] "SQL INSERT INTO statement,". [Online]. Available: http://www.w3schools.com/sql/sql_insert.asp.
[12] "CSS backgrounds," in www.w3schools.com. [Online]. Available: http://www.w3schools.com/css/css_background.asp.

©IJRASET: All Rights are Reserved



10.22214/IJRASET

45.98

IMPACT FACTOR: 7.129

IMPACT FACTOR: 7.429

INTERNATIONAL JOURNAL FOR RESEARCH

IN APPLIED SCIENCE & ENGINEERING TECHNOLOGY

Call : 08813907089 (24*7 Support on Whatsapp)