EXAMINATION SEATING ARRANGEMENT SYSTEM

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Abstract: Today's Necessity is Time. Since it is the Era of Computer, Nobody wants to be lagging in the race of Advancement and Technology.

Presently, the seating arrangement for the examinations is done manually. Initially the examination section has to collect all student examination registration details branch wise and year wise. These details include name, roll no, branch, year, list of subjects registered for exam. The administrator need to count the total number students registered. Then he needs to select the rooms and divide the students among those rooms. After dividing the rooms, he need to prepare students list for each based on the exam. He also needs to prepare the seating arrangement list for each room based upon the count. All this work need to be done for each exam and for each branch and year. This is very tedious work and there are many chances for mistakes to occur due to manual work. The examination seating arrangement system‖ automizes the existing system of assigning seating arrangement. In Our System all the records of student are stored in software and the seating arrangement is done automatically without doing any tedious work.

Keywords: seating arrangement, Room, Benches, Seat no.

1. INTRODUCTION

The project Exam Seating Arrangement System has been developed to help the department for maintaining the student details, carlier the records were maintained manually, with the help of this package the concerned departments will be able to improve the productivity, reduce the time, cost factors associated with the system. The automation of the system will help the organization in proper maintenance of the record, less manpower, less man-days, less cost, proper & accurate functioning

The basic need for the package was to automate the whole procedure of maintaining of student details, earlier it was all done manually. By developing this package lot of burden was removed from the department, which was maintaining student's details. It improved the efficiency, reduced the cost, and reduced the time need to do the work manually. With the help of this package the past details of the students can be assessed and reports can be generated on this details.

What is .NET?

Many people reckon that it's Microsoft's way of controlling the Internet, which is false. .NET is Microsoft's strategy of software that provides services to people any time, any place, is any device. An accurate definition of .NET is, it's an XML Web Services platform which allows us to build rich .NET applications, which allows users to interact with the Internet using wide range of smart devices (tablet devices, pocket PC's, web phones etc), which allows to build and integrate Web Services and which comes with many rich set of tools like Visual Studio to fully develop and build those applications.

.NET Framework

.NET IS A "Software Platform". It is a language-neutral environment for developing rich .net experiences and building applications can easily and securely operate within it. When developed applications are deployed, those applications will target .NET and will execute wherever .NET is implemented instead of targeting a particular Hardware/OS combination. The components that make up the .NET platform are collectively called .NET Framework.

The .NET Framework is a managed, type-safe environment for developing and executing applications. The .NET Framework manages all aspects of program execution, like, allocation of memory for the storage of data and instructions, granting and denying permissions to the application, managing execution of the application and reallocation of memory for resources that are not needed.

The .NET Framework is designed for cross-language compatibility. Cross-language compatibility means, an application written in Visual Basic .NET may reference a DLL file written in C# (C-Sharp). A Visual Basic .NET class might be derived from a C# class or vice versa.

The .NET Framework consists of two main components:

1. Common Language Runtime (CLR)

2. Class Libraries

Common Language Runtime (CLR)

The CLR is described as the "execution engine" of .NET. It provides the environment within which the programs run. It's this CLR that manages the execution of programs and provides core services, such as code compilation, memory allocation, thread management, and garbage collection. Through the Common Type System (CTS), it enforces strict type safety, and it ensures that the code is executed in a safe environment by enforcing code access security. The software version of .NET is actually the CLR version.

Class Libraries

Class libraries is the second major entity of .NET Framework which is designed to integrate with the common language runtime. This library gives the program access to runtime environment. The class library consists of lots of prewritten code that all the applications created in VB .NET and Visual Studio .NET will use. The code for all the elements like forms, controls and the rest in VB.NET applications actually comes from the class library.

Common Language Specification (CLS)

If we want the code which we write in a language to be used by programs in other languages then it should adhere to the Common Language Specifications (CLS). The CLS describes a set of features that different languages have in common. The CLS defines the minimum standards that .NET language compilers must confirm to, and ensures that any source code compiled by a, NET compiler can interoperate with the .NET Framework.

Some reasons why developers are building applications using the .NET Framework:

1. Improved Reliability

2. Increased Performance

3. Developer Productivity

4. Powerful Security

5. Integration with existing Systems

6. Ease of Deployment

7. Mobility Support

8. XML Web service Support

9. Support for over 20 Programming Languages

10. Flexible Data Access

Visual Basic .NET

Visual Basic .NET provides the easiest, most productive language and tool for rapidly building Windows and Web based applications.

Visual Basic .NET comes with enhanced visual designers, increased application performance, and a powerful integrated development environment (IDE). It also supports creation of applications for wireless, Internet-enabled hand-held devices. The following are the features of Visual Basic .NET with .NET Framework 1.0 and Visual Basic .NET 2003 with .NET Framework 1.1. This answers why should I use Visual Basic .NET, what I can do with it?

Visual Basic .NET comes with features as powerful new forms designers, an in-place menu editor, and automatic control anchoring and docking. Visual Basic .NET delivers new productivity features for building more robust applications easily and quickly. With an improved integrated development environment (IDE) and a significantly reduced startup time, Visual Basic .NET offers fast, automatic formatting of code as you type, improved IntelliSense, an enhanced object browser and XML designer, and much more.

