ABSTRACT

The technological development and impact of computers and internet on our lives that has been verified over time affected various sectors of activity. And almost every task today is being run through computers. Getting information and quickly turning it into a product that consumers want is the essential key to staying in business and all of this is done nowadays using computers and applications or information systems. And the education system is undeniably the backbone of the society, it focuses at preparing the young talents for the future. However, currently the process of students' result management and declaration at some of the colleges, is performed manually with extensive human intervention, the students' results are generated through a spreadsheet application and then printed on a paper, attached to a wall for declaration and then stored. The current research aims at creating a web-based student result management system, reducing time, effort and improving security.

INTRODUCTION

The impact of computers and the internet on our lives today is probably much more than we really know. Getting information and quickly turning it into a product that consumers want is the essential key to staying in business and all of this is done nowadays using computers and applications or information systems.
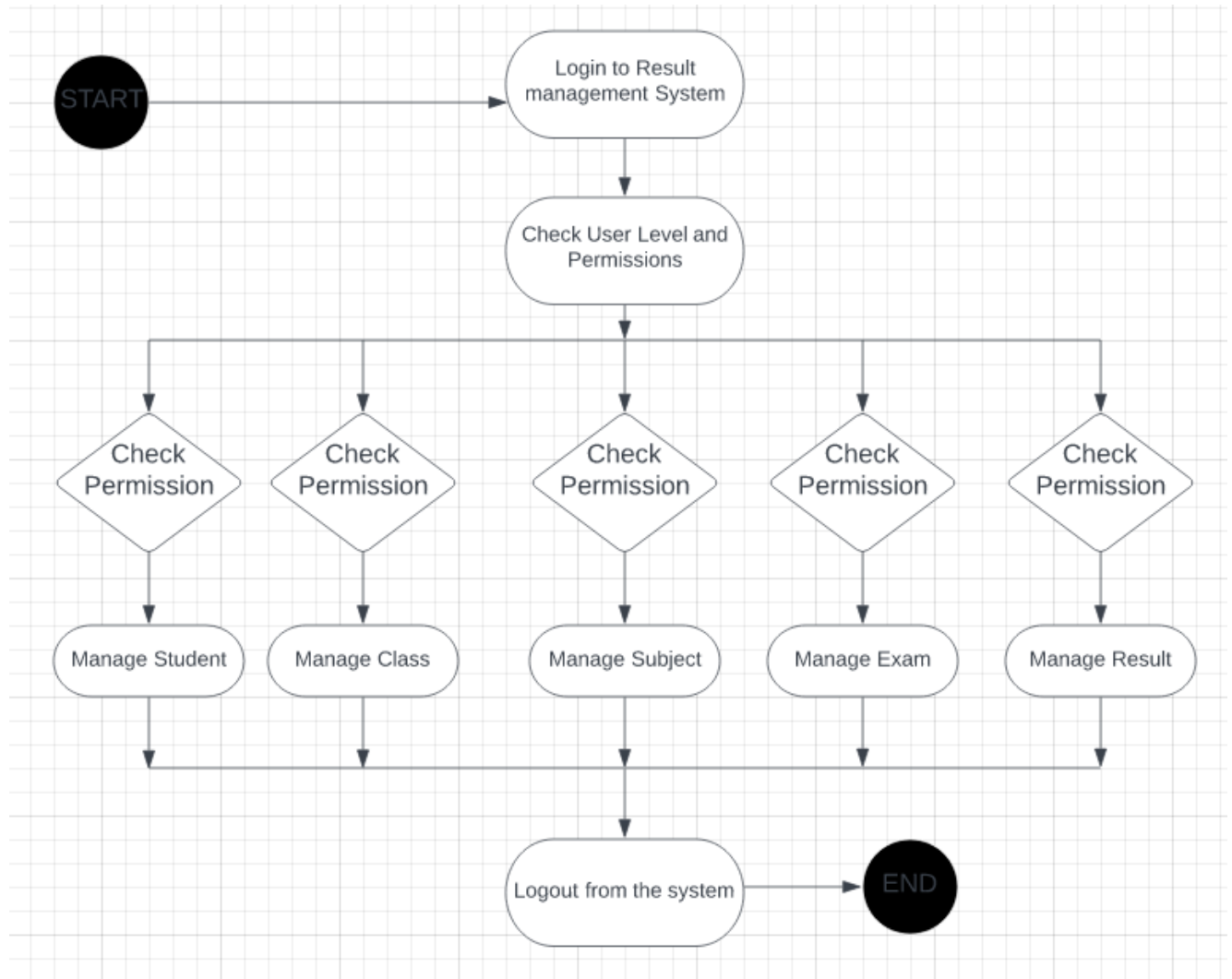
And the information systems will continue to change businesses and the way we live. Many corporate leaders are using technology to manage every aspect of their organization, from product creation to customer service. It has brought evolution in almost every field, it changed the ways of teaching, administration of activities such as e-learning, e-library and online portals where teachers and students communicate, and sharing of information has never been better.

