

**A Project Report**

**on**

**Attendance system using face recognition**

***Submitted in fully fulfillment of the  
requirement for the award of the degree of***

**Bachelor of Technology in Computer Science and  
Engineering**



(Established under Galgotias University Uttar Pradesh Act No. 14 of 2011)

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**SCHOOL OF COMPUTING SCIENCE AND ENGINEERING GALGOTIAS  
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**CANDIDATE'S DECLARATION**

**We hereby certify that the work which is being presented in the project, entitled "Attendance system using face recognition" in Fully fulfillment of the requirements for the award of the B.Tech submitted in the School of Computing Science and Engineering of Galgotias University, Greater Noida, is an original work carried out during the period of August 2021 to December 2021, under the supervision of Ms. Suman Devi, Department of Computer Science and Engineering of School of Computing Science and Engineering, Galgotias University, Greater Noida .**

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**CERTIFICATE**

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## **ABSTRACT**

**The student attendance management** system deals with the maintenance of the student's attendance details. It generates the attendance of the student on basis of presence in class. It is maintained on a daily basis of their attendance. the staff will be provided with a separate username & password to make the student's status.

The staff handling the particular subjects responsible to make the attendance for all students. Only if the student is present on that particular period, the attendance will be calculated. The students' attendance reports based on weekly and consolidated will be generated.

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## CHAPTER 1 INTRODUCTION

### 1.1 OBJECTIVE:

“Attendance Management System” is a software developed for maintaining the attendance of the student on the daily basis in the college. Here the staff, who are handling the subjects, will be responsible to mark the attendance of the students. Each staff will be given a separate username and password based on the subject they handle. An accurate report based on student attendance is generated here. This system will also help in evaluating the attendance eligibility criteria of a student. Report of the student’s attendance on a weekly and monthly basis is generated.

## CHAPTER 2

### SYSTEM ANALYSIS

#### 2.1 INTRODUCTION

Analysis can be defined as breaking up of any whole so as to find out their nature, function, et, It defines design as to make preliminary sketches of; to sketch a pattern or outline for plana. To plan and carry out especially by the artistic arrangement or in a skillful wall. System analysis and design can be characterized as a set of techniques and processes, a community of interests, a culture, and an intellectual orientation.

The various tasks in the system analysis include the following.

- Understanding application.
- Planning.
- Scheduling.
- Developing candidate solutions.
- Performing trade studies.
- Performing cost-benefit analysis.
- Recommending alternative solutions.
- Selling of the system.
- Supervising, installing, and maintaining the system.

This system manages the analysis of the report creation and develops manual entry of the student attendance. First design the student's entry form, staff allocation, and timetable allocation forms. This project will help the attendance system for the department calculate percentages and reports for eligibility criteria of the examination The application attendance entry system will provide fa flexible reports for all students.

## **2.2 EXISTING SYSTEM**

The Existing system is a manual entry for the students. Here the attendance will be carried out in the hand written registers. It will be a tedious job to maintain the record for the user. The human effort is more here. The retrieval of the information is not as easy as the records are maintained in the hand written registers.

This application requires correct feed on input into the respective field. Suppose the wrong inputs are entered, the application resists working. so the user finds it difficult to use.

### **2.3 PROPOSED SYSTEM:**

To overcome the drawbacks of the existing system, the proposed system has been evolved. This project aims to reduce the paperwork and save time to generate accurate results from the student's attendance. The system provides the best user interface.

Efficient reports can be generated by using this proposed system.

#### **2.3.1 Advantages of Proposed System**

- It is trouble-free to use.
- It is a relatively fast approach to enter attendance
- Is a highly reliable, approximate result from user
- Best user Interface
- Efficient reports

### **3. FEASIBILITY STUDY:**

Feasibility analysis begins once the goals are defined. It starts by generating broad possible solutions, which are possible to indicate what the new system should look like. This is where creativity and imagination are used. Analysts must think up new ways of doing things- generate new ideas. There is no need to go into the detailed system operation yet. The solution should provide enough information to make reasonable estimates about project costs and give users an indication of how the new system will fit into the organization. It is important not to exert considerable effort at this stage only to find out that the project is not worthwhile or that there is a need to

significantly change the original goal.

The feasibility of a new system means ensuring that the new system, which we are going to implement, is efficient and affordable. There are various types of feasibility to be determined. They are,

### **3.1 Economically Feasibility:**

The development of this application is highly economically feasible. The only thing to be done is to make an environment with effective supervision.

It is cost-effective in the sense that has eliminated the paperwor. The system is also time effective because the calculations are automated which are made at the end of the month or as per the user requirement.

### **3.2 Technical feasibility:**

The technical requirement for the system is economic and it does not use any other additional hardware and software. The technical evaluation must also assess whether the existing systems can be upgraded to use the new technology and whether the organization has the expertise to use it.

Install all upgrades framework into the .Net package supported windows-based application. this application depends on Microsoft office and intranet service, database. Enter their attendance and generate reports to excel sheet.

### **3.3 Operational Feasibility:**

The system working is quite easy to use and learn due to its simple but attractive interface. The user requires no special training for operating the system. Technical performance includes issues such as determining whether the system can provide the right information for the Department personnel student details and whether the system can be organized so that it always delivers this information at the right place and on time using intranet services. Acceptance revolves around the current system and its personnel.

## **CHAPTER 3 SYSTEM**

### **SPECIFICATION**

#### **3.1 HARDWARE REQUIREMENTS (Minimum Requirement)**

- **Minimum RAM:**-1GB
- **Hard Disk:**-128 GB
- **Processor:**-Intel Pentium 4( 1.50 GHz) or above

#### **3.2 SOFTWARE REQUIREMENTS (minimum Requirement)**

- **Operating system:** Windows XP
- **Front\_Design:**VB.Net version 10.0 ,.NET framework 4.0
- **Front-End Language:** Visual basic
- **Back-End:** Oracle 10g
- **Back-End Connectivity:**ADO.net



## CHAPTER 4

### SOFTWARE DESCRIPTION

#### 4.1 PACKAGE - VISUAL STUDIO 2010

**Microsoft Visual Studio** is an integrated development environment (IDE) from Microsoft. It is used to develop console and graphical user interface applications along with Windows Forms or WPF applications, web sites, web applications, and web services in both code together with managed code for all platforms supported by Microsoft Windows, Windows Mobile, Windows CE, .NET Framework, .NET Compact Framework, and Microsoft Silver light.