2 Problem Definition

The Project is about the College application "Examination seating arrangement System",made by using: VISUAL BASIC 2008 and MS ACCESS

The Project is self explanatory about itself. We have tried to collect a small cup of water in the form of project, from the great ocean of the computer software.

As the tendency of the student behind the project is to get marks and see to that very less time is spend, but the fame doesn't come within a day, as it is a project work. The points and ideas given by our guide, teacher and friends gave the confidence for designing the project. Might such project exist in the market in industry, but the one which we have developed is purely our idea and help of teacher.

3. REQUIREMENTS

Hardware

- 3-GB RAM

- 1GB HARD DISK SPACE FOR STRONG SOFTWARE

- COLOR MONITOR

- CDROM/DVD

- MOUSE

- KEYBOARD

Software

- MICROSOFT WINDOWS XP OR HIGHER VERSION

- MICROSOFT VISUAL STUDIO 2008

- GIF ANIMATOR

- MACROMEDIA FLASH 8.0

- MS OFFICE

- PHOTOSHOP

- ADOBE IMAGE STYLER

- GIF ANIMATOR

4. WORKING

Our Project is in VISUAL BASIC 2008 which is a very user friendly language.This language provides a windows programming which has got some modern tools to help the programmer in an easy way.

Our backend is MS ACCESS 2000 which is very secure Database which provides security,integrity of the record stored in it . And data Encapsulation Features. It Stores data in an organized manner so that it can be retrived easily and in faster way.

In visual basic software we will design a GUI of project. Where we can add fields like select date – where admin can enter date of exam after class field. After this new page will displa where we have to select class room after this how many benches will be there it will display in alert box and after clicking on alert box then new alert

box display it will show from which seat no seating arrangement start. And after clicking on ok next alert box display it will show seat nos ends and at last one alert box display which show seating arrangement done successfully for that class. And this will happen for all the classes and will show this in crystal report in last.

In brief we can say this system was required to automate the processing of students details, which was done manually before the development of the package. Earlier all the information / data pertaining to the students was maintained manually or we can say it was on paper, hence it created a problem for the organization/ school, how to manage it properly. With the help of this system the organization/school is able to maintain the data properly & accurately.
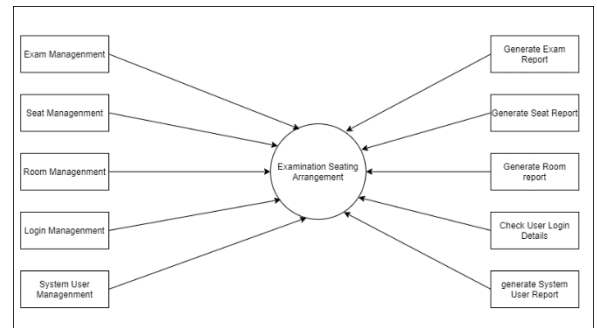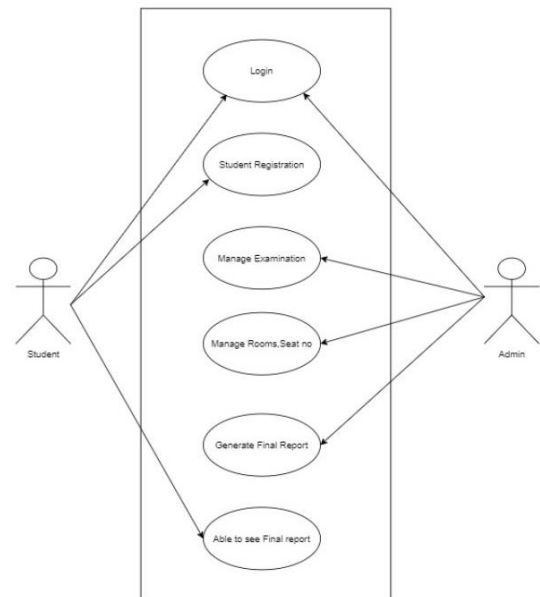

Fig 1 – DFD Diagram
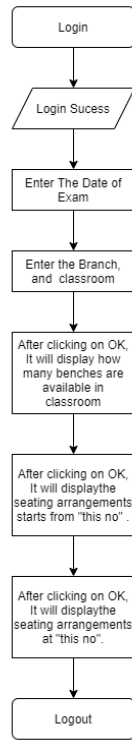

Fig 2 – Use Case Diagram

Fig 3 – Flowchart

5. ADVANTAGES

The computerized Examination Seating arrangement software basically does all the work same as like of manual.so it may be asked that why to go for computer system,the reason is feature like - Large Data Storage,

Speed of Retrival of Data.

More Flexibility.

Reduce System Cost.

Faster Processing.

Reduces Manual Work.

Not Time Consuming.

Thus an organization having a computerized system can work efficiently and provide good Response to the user.

The system provides proper security and reduces the manual work: Security of data, Ensure data accuracy's, Proper control of the higher officials, Minimize manual data entry, Minimum time needed for the various processing, Greater efficiency, Better service, User friendliness and interactive, Minimum time required.

6. CONCLUSIONS

It provides various features like storing students details for arranging seats for examination seating arrangement according to timetable and for different branches for different sections.

Thus we are concluding that we have completed our project with the above future enhancements to be done.

We thank everybody who helped us successfully completing our project.

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