Student result declaration and management are amongst the most important activities within a university or any educational institution, since all other activities depend on it. Hence implementing an information system can be declared a significant result. The main objective of this research is to enhance and automate the management and declaration of students' results using a computerized system.

PROBLEM DEFINITION

Currently, the process of declaring and managing the students' results is performed manually with extensive human. The students' results are generated through a spreadsheet application and then printed on a paper, attached to a wall for declaration and then stored. Despite having an application that generates the result, it is not very effective as the system consumes a lot of time and human resources in performing various tasks, it is costly, it lacks data security and efficiency. And at present, the institution needs an advanced and computerized environment. And once implemented, it will minimize all the problems mentioned.

DATA FLOW DIAGRAM

START → Login to Result management System

Login to Result management System → Check User Level and Permissions

Check User Level and Permissions branches to:

- Check Permission → Manage Student
- Check Permission → Manage Class
- Check Permission → Manage Subject
- Check Permission → Manage Exam
- Check Permission → Manage Result

Manage Student, Manage Class, Manage Subject, Manage Exam, Manage Result → Logout from the system
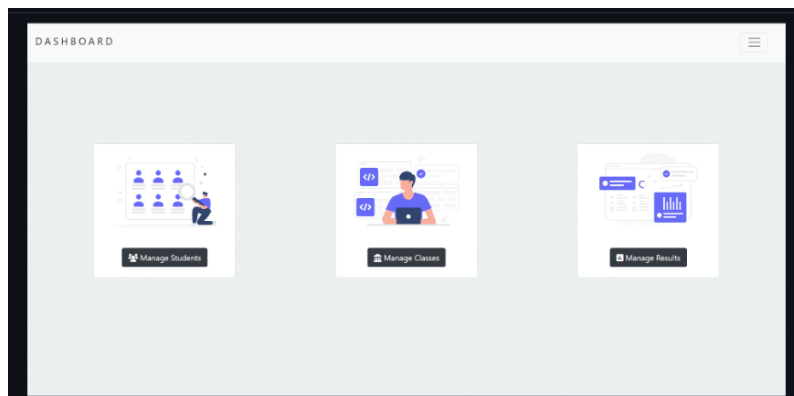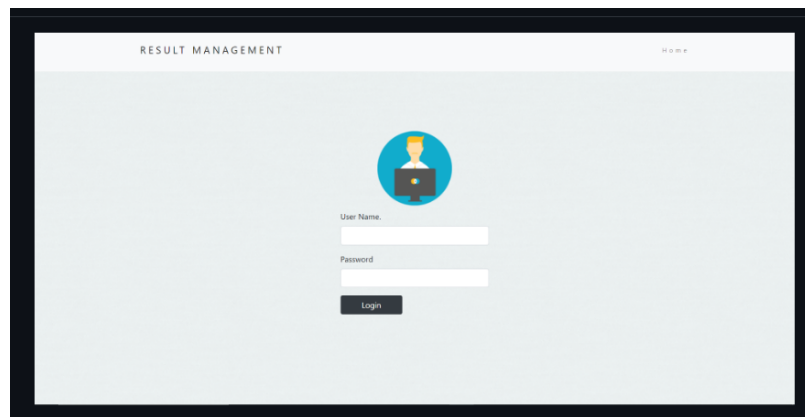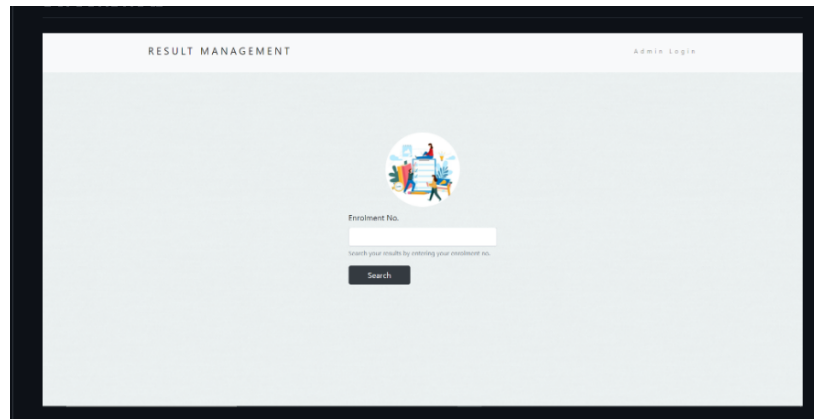
Logout from the system → END