Visual Studio supports different programming languages using language services, which allow the code editor and debugger to support (to varying degrees) nearly any programming language, provided a language-specific service exists.

Visual Studio also includes a website editor and designer that allows web pages to be authored by dragging and dropping widgets. It is used for developing the VB.NET applications efficiently to get input and output design easiest one. It will be run at windows application-based services provide to the user.

#### 4.2 DEVELOPMENT TOOLS AND TECHNOLOGIES

##### **VB.NET Version 10.0:**

The latest version of Visual Basic .NET, which runs on .NET framework 4.5. Async Feature, Iterators, Call Hierarchy, Caller Information, and Global Keyword in Namespace Statements are some of the major features introduced in this version of VB. **Visual Basic .NET (VB.NET)** is an object-oriented computer programming language that can be viewed as an evolution of the classic Visual Basic (VB), implemented on the .NET Framework. Microsoft currently supplies two main editions of IDEs for development in Visual Basic: Microsoft Visual Studio 2012, which is commercial software,

and Visual Basic Express Edition 2012, which is free of charge. The command-line compiler, VBC.EXE, is installed as part of the freeware .NET Framework SDK. Mono also includes a command-line VB.NET compiler. The most recent version is VB 2012, which was released on August 15, 2012.

My goal in this article is to provide you with an introductory, yet intensive, look at Visual Basic .NET and the new Microsoft®.NET platform. To learn what Visual Basic .NET is all about, you must first understand a few core aspects of the .NET platform. This article will build your knowledge of Visual Basic .NET from the ground up, so I'll begin by discussing the new programming model and the high-level architecture of the platform's execution engine called the common language runtime (CLR).

While explaining what the CLR is and how it works, I'll show a few examples using Visual Basic .NET. As you'll see, Visual Basic® has undergone a significant overhaul to accommodate the CLR and its associated programming model. Consequently, Visual Basic .NET has many new object-oriented design features and much higher levels of type safety than previous versions of Visual Basic. either language can be used to write software that takes full advantage of the CLR .NET Framework. Now, let me get started by introducing the core concepts of the .NET platform

#### **Features of .NET**

- IO management
- Windows and Web Controls
- Database access
- Multithreading
- Remoting
- Reflections

#### **ORACLE 10G:**

Oracle 10g has come with the purpose of improving manageability and performance in all areas, right from the process of installation, server configuration, database upgrades to application tuning, space and storage management, and so on. This Oracle version has been designed to reduce the cost of manageability and deliver high performance for all key workloads. Also, various new features are provided for high- availability, including new

flashback capabilities, virtualization of computing resources in Grid environment that reduce the cost of hardware and storage, security enhancement, Business intelligent solutions, etc. Let have a glance at some exciting features of Oracle 10g.

- Clustering
- Grid computing
- Server manageability
- Network management
- Storage management
- Space, object transaction management
- Back up recovery management
- Reduce downtime for application and database upgrades

**ADO.Net:**

An evolutionary, more flexible successor to ADO. A system designed for connected environments. A programming model with advanced XML support. A set of classes, interfaces, structures, and enumerations that manage data access from within the .NET Framework

**Data Providers**

- MS SQL Server 7.0+
- Oracle
- OLE DB (old SQL & Access- Jet 4.0)
- Open Database Connectivity (ODBC)- earlier Visual Studio, Access Driver, ODBC for Oracle

## **CHAPTER 5 PROJECT**

### **DESCRIPTION**

#### **5.1 PROBLEM DEFINITION:**

This system developed will reduce the manual work and avoid redundant data. By maintaining the attendance manually, then efficient reports cannot be generated. The system can generate efficient weekly, consolidate reports based on attendance. As the attendances are maintained in registers it has been a tough task for admin and staff to maintain for a long time. Instead, the software can keep long and retrieve the information when needed.

#### **5.2 PROJECT OVERVIEW**

Attendance Management System has two main modules for proper functioning

- Admin module has rights for creating any new entry of faculty and student details.
- The user has a right of making daily attendance, generating reports. Attendance report can be taken by given details of student details, date, class.

#### **5.3 MODULE DESCRIPTION**

The system should be designed in such a way that only authorized people should be allowed to access some particular modules. The records should be modified by only administrators and no one else. The user should always be in control of the application and not vice versa.

The user interface should be consistent so that the user can handle the application with ease and speed. The application should be visually, conceptually clear.

### 5.3.1 ADMINISTRATOR MODULE:

- **Student Details:**

This module deals with the allocation of roll no and personal details for a new batch. It will generate personal details of students and academic details of the students with the photos.

- **Staff Details:**

- It helps to allow the subject and the subject code to the particular staff.
- It provides the facility to have a user name and password to the staf.

- **Time table details:**

- It will retrieve the subject information from the subject database and assign time table to the staff.
- It will help the admin, staff to make the entry of attendance based on the subject and period allotted to the respective staff.

- **Attendance details:**

- It will be made to the attendance database for all students. Entered attendance to be stored in the database subject, periodwise into the particular date.
- It will help s to the get report of weekly and consolidate of the attendance.

**Report details:**

The report can be taken daily, weekly, and consolidate:

- weekly report get all hour details of attendance starting date to ending date and display the status
- Consolidate report get all student attendance details starting date to ending date status help for the eligibility criteria of the student to attend the examination.

**5.3.2 STAFFS MODULE:**

- **Attendance details:**

- It assists the staff to mark attendance to the students for their subject. This will authenticate the staff before making the entry.

