Online Attendance Management System

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Undertaken by:

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Submitted to:

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STATEMENT OF SUBMISSION

This is to certify that **Mr. Abdul Rehman** Registration No. **01161811022** has successfully completed the final project as ***"Attendance Management System"*** Quaid-i-Azam University, Islamabad to fulfill the partial requirement of the degree "**Master of Sciences in Information Technology**".

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In the name of Allah, Most Gracious, Most Merciful

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Last but not least, my deepest gratitude goes to my kind family and beloved parents for their endless love, prayers, encouragement and unconditional support to pursue my interests, even when the interests went beyond boundaries of language, field and geography.

ABDUL REHMAN

ABSTRACT

Online Attendance Management System is an innovative Website designed to maintain and managed the attendance of students of IT department . This project keeps the attendance details of all students and which allows us to create flexible and configurable attendance policies to manage proper time and scheduling among the students, teachers and admin. The basic idea behind this project is to monitor activity of student attendance.

Objectives

The objectives behind this project are:

- Reduces admin work by integrating the details of the students into a single database.
- Manual work for information retrieval on attendance becomes less as the work becomes digitized.
- Easy access for students because they can view their attendance and make up for the shortage of attendance accordingly.
- It is also time saving as manual work is less.
- There is less chance of error.
- It eliminates duplicate data entry in time and attendance entries.
- Auto-generation of various types of reports of student attendance

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Chapter No.1

INTRODUCTION

1.1 Introduction:

Online Attendance Management System is a software developed for daily student attendance in universities and other organizations. It facilitate to access the attendance information of a particular student in a particular class. The information is sorted by the operator , which will be provided by the teacher of a particular class. This system will also help in evaluating attendance eligibility criteria of a student.

1.2 Purpose:

The main purpose of my developed system is that it is web based, fully responsive and flexible . It can be accessed from any computer no matter where you are. Its purpose is to make a web based attendance software for IT department to register the student details; their subjects, teacher, and related field. The daily attendance of students are taken automatically by selecting student name and program, if the student was present then the present check box is clicked similarly if the student was absent then the absent check box is clicked instead of the present check box , and by clicking the save button information will be stored in database. The attendance report will be generated automatically without time consuming which is reliable and there will be not any mistakes.

1.3 Scope:

With the help of this project faculty can keep a close eye on student's presence in their batch. This application can handle record of a large number of students and their present, absent or leave status. This is a very user friendly application faculty member can easy operate it without any special training. Adding or editing of any record in this application is very easy. This system generates all the necessary reports required by the management. All repetitive data is stored as master record. It saves users time in entering data. They can select correct data by selecting drop down menu. If any change is required in this application it can be easily done by the programmer.

1.4 Objectives:

My project is on Online Attendance management system and the objectives are:

1: Reduces admin work by integrating the detail of the student of all the subjects.

2: Manual work for information retrieval on attendance become less as the work become digitized.

3: Easy access for students because they can view their attendance and make up for the shortage of attendance accordingly .

4: It is also time saving as manual work is less.

5: There is less chance of error.

6: It eliminates duplicate data entry in time and attendance entries.

7: Auto-generation of various types of reports of student attendance.

1.5 Features:

The lists below are the feature that is included in the Online Attendance Management System Thesis.

- Student Registration
- Teacher Registration
- Attendance Monitoring for student and teachers
- Easy retrieval of attendance record for both student and teachers
- Student and Teachers Information Management
- Daily and Monthly Attendance Report for Students and Teachers

1.6 Product Perspective :

The Product Online Attendance management system is an independent product and does not depend on any other product or system. The product will automate various tasks associated with handling student details and better organizing stored information and optimum performance.

1.7 Product Functions:

Our system has two types of accessing modes:

i. Administrator
ii. User
    - Teacher
    - Student

1.7.1 Administrator:

Administrator have rights to manage student details, add a new student, provide register number for new student ,assign each student a course etc. Administrator can update his profile and also can give help to the teachers and students.

1.7.2 Users:

There are two users:-

- Student : - Student do the login and see profile, Attendance details etc.

- Teacher:-View the student details, and take attendance student.

1.8 Technologies:

The technologies used are:

Frontend:

- HTML
- CSS
- JavaScript

Backend:

- PHP
- MySQL

1.9 MODULE DESCRIPTION:

The system should be designed in such a way that only authorized people should be allowed to access some particular module. The record should be modified by only administrator and no one else. The user should always be in control of the administrator. The interface should be consistent.

1.9.1 Administrator module:

1.9.1.1 Student details:

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

1.9.1.2 Attendance details:

It will make to the attendance database all students. Entered Attendance to store in the database subject, period wise into the particular data. It will help the faculties to the get report of weekly and consolidate of the Attendance.

1.9.1.3 Report Details:

Report can be taken by 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.

1.9.2 Login Module:

1.9.2.1 Attendance details:

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

1.9.2.2 Report details:

Weekly report get particular hour details of attendance from starting date to ending date and display the status.

Chapter No.2

System Analysis

CHALLENGE & WEAKNESSES OF CURRENT SYSTEM.

2.1 Current System:-

In the present system all work is done on paper. The whole session attendance is stored in register and at the end of the semester the reports are generated and it takes more time in calculation. By the way we are not interested in generating report in the end of the semester but during the semester for the student to take note of his situation, and the department to know what action to take on students with poor attendance even before Exam.

So, we are not able to get student regularity report and take necessary action on students whenever we want because of having very time consuming process.

2.2 Weaknesses in Current System:-

2.2.1 Not User Friendly:

The existing system is not user friendly because the retrieval of data is very slow and data is not maintained efficiently.

2.2.2 Difficulty in report generating:

We require more calculations to generate the report so it is generated at the end of the semester. And the student doesn't get a single chance to improve their Attendance.

2.2.3 Manual control:

All calculations to generate report are done manually so there is greater chance of errors.

2.2.4 Lots of paperwork:

Existing system requires lot of paper work. Loss of even a single register/record led to difficult situation because all the papers are needed to generate the reports.

2.2.5 Time consuming:

Every work is done manually so we cannot generate report in the end of the semester or as per the requirement because it is very time consuming.

2.3 Requirements of New System:

2.3.1 User Requirements

The User requirements for the new system are to make the system fast, flexible, less prone to errors and reduce expenses and save time.

- A system that can automate the checking of answers which are pre-stored so that results can be generated as soon as the Student gives the reason.
- A facility that can generate result charts as per required.
- The New system should be more secure in managing Student records and reliable enough to be used in any condition.

