STUDENTS ATTENDANCE MANAGEMENT SYSTEM
Software Engineering PROJECT REPORT

Submitted by

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DECLARATION

I affirm that the mini project work titled **"**STUDENT **ATTENDANCEMANAGEMENT SYSTEM**"
being submitted in partial fulfilment for Software Engineering
is the original work carried out by us. It has not formed the part of any other project work submitted for award of any degree or diploma, either in this or any other University.

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ABSTRACT
Student attendance management

System deals with the maintenance of the student's attendance details. It is generating the attendance of the student on basis of presence in class. It is maintained on the daily basis of their attendance. the staffs will be provided with the separate username & password to make the student's status.

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

CHAPTER 1

1.1 INTRODUCTION

OBJECTIVE:

"Attendance Management System" is software developed for maintaining the attendance of the student on the daily basis in the collage. Here the staffs, who are handling the subjects, will be responsible to mark the attendance of the students. Each staff will be given with a separate username and password based on the subject they handle. An accurate report based on the student attendance is generated here. This system will also help in evaluating attendance eligibility criteria of a student. Report of the student's attendance on 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 etc. It defines design as to make preliminary sketches of; to sketch a pattern or outline for plan. To plan and carry out especially by artistic arrangement or in a skilful 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 solution.
- Performing trade studies.
- Performing cost benefit analysis.
- Recommending alternative solutions.
- Selling of the system.
- Supervising, installing and maintaining the system.

This system manages to the analysis of the report creation and develops manual entry of the student attendance. First design the student's entry form, staff allocation and time table allocation forms. This project will help the attendance system for the department calculate percentage and reports for eligibility criteria of examination. The application attendance entry system will provide flexible report 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 recordfor the user. The human effort is more here. The retrieval of the information is not as easy as the records are

maintained in the handwritten registers. This application requires correct feed on input into the respective field. Suppose the wrong inputs are entered, the application resist to work. 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 paper work and saving time to generate accurate
results from the student's attendance. The
system provides with the best user interface.The 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 highly reliable, approximate result from user
- Best user Interface
- Efficient reports

CHAPTER 3

SYSTEM SPECIFICATION

3.1SOFTWARE

REQUIREMENTS (minimum Requirement)

- **Operating system:** Windows 10
- **Front-End Language:** HTML, CSS, Bootstrap, JS and PHP
- **Back-End:** MYSQL
- **Back-End Connectivity:** Xampp

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 report based onthe attendance. As the attendances are maintained in registers it has been a tough task for admin and staff to maintain for long time. Instead the software can keep long and retrieve the information when needed.

5.2 PROJECT OVERVIEW

Attendance Management System basically has two main modules for proper functioning

- Admin module is having rights for creating any new entry of faculty and student details.
- User has a right of making daily attendance, generating report. 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 peopleshould be allowed to accesssome particular modules. The recor ds should be modified by only administrators and no one else. The user should always be in control of the application and not the 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:

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

Staff Details:

- It helps to allot subject and the subject code to the particular staffs.
- It provides the facility to have a user name and password to the staffs

Time table details:

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

Attendance details:

- It will be makes to the attendance database all students. Entered attendance to store in the database subject, period wise into the particular date.
- It will help to the get report of weekly and consolidate of the attendance.

Report details:

Report can be taken by daily, weekly and consolidate:

- weekly report gets 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:

- weekly report gets particular hour details of attendance from starting date to ending date and display the status.
- 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:

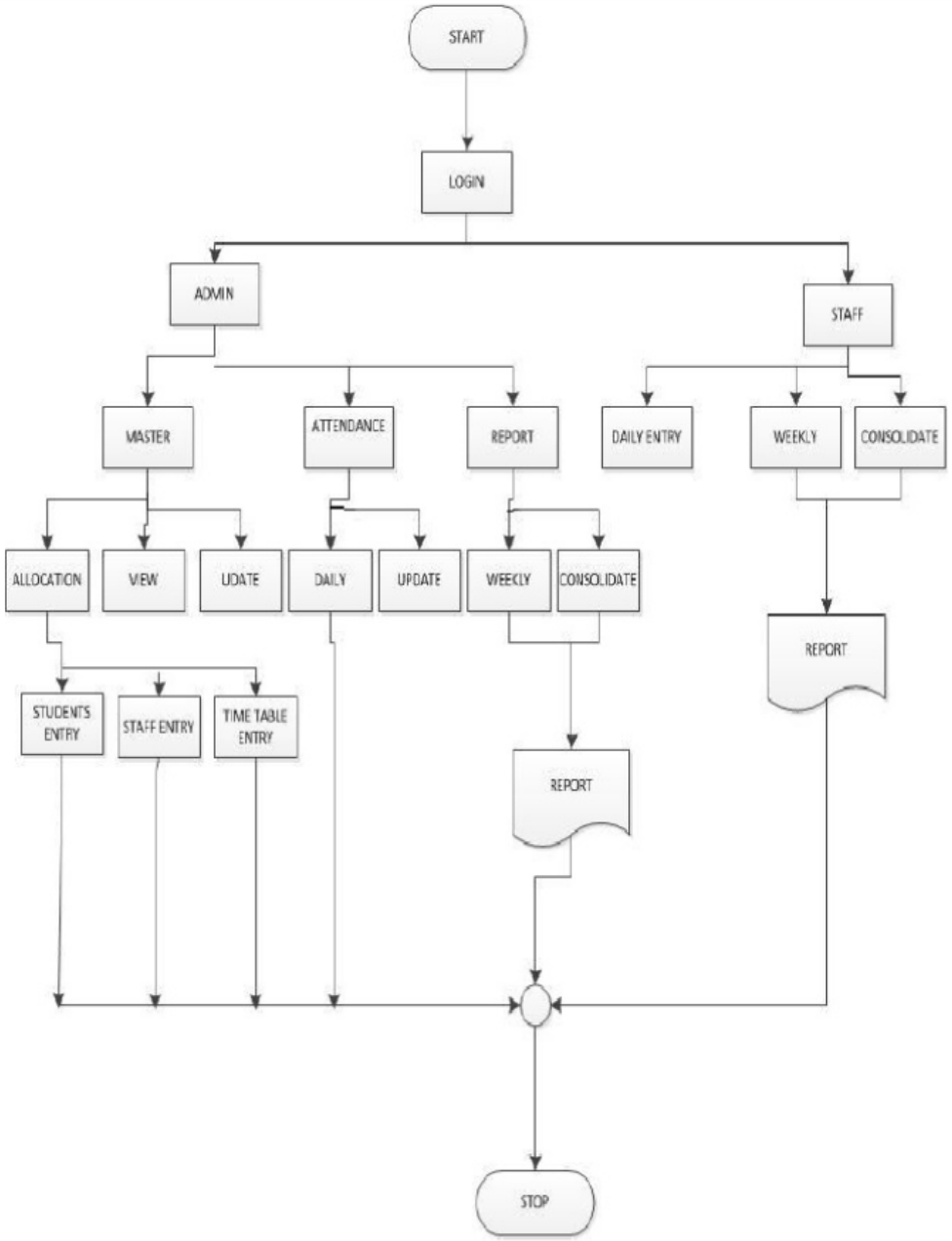

Figure 5.4-System Flow Diagram

5.5 Data Flow Diagram

5.5.1 DFD level 0:

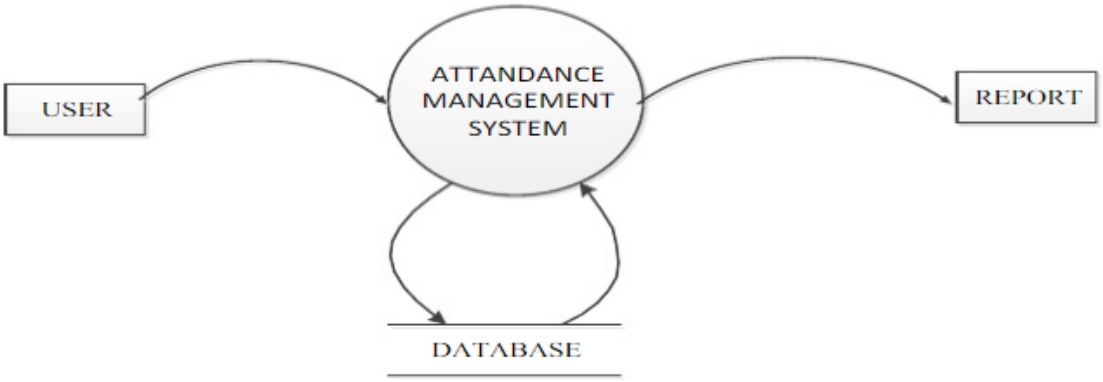