- **Report details:**

1. weekly report gets particular hour details of attendance from starting date to ending date and displays the status.
2. consolidate report get all student attendance details from starting date to ending date status help for the eligibility criteria of the student to attend the examination



## 5.4 SYSTEM FLOW DIAGRAM:

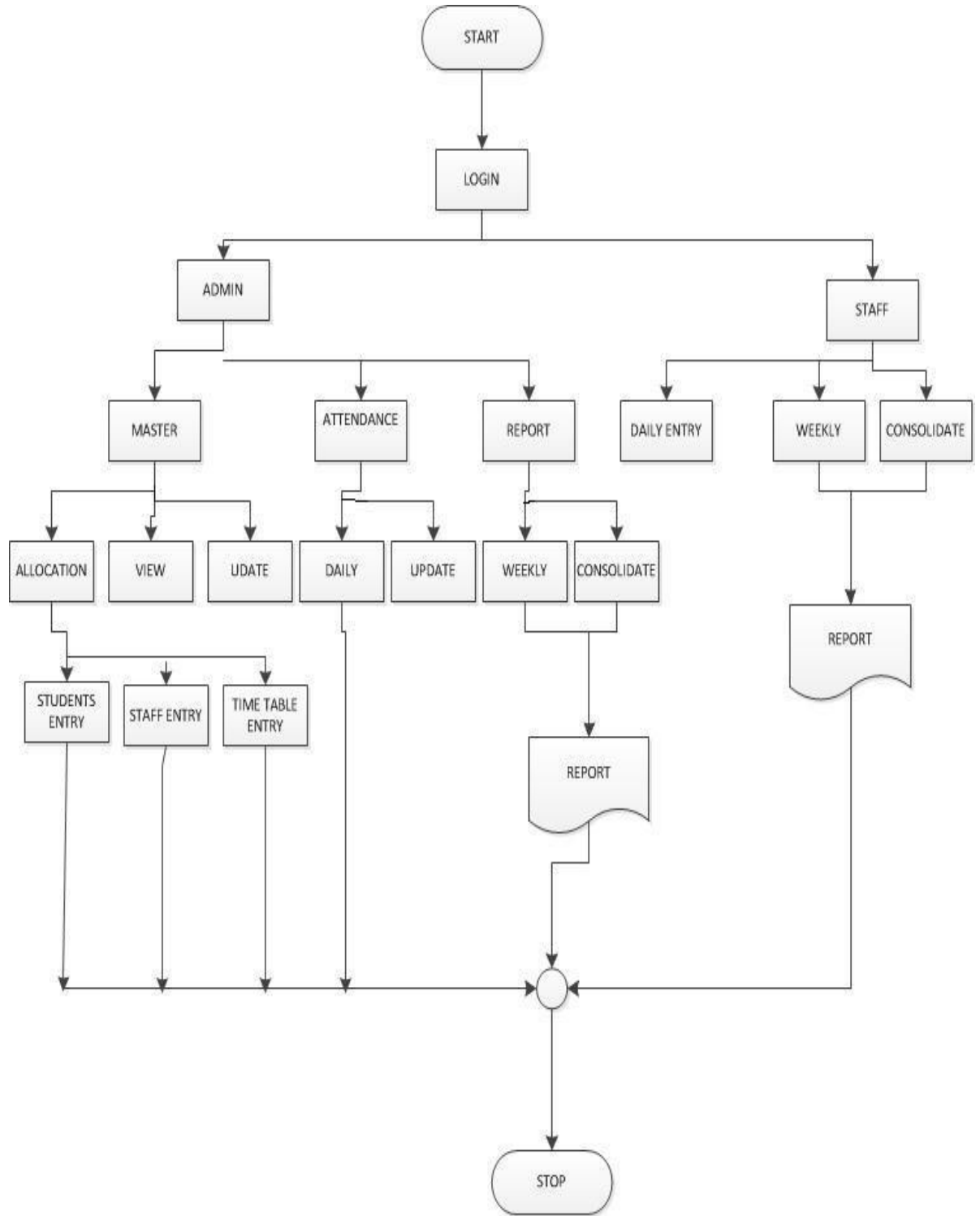


Figure 5.4-System Flow Diagram

## 5.5 Data Flow Diagram

5.5.1 DFD level 0:

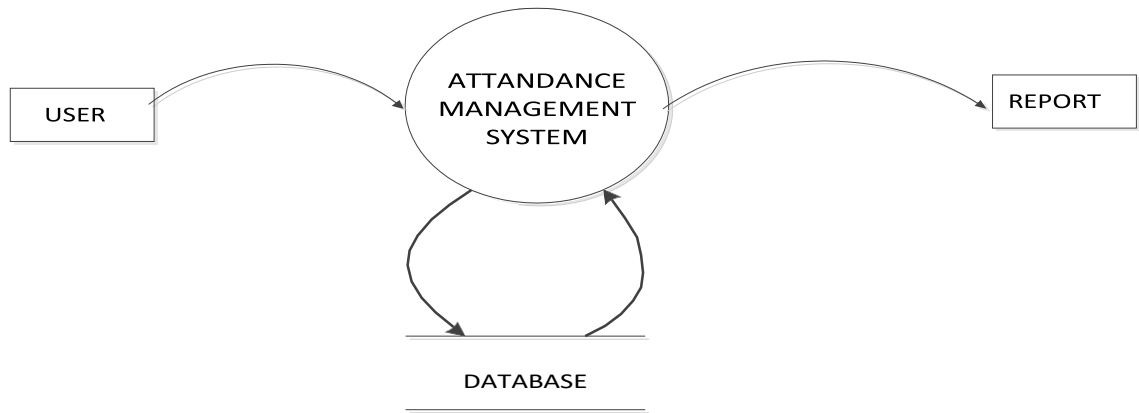


Figure 5.5.1-DataFlowDiagram Level1

5.5.2 DFD level 1:

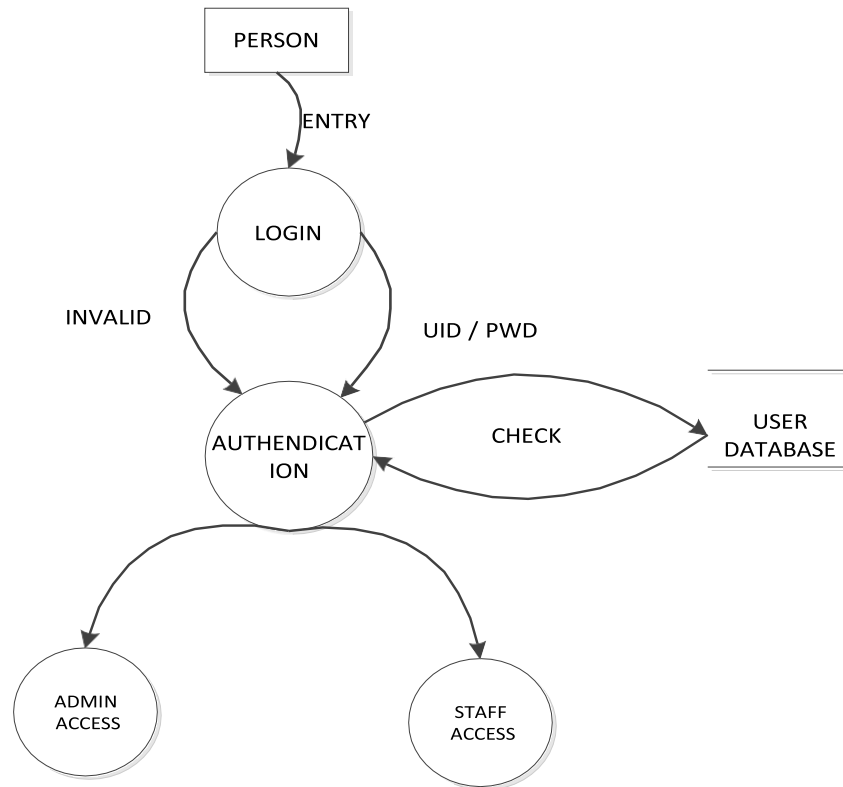


Figure 5.5.2-DataFlowDiagram Level1

5.5.3 DFD level 2:

### 5.5.3.1 Admin:

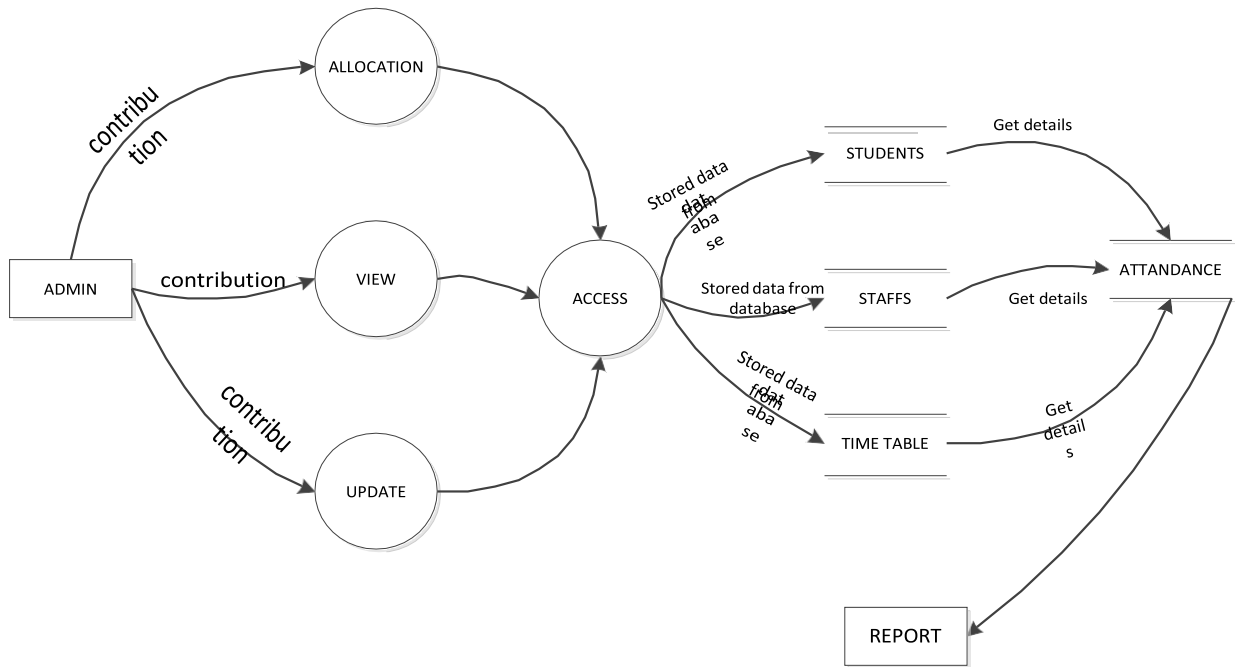


Figure 5.5.3.1-DataFlowDiagram Level2

### 5.5.3.2 staffs:

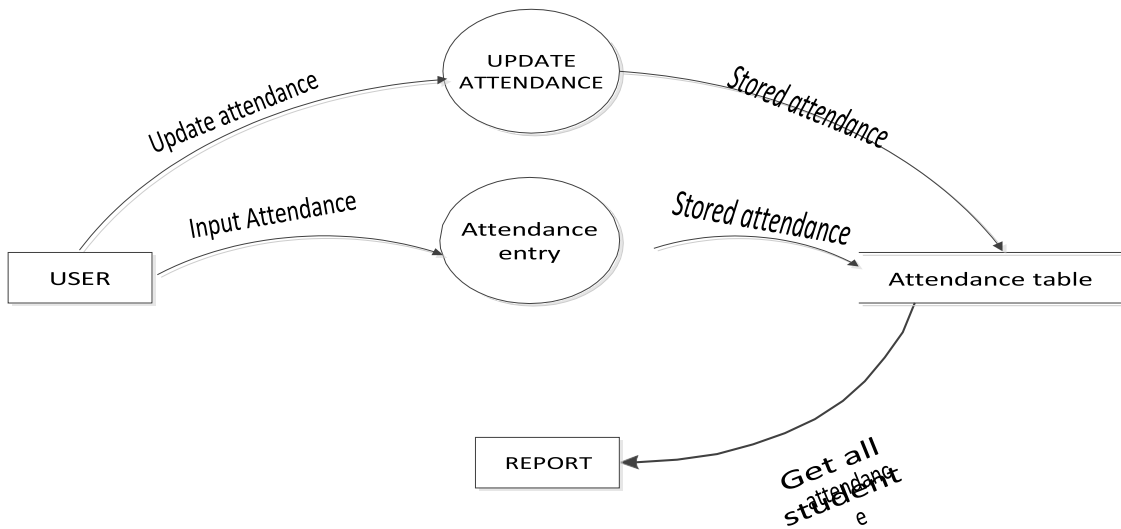


Figure 5.5.3.2-DataFlowDiagram Level2

## 5.6 SYSTEM DESIGN:

### 5.6.1 Entity Relationship Diagram:

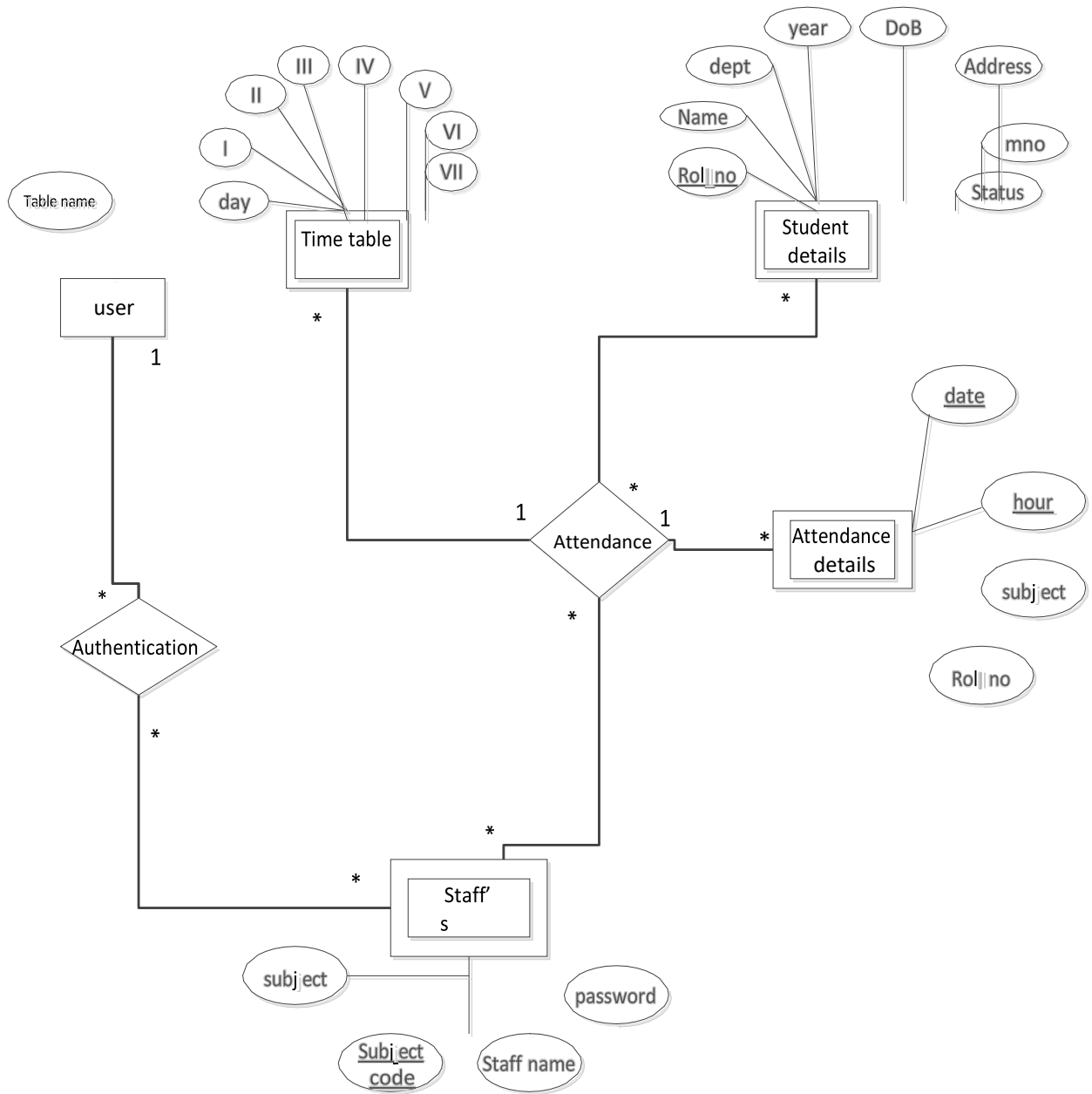


Figure 5.6.1-Entity Relationship Diagram

### 5.6.2 Use case Diagram:

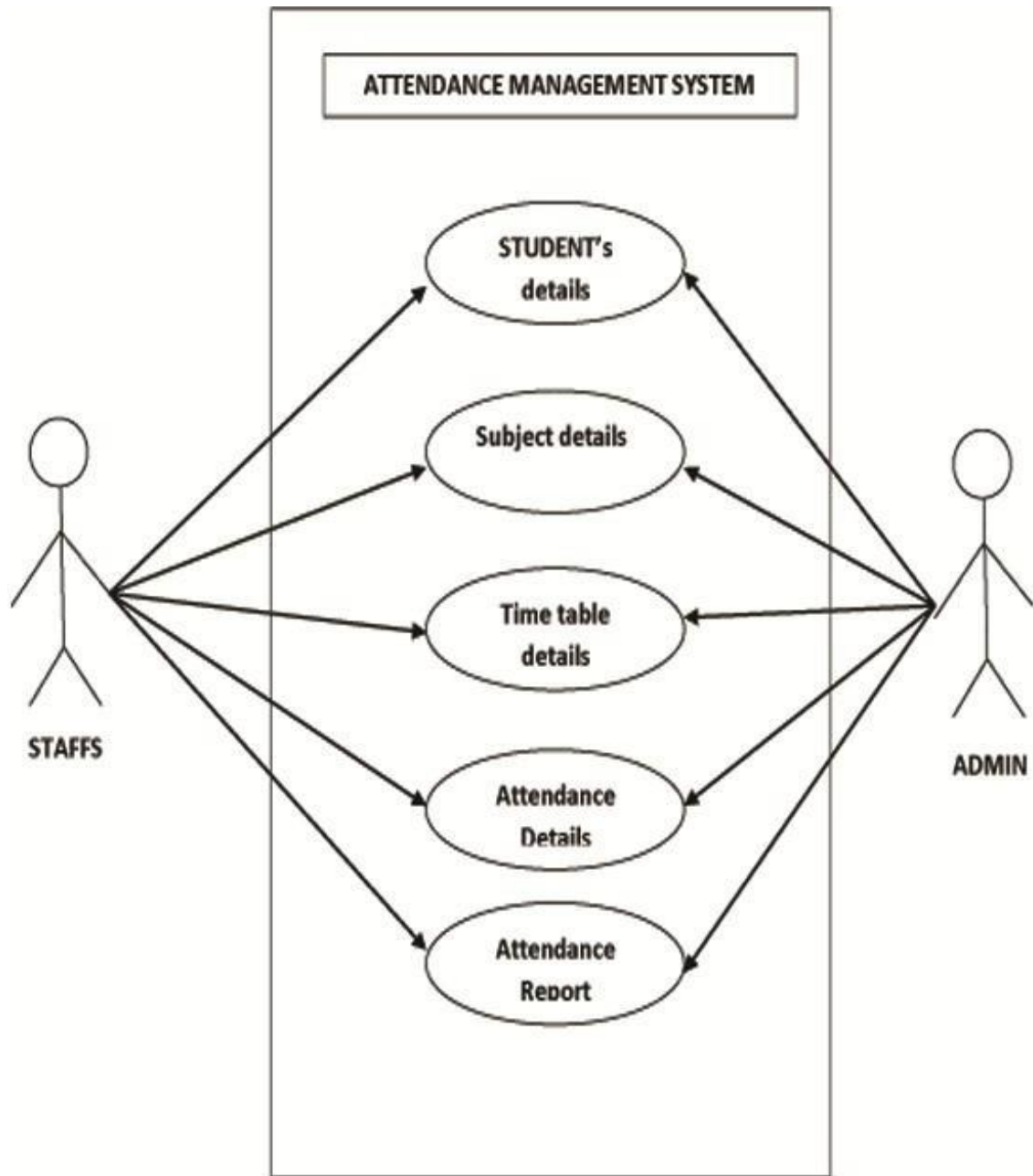


Figure:5.6.2 -Use case Diagram