Finally, it should prove cost effective as compared to the current system.

2.4 Features of the New System

Features of the New System:

The new system has been designed as per the user requirements so as to fulfill almost all them.

2.4.1 User Friendly: -

The proposed system is user friendly because the retrieval and storing of data is fast and data is maintained efficiently. Moreover the interface provided in the proposed system, provides user to deal with the system very easily.

2.4.2 Reports are easily generated:-

Reports can be easily generated in the proposed system so user can generate the report as per the requirement (weekly, monthly) or in the middle of the semester. User can give the notice to the employees to be regular.

2.4.3 Very less paper work:

The proposed system requires very less paper work. All the data is feted into the computer immediately and reports can be generated through computers. Moreover work becomes very easy because there is no need to keep data on papers.

2.5 Feasibility Study:

A key part of the preliminary investigation that reviews anticipated costs and benefits and recommends a course of action based on operational, technical, economic, and time factors. The

Chapter no. 3

REQUIREMENT ANALYSIS AND SPECIFICATION

3.1 Introduction:

Requirement analysis, also called requirement engineering, is the process of determination user expectation for a new or modify product. The purpose of requirement analysis is setup common understanding among stakeholder, the output of analysis is a requirement document, and the document can be business requirement specification, technical requirement specification, user stories, some screenshot drawing , or any other document. Requirement analysis is conducted iteratively with functional analysis to optimize performance requirements for identified function and to verified that synthesized solution can satisfy customer requirements.

3.2 Requirement Elicitation:

Requirement elicitation is the first of four steps in software requirement engineering (the order being analysis, specification and validation). IT consist of collecting information, understanding the stakeholder needs . Requirement elicitation practices include interview, questioners, user observation, workshops, brainstorming, use cases role playing and prototyping.

3.3 Requirement Analysis:

The analysis activity examine the high-level requirements and determine if they are, complete and free of contra dictation, and then define the strategy to address these issues.

3.4 Requirement Specification:

A specification is a document that specifies, in a complete, precise, verifiable manner, the require, design, behavior and other characteristics of system and often the procedure for determining whether these provision have been satisfied.

Requirements:

- Hardware Requirements:
- Software Requirements:
- Functional requirements:
- Non Functional requirements :

3.5 Hardware Requirements:-

System Hardware Requirements are:

RAM: -	2GB
Hard Disk: -	500GB
Processor: -	Intel core i3

3.6 Software Requirements:-

System Software Requirements are:

Operating system: - Window 7,8,10.

Front Design: - Notepad

Front end Language: - HTML, CSS, JavaScript.

Back end Language: - PHP, MySQL.

3.7 FUNCTIONAL REQUIREMENTS

The functional requirement part of the system discuss the functional behavior that should be possessed by the system. Each requirement maps to a high level function that transforms the given set of input data into output data.

They are:-

- Online Attendance Management System provides registration and information of the student and their status.
- It provides to add students to their respective course which they want to study.
- It provides to track the percentage of the students attending the classes.
- It produces single or multiple attendance reports.
- It helps to debar the students from examination having less attendance than 75%.

3.7.1 Login:-

Description:

The faculty will login into the website with the given user- id and password. If the user- id and password is correct, user will be prompt to proceed option else error message will be displayed.

INPUT: user id and password.

OUTPUT: student detail form.

3.7.2 View Course Taken :-

Description:

After login, the faculty can view the list of courses taken by the user during the semester and then he can get the list of student enrolled in that course.

INPUT: select the option.

OUTPUT: list of courses taken.

3.7.3 View Detail of Enrolled Student ;-

Description:

The faculty can view the list of student enrolled in a particular course .

INPUT:

select a course and select option to display student list

OUTPUT:

enrolled student list

3.7.4 Take Attendance:

Description:-

Faculty take attendance on a particular day by swiping over a student name to mark him absent.

INPUT: mark student present or absent

OUTPUT: confirmation message

3.7.5 Synchronize Database:

Description:-

At the end of the month or at any time when faculty wishes, he can upload the attendance details of a particular subject in the online server.

3.8 NON FUNCTIONAL REQUIREMENTS

Non-Functional Requirements describe the overall qualities and attributes of the proposed or modified system. These requirements place restrictions on the product being developed, the development process, and specify external constraint that the product must meet. Non-Functional requirement include safety, security, usability, reliability and performance requirements.

3.8.1 Performance:-

Performance requirement define acceptable response times for system functionality. This means that the retrieval speed of any information, data about project and commands should be fast to perform the action quickly. All the requirements relating to performance characteristics of the system are specified in the section below. There are two types of requirements.

3.8.2 Static Requirements:-

These requirements do not impose any constraints on the execute characteristics of the System. They are:

Number of Terminals:

The software makes use of an underlying database that will reside at the server, while the front end will be available to the administrative and departmental computers as well as students and teachers.

Number of Users:

The number of users may vary, as this software finds applications in almost all department of the organization.

3.8.3 Dynamic Requirements:-

These specify constraints on the execution characteristics of the system. They typically include response time and throughout of the system. Since these factors are not applicable to the proposed software, it will suffice if the response time is high and the transactions are carried out precisely and quickly.

3.8.4 Reliability:-

The software will not be able to connect to the centralized database in the event that the server being down due to a hardware or software failure.

3.8.5 Availability:-

The software will be available only to authorized users of the colleges, universities like teachers to mark the students' attendance, student to view their enrolled course, admin to add an update students records.

3.8.6 Security:-

The security requirements deal with the primary security. The software should be handled only by the administrator and authorized users. Only the administrator has right to assign permission like creating new accounts and generating password. Only authorized users can access the system with username and password.

3.8.7 Maintainability:-

Backups for database are available.