Figure 5.5.1-DataFlowDiagram Level1

5.5.2 DFD level 1:

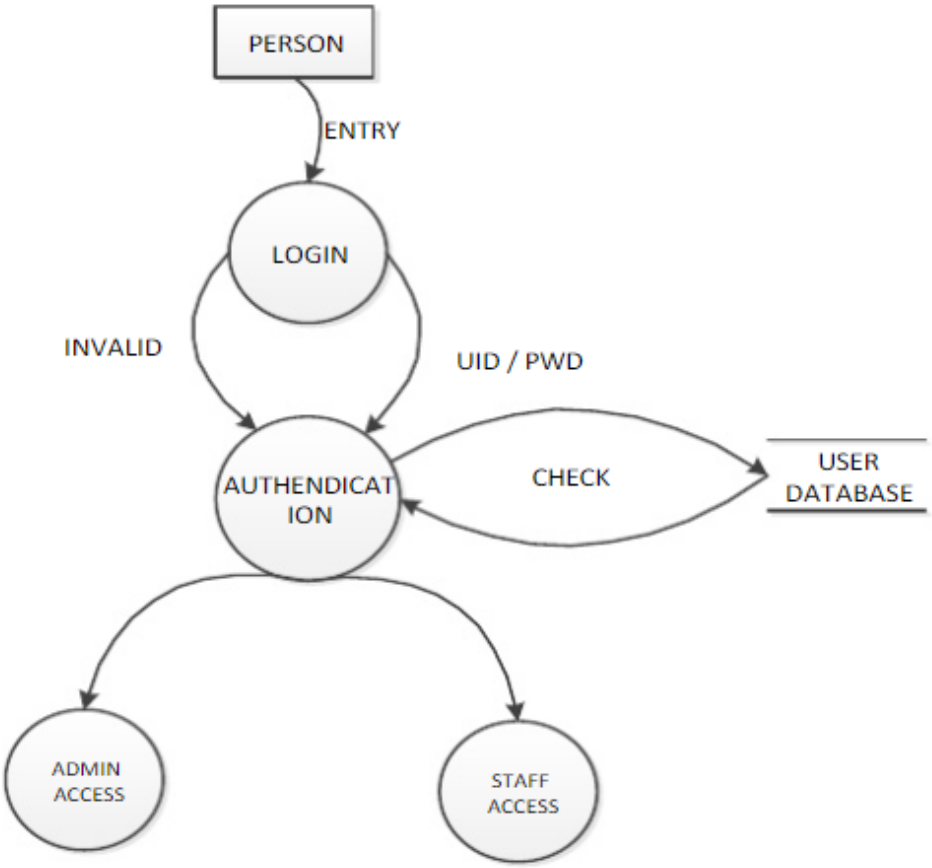

Figure 5.5.2-DataFlowDiagram Level1