IMPLEMENTATION

The implementation or coding of the proposed system was performed using JavaScript programming language which is based on the object-oriented paradigm. It organizes the system in modules or classes within their respective packages. And has become a popular approach not only in the field of programming but for system analysis and design. The system is build with node, express and bootstrap. The system functions and features it includes are:

- Login Page for admin and for students to view their result
- The admin can manage students, classes and results based on their requirements
- The admin can also upload, update and delete the data.

OUTPUT SCREENSHOTS

RESULT MANAGEMENT

HOME

Name : Nirav Patel

Enrolment Number: IT1902

Semester: 1

Branch : Information Technology

Select Semester   Sems - 1 ▼

Search

NO.	Subject	MARKS	OUT OF
1	Mathematics - 1	40	70
2	C Programming	50	70
3	Basic Electronics	55	70
4	Basic Mechanical Engineering	60	70

Percentage : 73.21 %

Status : Pass

Print Result

Select Class Id   - Select Class Id -   ▼

Enrolment_no   Enter enrolment no

Add Result   Go Back

Upload File

Show 10 ▼ entries   Search:

NO.	Enrolment no	Class Id	Name	Results	Action
1	IT1902	IT-1	Nirav Patel	See result	🗑
2	IT1901	IT-3	Jay Monpara	See result	🗑
3	IT1904	IT-1	poojan patel	See result	🗑

Showing 1 to 3 of 3 entries   Previous 1 Next

Class id: Enter class id

Name   Enter Name

Enrolment_no   Enter enrolment no

Add Student   Go Back

Upload File   Update Class info

Show 10 ▼ entries   Search:

NO.	Class id	Enrolment No.	Name	Action
1	IT-3	IT1902	yash jain	🗑
2	IT-3	IT1903	poojan patel	🗑
3	IT-3	IT1904	nirav patel	🗑
4	IT-3	IT1905	jay monpara	🗑
5	IT-3	IT1901	harsh thakkar	🗑

Select Class Id   - Select Class Id -   ▼

Enrolment_no   Enter enrolment no

Add Result   Go Back

Upload File

Upload File   ✕

Choose file   Browse

Upload

Show 10 ▼ entries   Search:

NO.	Enrolment no	Class id	Results	Action
1	IT1903	IT-1	See result	🗑
2	IT1902	IT-1	See result	🗑
3	IT1905	IT-1	See result	🗑
4	IT1904	IT-1	See result	🗑
5	IT1904	IT-2	See result	🗑

CONCLUSION

The present research was based on the computerization and the implementation of a sophisticated Web-Based Student Result Management System. The main objective was to enhance and automate the management and declaration of students' results using a computerized system. A well-defined, efficient, controlled and managed information system or software based on web technology storing, processing and providing information through the internet. And the objectives were achieved by following a process model such as system analysis, design and system implementation.