3.8.8 Design Constraints:-

This software provides security. The login form prevents the system from being misused by unauthorized users. Only an authorized operator will be granted rights to modify as per

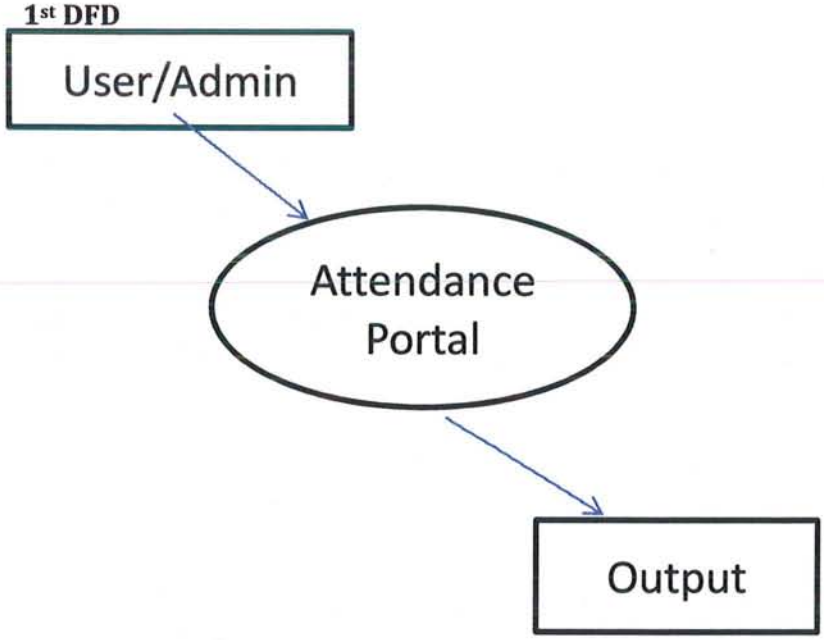
requirements. This software is also reliable and fault tolerant. The system developed is designed to handle invalid inputs. Since reliability is major area of concern the system has a backup to avoid data loss. The user should know the programming language very well that is used to develop software.