5.5.3 DFD level 2:

5.5.3.1 Admin:

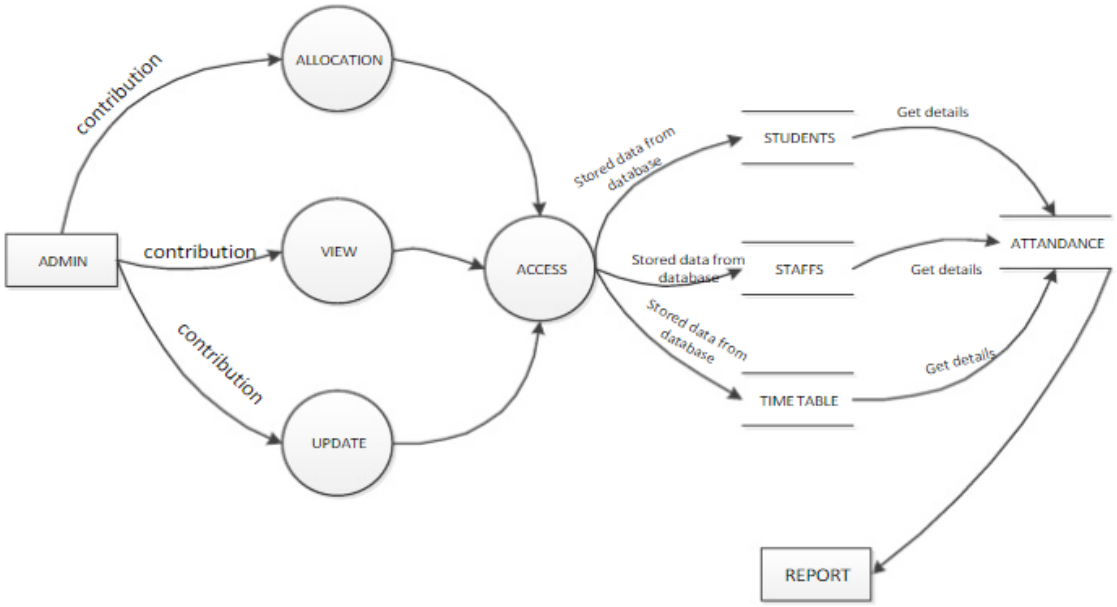

Figure 5.5.3.1-DataFlowDiagram Level2

5.5.3.2 staffs:

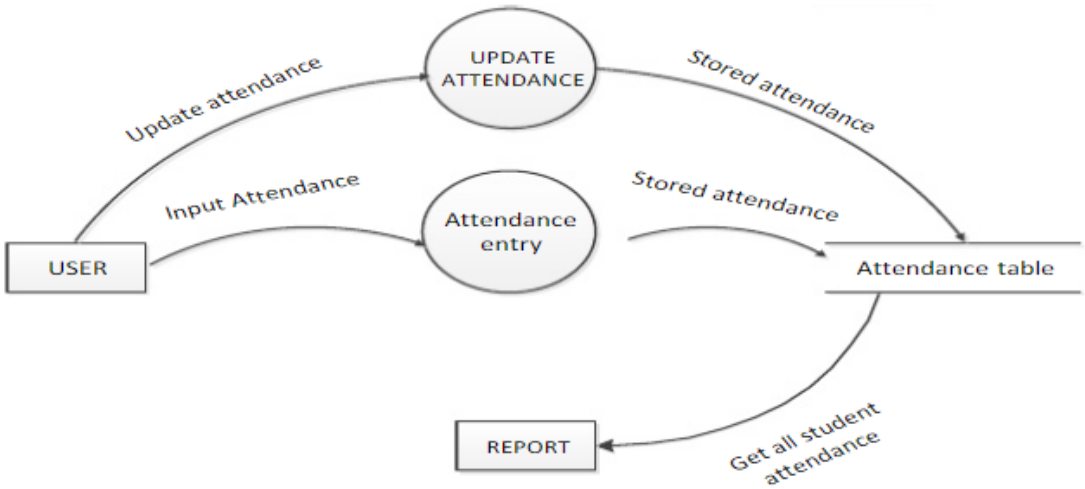

Figure 5.5.3.2-DataFlowDiagram Level2

5.6 SYSTEM DESIGN:

5.6.1 Entity Relationship Diagram:

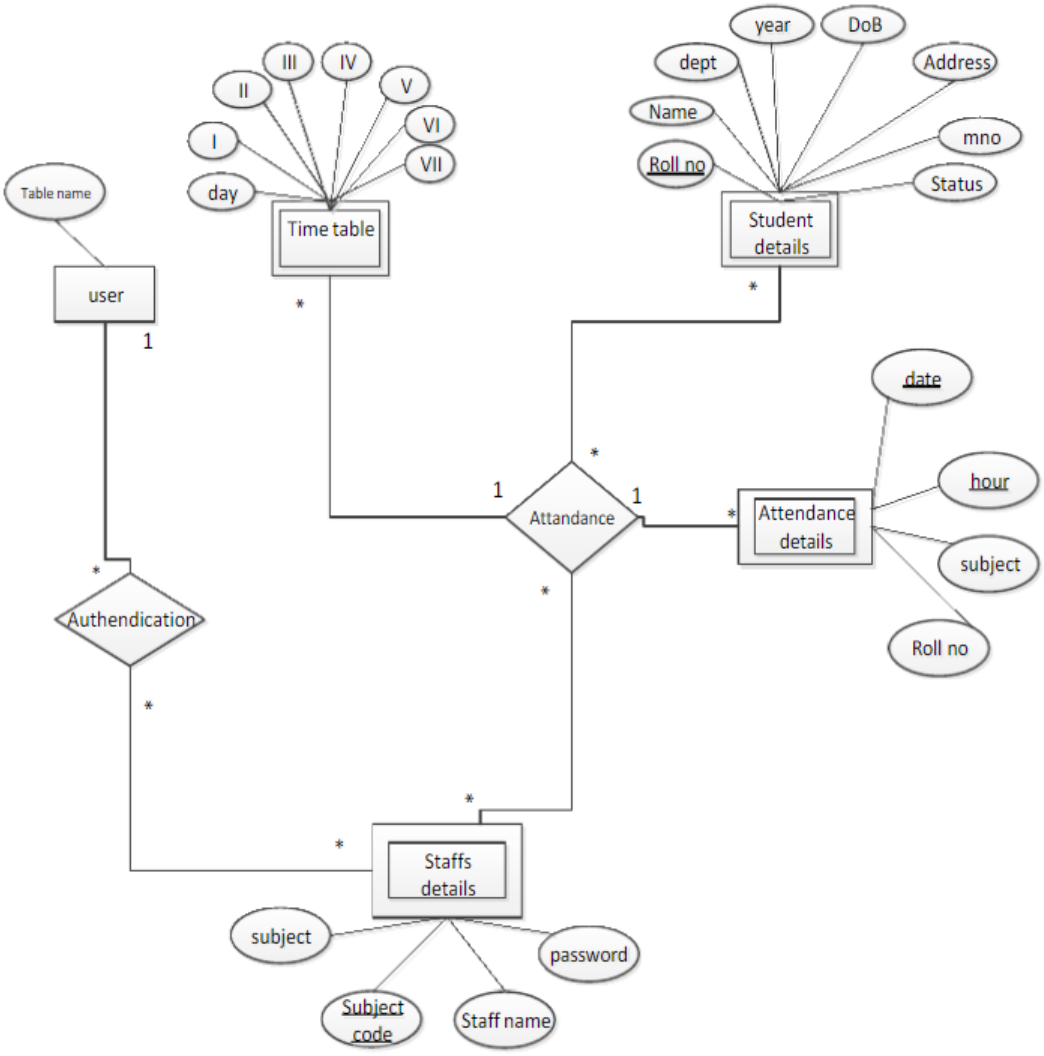

Figure 5.6.1-Entity Relationship Diagram

5.6.2 Use case Diagram:

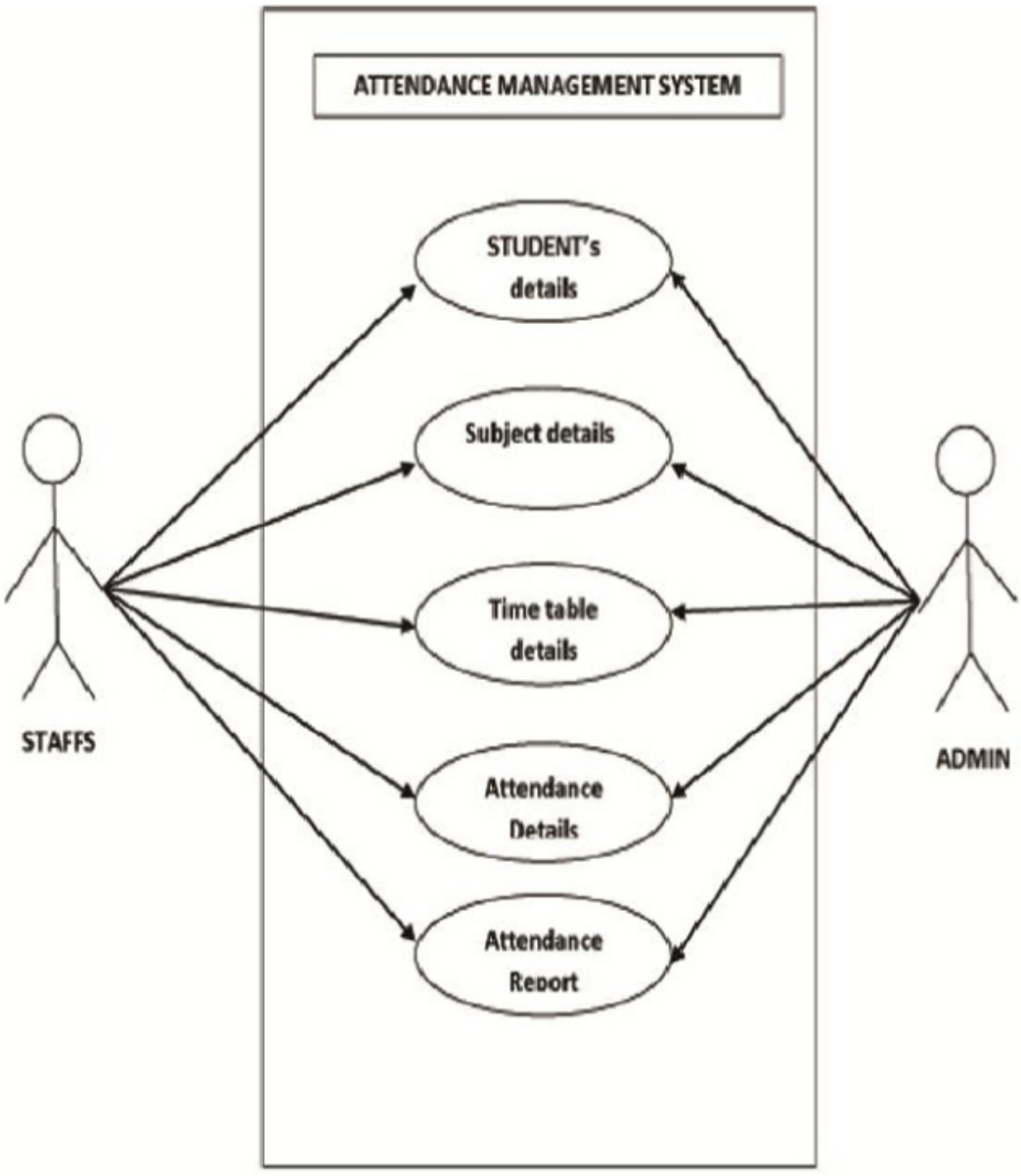

Figure:5.6.2 -Use case Diagram

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 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 test 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, behaviour 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 database and retrieved. If you want required module to access input or get the output from the End user. any error will accrue the time will provide handler to show what type of error will accrued.

6.2.2 System testing:

System testing is actually 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 input basis. If you want change any values or inputs will change all information. so specified input is 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 reduce attendance table, codes. it will generate report fast.no have extra time or waiting of results. entered correct data will show result few millisecond. just used only low memory of our system. Automatically do not getting access at another 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 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.

CHAPTER 7

SYSTEM IMPLEMENTATION

7.1 Purpose

System implementation is the important stage of project when the theoretical design is tuned 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 elaborates 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 recourses. 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 maintains of the system. The nominated person has sufficient knowledge of the organization’s computer passed 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 future. The project can be implemented on intranet in future. Project can be update+d in near future as and when 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.