## 5.6.2 Database Design:

### 5.6.2.1 LOGIN TABLE:

- To create login details for the table.

| <b>FIELDS</b> | <b>DATATYPE</b> | <b>CONSTRAINTS</b> | <b>DESCRIPTION</b>                 |
|---------------|-----------------|--------------------|------------------------------------|
| Table name    | varchar (20)    | Primary key        | Stored number of tables from login |

Table:5.7.2.1 -Login Table

### 5.6.2.2 Staffs Table:

- To create a username and password for the staff details.

| <b>FIELDS</b> | <b>DATATYPE</b> | <b>CONSTRAINTS</b> | <b>DESCRIPTION</b>                    |
|---------------|-----------------|--------------------|---------------------------------------|
| Score         | varchar (20)    | Primary key        | Define<br>separat<br>esubject code id |
| ssname        | Varchar(15)     | Not Null           | Short subject<br>name(ex:cpp)         |
| name          | Varchar (20)    | NotNull            | Staffs name                           |
| Password      | Varchar (20)    | NotNull            | Staff login password                  |

Table:5.7.2.2 –Student details Table

### 5.6.2.3 Student table:

- To create a table for Student personal details for our department.

| <b>FIELDS</b> | <b>DATATYPE</b> | <b>CONSTRAINTS</b> | <b>DESCRIPTION</b>                          |
|---------------|-----------------|--------------------|---|
| Roll          | Varchar (15)    | Primary key        | Student roll number                         |
| Name          | Varchar (20)    | NotNull            | Student name                                |
| Dept          | Varchar (30)    | NotNull            | Department name                             |
| Year          | Number          | NotNull            | Batch year                                  |
| DOB           | Varchar (20)    | NotNull            | Student date of birth                       |
| ADDRESS       | Varchar (20)    | NotNull            | Student<br>permanen<br>taddress             |
| MNO           | Varchar (20)    | NotNull            | Student<br>mobile<br>number                 |
| EID           | Varchar (30)    | NotNull            | Student E-mail id                           |
| CSTATUS       | Varchar (20)    | NotNull            | Student status for<br>days holler/Hosteller |

Table:5.7.2.3 –Staff Details Table

#### 5.6.2.4 Time table:

- To create the subject timetable for a particular class.

| <b>FIELDS</b> | <b>DATATYPE</b> | <b>CONSTRAINTS</b> | <b>DESCRIPTION</b>                          |
|---------------|-----------------|--------------------|---|
| Day           | Varchar (20)    | Primary key        | Days insert<br>(ex: Monday)                 |
| I             | Varchar (20)    | NotNull            | set the period for 1<br>particular subject  |
| II            | Varchar (20)    | NotNull            | set the period for 2<br>particular subjects |
| III           | Varchar (20)    | NotNull            | set the period for 3<br>particular subjects |
| IV            | Varchar (20)    | NotNull            | set the period for 4<br>particular subjects |
| V             | Varchar (20)    | NotNull            | set the period for 5<br>particular subjects |
| VI            | Varchar (20)    | NotNull            | set the period for 6<br>particular subjects |
| VII           | Varchar (20)    | NotNull            | set the period for 7<br>particular subjects |