Chapter No. 4

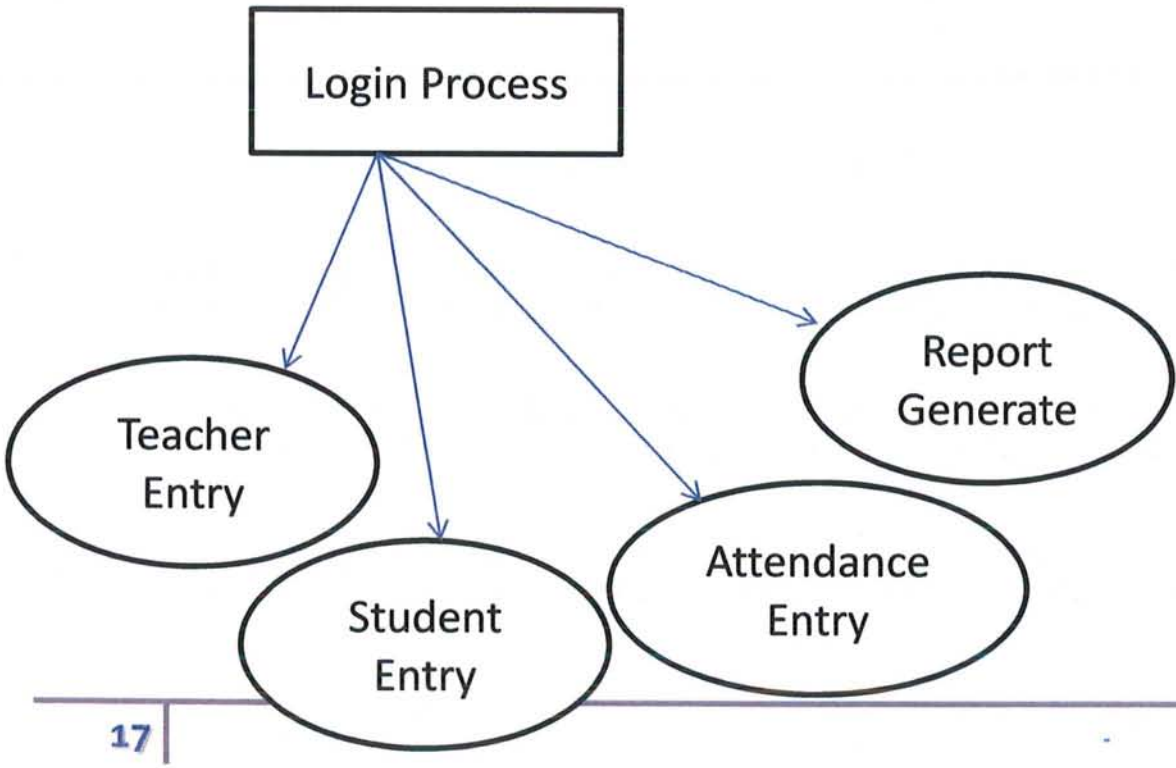
System Design

4.1 Data Flow Diagrams:-

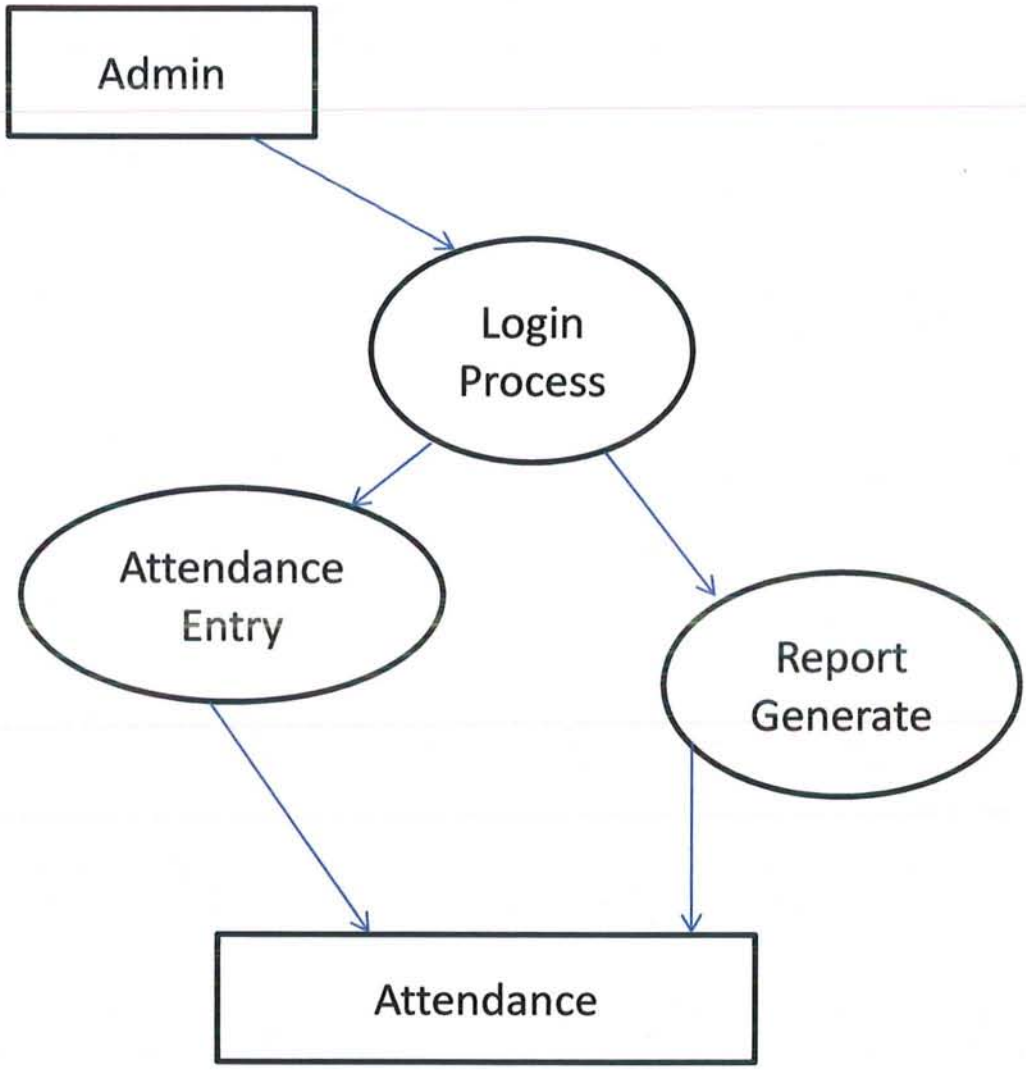
4.1.1:- 1st DFD



4.1.2:- 2nd DFD

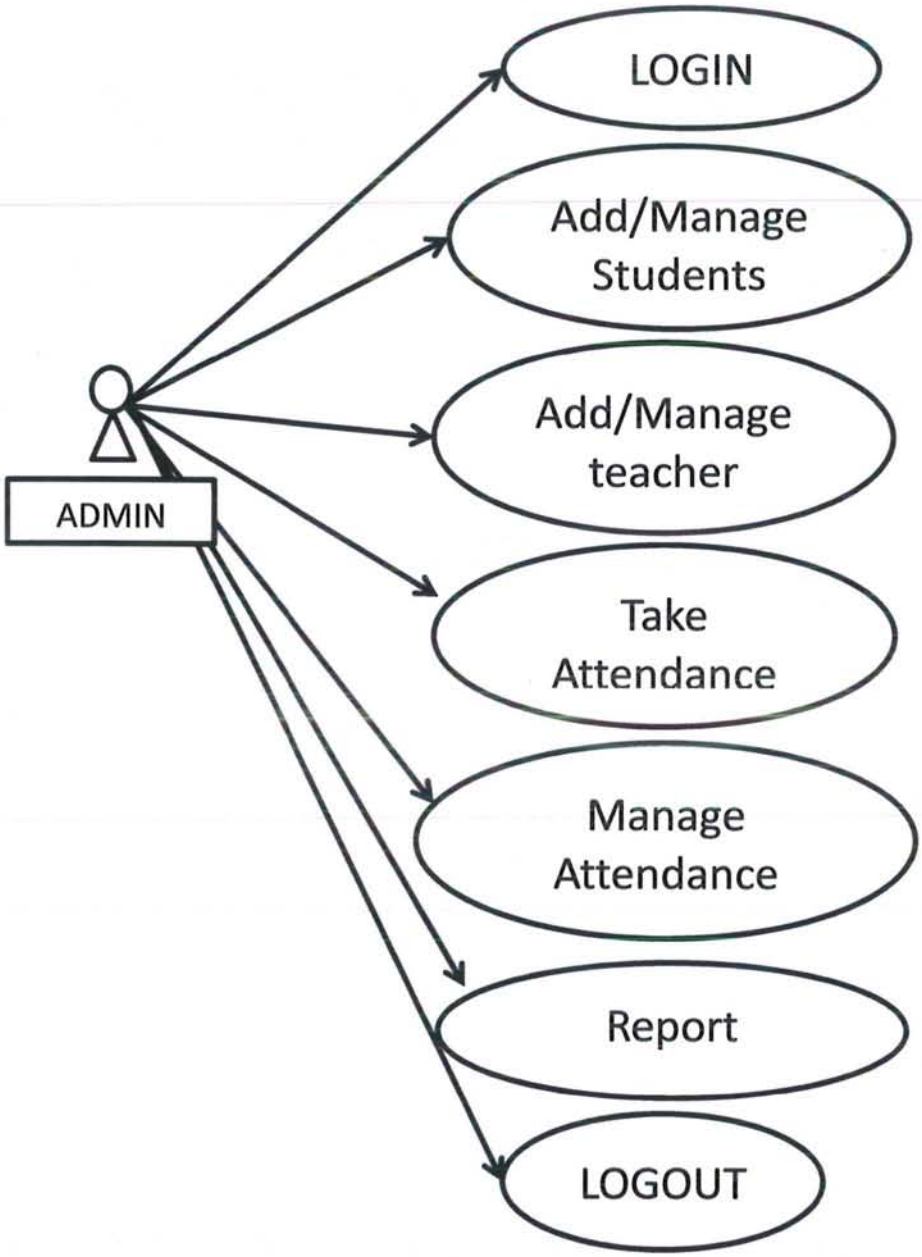


4.1.3:- 3rd DFD

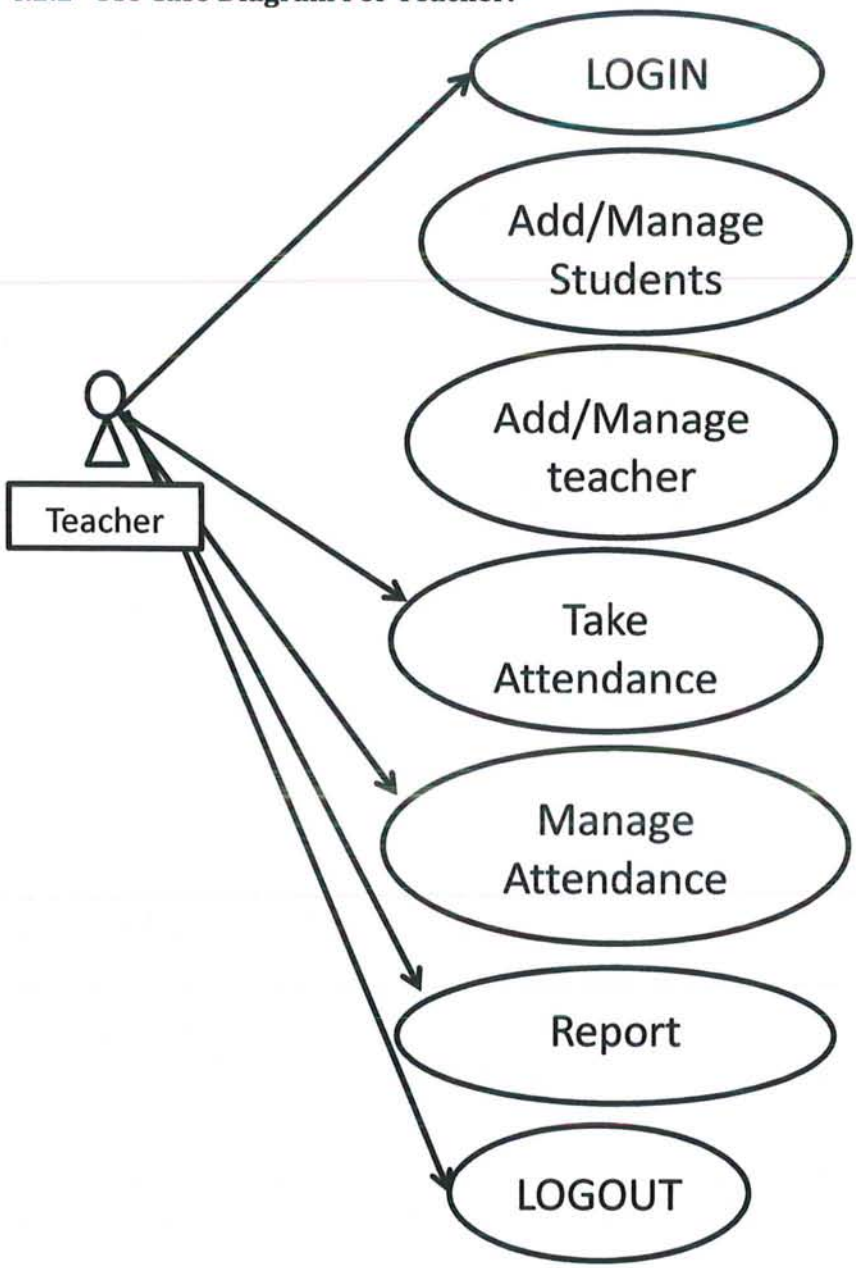

Admin
Login Process
Attendance Entry
Report Generate
Attendance

4.2 Use Case Diagrams: -

4.2.1 Use Case Diagram For Admin:



4.2.2 Use Case Diagram For Teacher: -



4.3 Use Case Tables:

Table 4.3.1 Login

Use Case ID	01
Use Case Name	Login
Actor	Admin, Teacher
Description	He/ She Login by the User Name, Password.
Pre-Condition	Admin, Teacher must enter valid data like username and password.
Post-condition	Login Successfully in the website.
Basic Flow	Admin, Teacher should enter username, password and press login button. System validates username and password. User is logged into system.

Table 4.3.2 Admin Profile

Use Case ID	02
Use Case Name	Admin Profile
Actor	Admin
Description	Admin enter his profile data.
Pre-Condition	Admin should have entered accurate data.
Post-condition	Admin successfully entered his profile data.
Basic Flow	Admin should enter username, DOB, CNIC, Gender, address and press update button.

Table 4.3.3 Teacher Entry

Use Case ID	03
Use Case Name	Teacher Entry
Actor	Admin, Teacher.
Description	Admin enter data for new teachers.
Pre-Condition	Only Admin must enter data for teachers.
Post-condition	Admin successfully entered teacher data.
Basic Flow	Admin should have enter Teacher name, DOB, CNIC, Gender, address and press update button.

Table 4.3.4 Student Entry

Use Case ID	04
Use Case Name	Student Entry
Actor	Admin, Student.
Description	Admin enter data for new Student.
Pre-Condition	Only Admin must enter data for Student.
Post-condition	Admin successfully entered Student data.
Basic Flow	Admin should have enter Student name, DOB, CNIC, Gender, address and press update button.

Table 4.3.5 Subject Entry

Use Case ID	05
Use Case Name	Subject Entry
Actor	Admin.
Description	Admin enter data for new Subject.
Pre-Condition	Only Admin must enter data for Subject.
Post-condition	Admin successfully entered Subject data.
Basic Flow	Admin should have enter Subject code, Name, Hours, Marks, Semesters, Department and press update button.

Table 4.3.6 Teacher Attendance

Use Case ID	06
Use Case Name	Teacher Attendance
Actor	Admin, Teacher.
Description	Admin take Attendance of Teacher.
Pre-Condition	Only Admin must take Attendance of Teacher.
Post-condition	Admin successfully take Attendance of Teacher .
Basic Flow	Admin go to Attendance dropdown menu select Teacher option and take Attendance of Teacher.

Table 4.3.7 Student Attendance

Use Case ID	07
Use Case Name	Student Attendance
Actor	Admin, Teacher, Student.
Description	Admin/Teacher take Attendance of Student.
Pre-Condition	Only Admin/Teacher must take Attendance of Student.
Post-condition	Admin/Teacher successfully take Attendance of Student.
Basic Flow	Admin/Teacher go to Attendance dropdown menu select Student option and take Attendance of Student.