Table:5.7.2.4 -Time Table



### 5.6.2.5 Attendance table:

- To create attendance details for a particular class.

| <b>FIELDS</b>       | <b>DATATYPE</b> | <b>CONSTRAINTS</b> | <b>DESCRIPTION</b>   |
|---------------------|-----------------|--------------------|--|
| Dates               | Date            | Primary key        | Enter day by day attendance                                      |
| Hour                | Number          | Primary key        | Set particular hour only   |
| Subject             | Varchar (15)    | NotNull            | Particular Subject   |
| Rollno<br>(1 to 60) | Varcahar (20)   | NotNull            | Enter Present absent details in particular student(ex:M11MCA001) |

Table:5.7.2.5 -Attendance Table

### 5.6.3 INPUT DESIGN

Input design is part of overall system design that requires special attention to designing input data is to make the data entered easy and free from **errors**. The input forms are designed using the controls available in the .NET framework. Validation is made for every data that is entered. Help information is provided for the users when the customer feels difficult.

Input design is the process of converting the user originated inputs to a computer-based format. A system user interacting through a workstation must be able to tell the system whether to accept the input to produce reports. The collection of input data is considered to be a most expensive part of the system design. Since the input has to be planned in such a manner to get relevant information, extreme care is taken to obtain pertinent information

This project first will be entered into the input of allocation forms it will be created on student details form and subject entry form, time table form .it will help to calculate subject wise attendance system. next one if u want any verification on your data's also available in details to show forms. Attendance to enter single subject-wise or all subject-wise attendance systems available

in this project.

#### 5.6.4 OUTPUT DESIGN

Output design this application “**Student Attendance management system**” generally refers to the results and information that are generated by the system for many end-users; output is the main reason for developing the system and the basis on which they evaluate the usefulness of the application.

The output is designed in such a way that it is attractive, convenient, and informative. Forms are designed with various features, which make the console output more pleasing.

As the outputs are the most important sources of information to the users, better design should improve the system’s relationships with us and also will help in decision making. Form design elaborates the way output is presented and the layout available for capturing information.

One of the most important factors of the system is the output it produces. This system refers to the results and information generated. The output from a computer system is used to communicate the result of processing to the user.

Attendance management system to show the report subject-wise attendance maintained by staff. Taken as a whole report obtain on administrator privileges only. These forms will show weekly reports and consolidate report generated to date, batch, and class-wise to our end user. we want to change our report to convert Excel format. if you want to change any modification.

# CHAPTER 6

## SYSTEM TESTING

### 6.1 Introduction

Once source code has been generated, software must be tested to uncover (and correct) as many errors as possible before delivery to the customer. Our goal is to design a series of test cases that have a high likelihood of finding errors. To uncover the errors software techniques are used. These techniques provide systematic guidance for designing tests that

- (1) Exercise the internal logic of software components, and
- (2) Exercise the input and output domains of the program to uncover errors in program function, behavior, and performance.

**6.1.1 Steps:** Software is tested from two different perspectives:

- (1) Internal program logic is exercised using —White box|| test case design techniques.
- (2) Software requirements are exercised using —block box|| test case design techniques.

In both cases, the intent is to find the maximum number of errors with the minimum amount of effort and time.

### 6.2 Testing Methodologies:

A strategy for software testing must accommodate low-level tests that are necessary to verify that a small source code segment has been correctly implemented as well as high-level tests that validate major system functions against customer requirements. A strategy must provide guidance for the practitioner and a set of milestones for the manager. Because the steps of the test strategy occur at a time when deadline pressure begins to rise, progress must be measurable and problems must surface as early as possible. Following testing, techniques are well known and the same strategy is adopted during this

project testing.

### **6.2.1 Unit testing:**

Unit testing focuses verification effort on the smallest unit of software design-the software component or module. The unit test is white-box oriented. The unit testing implemented in every module of student attendance management system. by giving correct manual input to the system, the data are stored in the database and retrieved. If you want the required module to access input or get the output from the End-user. any error will accrue the time will provide a handler to show what type of error will be accrued.

### **6.2.2 System testing:**

System testing is a series of different tests whose primary purpose is to fully exercise the computer-based system. Below we have described the two types of testing which have been taken for this project. it is to check all modules worked on an input basis. if you want to change any values or inputs will change all information. so specified input is a must.

### **6.2.4 Performance Testing**

Performance testing is designed to test the run-time performance of software within the context of an integrated system. Performance testing occurs throughout all steps in the testing process. Even at the unit level, the performance of an individual module may be assessed as white-box tests are conducted.

This project reduces attendance tables, codes. it will generate a reports fast.no have extra time or wait for results .entered correct data will show result few millisecond. justused only low memory of our system. Automatically do not get access to other software. Get user permission and access to other applications.

### 6.3 Test cases

Test case is an object for execution for other modules in the architecture that does not represent any interaction by itself. A test case is a set of sequential steps to execute a test operating on a set of predefined inputs to produce certain expected outputs. There are two types of test cases: *-manual* and *automated*. A manual test case is executed manually while an automated test case is executed using automation.

In system testing, test data should cover the possible values of each parameter based on the requirements. Since testing every value is impractical, a few values should be chosen from each equivalence class. An equivalence class is a set of values that should all be treated the same.

Ideally, test cases that check error conditions are written separately from the functional test cases and should have steps to verify the error messages and logs. Realistically, if functional test cases are not yet written, it is ok for testers to check for error conditions when performing normal functional test cases. It should be clear which test data if any is expected to trigger errors.