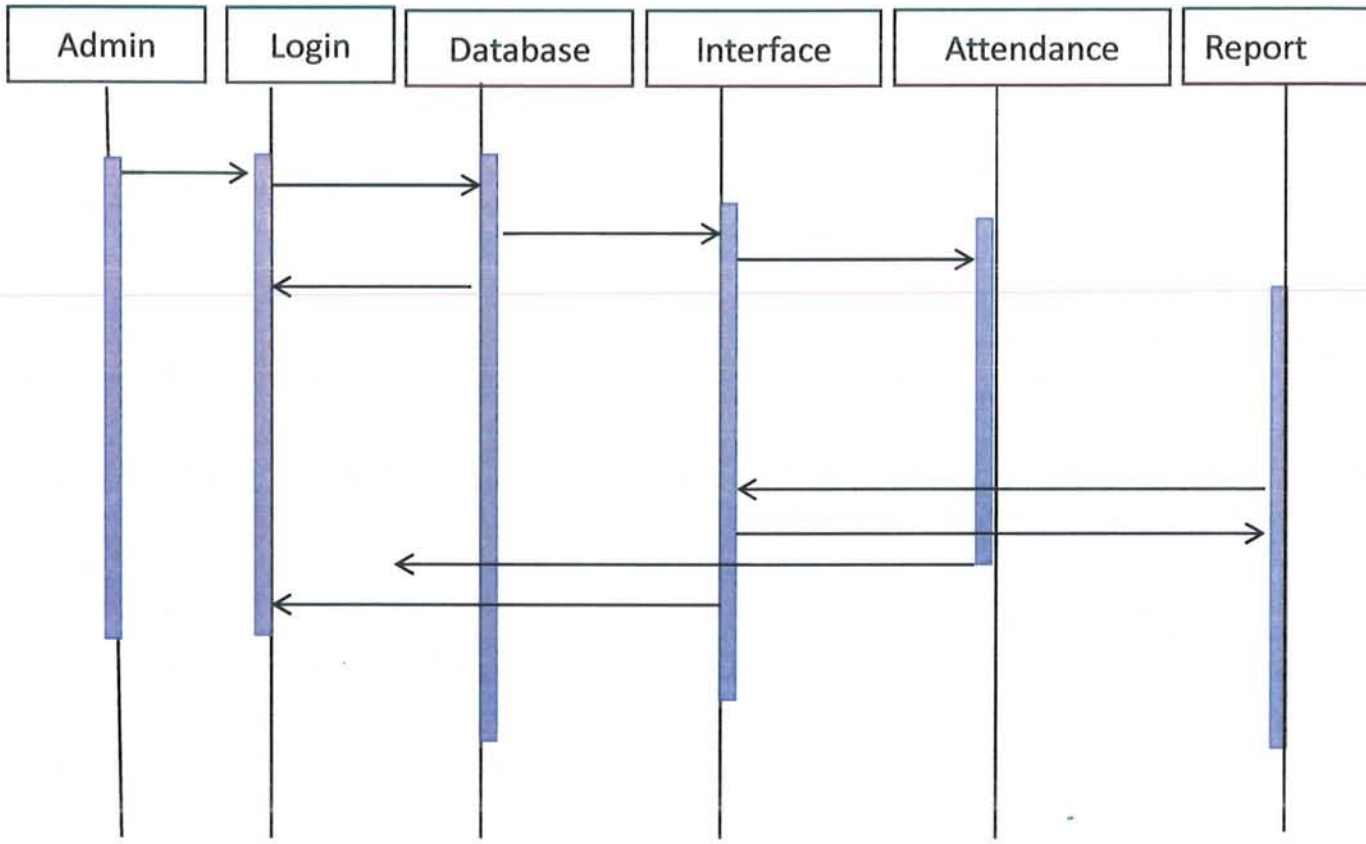
Table 4.3.8 Teacher Report

Use Case ID	08
Use Case Name	Teacher Report
Actor	Admin, Teacher.
Description	Admin generate Report of Teacher.
Pre-Condition	Only Admin must generate Report of Teacher.
Post-condition	Admin successfully generate Report of Teacher.
Basic Flow	Admin go to List dropdown menu select Teacher option and generate Report of Teacher.

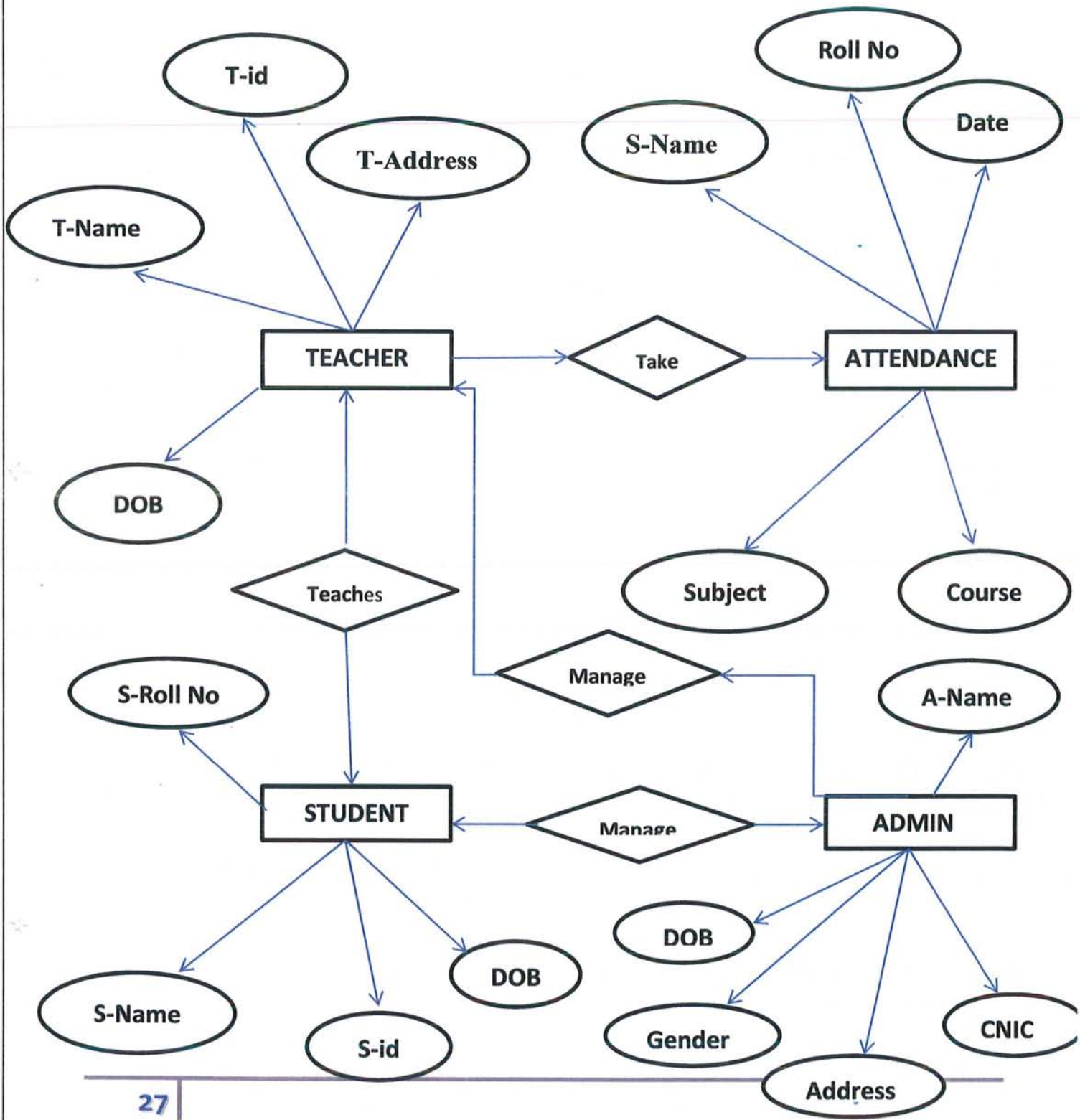
Table 4.3.9 Student Report

Use Case ID	09
Use Case Name	Student Report
Actor	Admin, Student.
Description	Admin generate Report of Student.
Pre-Condition	Only Admin must generate Report of Student.
Post-condition	Admin successfully generate Report of Student.
Basic Flow	Admin go to List dropdown menu select Student option and generate Report of Student.

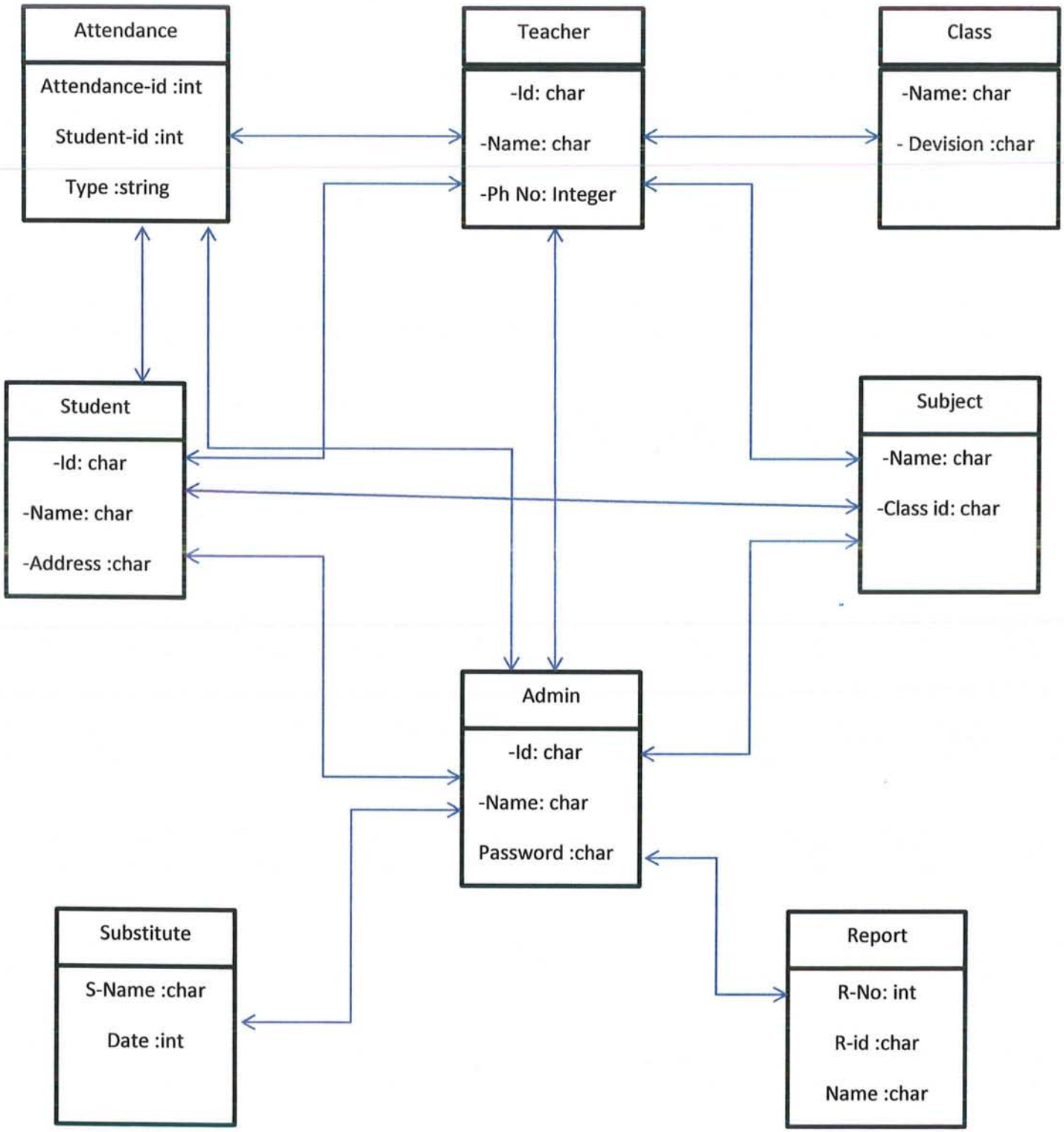
4.4 Sequence Diagram:-



4.5 ERD Diagram:-



4.6 Class Diagram:-



Chapter No.5

System Implementation

5.1 WAMP Server:-

WAMP is installed as a software bundle and stands for "Windows, Apache, MySQL, and PHP."WAMP is often used for web, development and internal testing, it also can be used for serving live websites. WAMP

Server is available freely in two versions that is 32 and 64 bits. Now, visually, a brief description of downloading and installation of WAMP server, from sources where I have used is shown below step by step.

- Go to http://www.wampserver.com/, website
- Click the download label
- Select WAMP SERVER (32 BITS & PHP 5.5) 2.1 OR WAMP SERVER (64 BITS & PHP 5.5) 2.1 according to requirement

5.2 MYSQL:-

SQL stands for Structured Query Language. MySQL is an open source Relational Database Management System (RDBMS); it is a popular database for use in web applications, and is a central part of the greatly used LAMP (Linux, Apache, MySQL, Perl/PHP/Python) open-source web application software stack.

MySQL is used by many applications like, WordPress, Joomla, TYPO3, Drupal, MyBB, phpBB, MODX and other software. Numerous large scale websites including Google, YouTube, Facebook, Twitter, and Flickr are also using MySQL.

On all platforms excluding Windows, MySQL sends with no GUI (Graphical User Interface) to administer MySQL databases or managing the data held within the databases. Users may install MySQL Workbench by downloading separately or simply may use the command line tools. Numbers of third party GUI tools are also available.