## TEST CASE:

### 6.3.1 Agent and admin login form

| Sno | Test case id | Test case name    | Test case desc                              | Step  | Expected result   | Actual Result   | Test case status<br>pass/fail |
|-----|--------------|-------------------|---|---|---|---|-------------------------------|
| 1   | Login admin  | Validate login    | To verify that login name on the login page | Enter the login name and password and click submit button | Login successful or an error message "Invalid login or password" must be displayed  | Login successful                                      | Pass                          |
| 2   | Login Staff  | Validate login    | To verify that login name on the login page | Enter the login name and password and click submit button | Login successful or an error message "In valid login or password" must be displayed | Login successful                                      | Pass                          |
| 3   | Password     | Validate password | To verify that password on the login page   | Enter password and login name click submit button         | An error message "password invalid" must be displayed                               | An error message "password invalid" must be displayed | fail                          |



### 6.3.2 MASTER form

| Sn<br>o | Test<br>case<br>id                      | Test<br>case<br>name                     | Test<br>case<br>des<br>c  | Step  | Expected result   | Actual<br>Result  | Test<br>case<br>status<br>pass/fa<br>il |
|---------|---|--|---|---|---|---|---|
| 1       | Cre<br>ate<br>sude<br>nt<br>detail<br>s | Validate<br>allocatio<br>n form          | To<br>allocate<br>separat<br>eroll no<br>for the<br>students                            | Nothing<br>entered<br>and click<br>submit<br>button | An error message<br>student name not<br>equal to null must<br>be displayed  | Inserted<br>successf<br>ull                                       | Pass                                    |
| 2       | Cre<br>ate<br>staff<br>detail<br>s      | Validate<br>allocatio<br>n form          | To<br>allocate<br>separat<br>esubject<br>userna<br>me<br>passwor<br>d for the<br>staffs | Nothing<br>entered<br>and click<br>submit<br>button | An error message<br>staff details<br>password,userna<br>me not equal to<br>nullmust be<br>displayed                       | Inserted<br>succesf<br>ul   | Pass                                    |
| 3       | Cre<br>ate<br>timet<br>able             | Validate<br>allocate<br>a period<br>form | To<br>verify<br>that<br>data<br>stored<br>on<br>database                                | Nothing<br>entered<br>and click<br>submit<br>button | An error message<br><del>do</del> not click not<br>allocation<br>subjecttable not<br>equal tonull<br>must be<br>displayed | Inserted<br>successf<br>ull                                       | Pass                                    |
| 4       | View                                    | Check<br>details of<br>all data          | To<br>verify<br>that<br>data<br>stored<br>on the<br>databas<br>e                        | generat<br>e d                                      | An error message<br>return null will be<br>displayed  | An error<br>messag<br>ereturn<br>null will<br>be<br>displaye<br>d | fail                                    |

### 6.3.3 Report form

| Sno | Test case id       | Test case name                 | Test case desc                       | Step                                    | Expected result                  | Actual Result             | Test case status pass/fail |
|-----|--------------------|--------------------------------|--------------------------------------|---|----------------------------------|---------------------------|----------------------------|
| 1   | Weekly report      | Validate class attendanc eform | To select that sourceand destination | Nothing entered and click submit button | An error messag eon not selected | Retrieved data successful | Pass                       |
| 2   | Consolidate report | Validate class attendanc eform | To select that departon and time     | Nothing entered and click submit button | An error messag eon not selected | Retrived data successful  | Pass                       |

# CHAPTER 7 SYSTEM IMPLEMENTATION

## 7.1 Purpose

System implementation is the important stage of the project when the theoretical design is turned into practical system. The main stages in the implementation are as follows:

- Planning
- Training
- System testing and
- Changeover Planning

Planning is the first task in the system implementation. At the time of implementation of any system people from different departments and system analysis involve. They are confirmed to practical problem of controlling various activities of people outside their own data processing departments.

The line managers controlled through an implementation coordinating committee. The committee considers ideas, problems and complaints of user department, it must also consider:

- The implication of system environment
- Self selection and allocation for implementation tasks
- Consultation with unions and resources available
- Standby facilities and channels of communication

Student Attendance management system will implement student details ,staff handle subjects details, separate login details ,time table details. It will used to entered subject wise attendance .This application elaborate attendance table generate weekly, consolidate report provide to the End user. Mostly this application will calculate date wise attendance

.To select starting date to end date generate reports at the time of activities.

## **7.2 SYSTEM MAINTENANCE**

Software maintenance is far more than finding mistakes. Provision must be made for environment changes, which may affect either the computer, or other parts of the computer based systems. Such activity is normally called maintenance. It includes both the improvement of the system functions and the corrections of faults, which arise during the operation of a new system.

It may involve the continuing involvement of a large proportion of computer department resources. The main task may be to adapt existing systems in a changing environment.

Back up for the entire database files are taken and stored in storage devices like flash drives, pen drives and disks so that it is possible to restore the system at the earliest. If there is a breakdown or collapse, then the system gives provision to restore database files. Storing data in a separate secondary device leads to an effective and efficient maintenance of the system. The nominated person has sufficient knowledge of the organization's computer based system to be able to judge the relevance of each proposed change.

## **CHAPTER 8**

### **CONCLUSION AND FUTURE ENHANCEMENT**

#### **8.1 Conclusion**

To conclude, Project Data Grid works like a component which can access all the databases and picks up different functions. It overcomes the many limitations incorporated in the attendance.

- Easy implementation Environment
- Generate report Flexibly

#### **8.2 Scope for future development**

The project has a very vast scope in the future. The project can be implemented on the intranet in the future. The project can be updated in the near future as and when the requirement for the same

arises, as it is very flexible in terms of expansion. With the proposed software of database Space Manager ready and fully functional the client is now able to manage and hence run the entire work in a much better, accurate, and error-free manner. The following are the future scope for the project.

- Discontinue of particular student eliminate potential attendance.
- Bar code Reader based attendance system.
- Individual Attendance system with photo using Student login.

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