Swedish company has created MySQL which is written in C and C++. The first version of MySQL revealed on 23 may 1995. It has various versions.

5.3 PHP:-

It stands for PHP: Hypertext Preprocessor but, originally stood for Personal Home Page. Is a server side scripting language that designed for web development, as well as used for general purpose language. It was created in 1994 by Rasmus Lerdorf, in the present time the reference execution of PHP is produced by the PHP group.

In January 2013, PHP was installed on more than 240 million websites, and 2.1 million web servers. The PHP code can be combined with several web frameworks and templating engines or simplyit can be mixed with HTML code.

The PHP code is generally processed by a PHP interpreter, which is commonly executed as native module of web server or a Common Gateway Interface (CGI) executable. After interpretation and execution of the PHP code, the results will be sent by web server to its client.

Zend Engine has powered the standard PHP interpreter, which is free software liberated under the PHP license.

There are many versions of the PHP, and the version, I have used for my application is the PHP version 5.5.

5.4 PHPMyAdmin:-

It is an open source tool and also, it is free written in PHP, XHTML, CSS, and JavaScript planned to manage the administration of MySQL by using of a web. It is able to perform various missions like creating, modifying databases, tables, fields, executing SQL statements or managing and supervise users.

PhpMyAdmin is being translated into 72 languages in order to make the usage easy to a wide domain of people and it supports both LTR and RTL languages.

Following is some features of the phpMyAdmin,

- It is web interface
- It administrates multiple severs
- It is able to create PDF graphics of the database layout
- Importing data from SQL and CSV
- Export data to different formats such as SQL, PDF, CSV, XML and others
- It works with various Operating Systems

5.5 HTML AND CSS:-

HTML stands for Hypertext Markup Language and CSS stands for Cascading Style Sheets are the crucial technologies for creating web pages. HTML supplies the structure of the page, and CSS the layout, for diversity of devices. Together with scripting and graphics, HTML and CSS

are the fundamental of building Web Applications and Web pages.

HTML provides designers and developers the following facilities,

- To design forms for directing transactions with remote services, for use in making reservation, searching for information, ordering products, and others
- Retrieving online information through hypertext links.
- To include video and sound clips, spread sheets, and other applications straight in their documents
- Designer can publish online documents with text, headings, tables, photos and others.

CSS describes the Web pages presentation, involving layout, colors,
and fonts. It enables the designer to adjust the presentation to various types of devices, like a small screens, large screens, or printers.

CSS is separate from HTML, and their separation makes it easy to preserve and maintain sites, share style sheets across pages, and accommodate pages to various environments .

5.5 Bootstrap:-

Bootstrap is front-end framework and collection of tools and mechanisms for building web applications. It consists of HTML and CSS based design templates for navigations, forms, buttons, typography, and other interface elements, and also JavaScript extensions.

Bootstrap is free and open source, and its purpose is to make easy the development of dynamic websites and web applications. It is the most starred project on GitHub, with more than 85,000 stars and 34,000 forks.

Bootstrap was developed by Mark Otto and Jacob Thomton and named Twitter Bluprint. Before Bootstrap framework, designers were using different libraries for interface development, which had many inconsistencies and their maintenance were difficult.

5.6 JavaScript Framework (jQuery):-

JQuery is JavaScript library intended to make simple the client-side scripting of HTML. It is the most popular JavaScript framework, which is free and open-source software licensed under the MIT License.

Several of the largest companies, including,

- Google
- IBM

- Microsoft and
- Netflix are using the jQuery.

Chapter No. 6

System Testing

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

- Exercise the internal logic of software components, and
- Exercise the input and output domains of the program to uncover errors In program function, behavior and performance.

Steps: Software is tested from two different perspectives:

- Internal program logic is exercised using —White box test case design Techniques.
- 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.

6.3 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 accrued the time will provide handler to show what type of error will accrued.

6.4 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.

6.5 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.

Chapter No. 7

Database Tables

7.1 Class Attendance:-

	Field	Type	Collation	Attributes	Null	Default	Extra	Action
☐	id	int(11)			No	None	AUTO_INCREMENT	
☐	t_class_id	int(11)			No	None		
☐	topic_id	int(11)			No	None		
☐	presence	varchar(7)	latin1_swedish_ci		No	None		
☐	date	date			No	None		

7.2 Student Subject:-

	Field	Type	Collation	Attributes	Null	Default	Extra	Action
☐	ss_id	int(11)			No	None		
☐	std_regNo	varchar(10)	latin1_swedish_ci		No	None		
☐	subj_id	int(11)			No	None		
☐	tp/tc	varchar(7)	latin1_swedish_ci		No	None		

7.3 Class-Record:-

←T→	cr_id	t_id	tc_id	date
	3	1	12	2013-04-12
	4	1	11	2013-04-12
	5	1	6	2013-04-12
	6	1	13	2013-04-12
	7	1	12	2013-04-12
	8	2	9	2013-04-12
	9	4	11	2013-04-14
	10	1	12	2013-04-16
	11	1	12	2013-04-17
	12	3	12	2013-04-18
	13	1	12	2013-04-24
	14	2	12	2013-04-25

7.4 Student-Attendance:-

←T→	sa_id	std_regNo	cr_id	presence
	1	2009-Agr-U-10000	6	Absent
	2	2009-Agr-U-10001	6	Absent
	3	2012-Agr-U-10003	6	Absent
	4	2013-Agr-U-10003	6	Present
	5	2013-Agr-U-10005	6	Present
	6	2013-Agr-U-10006	6	Absent

7.5 Subject List:-

←T→	sl_id	code	name	department	semster	creditHour	marks
	1	CS-301	Introduction to computing	BS(CS)	1	3	100
	2	CS-302	Programming Fundamentals	BS(CS)	1	4	100
	3	EG-301	English Composition & Comprehension	BS(CS)	1	3	100
	4	MT-301	Calculus & Analytical Geometry	BS(CS)	1	3	100
	5	MG-301	Financial Accounting	BS(CS)	1	3	100
	6	PK-301	Islamic & Pakistan Studies	BS(CS)	1	3	100

7.6 Subject-topic:-

←T→	st_id	subj_id	week	topic
	1	1	2	Type of Hardware
	3	1	3	Type of Softwares
	4	46	1	Introduction
	5	23	1	Introduction
	6	23	1	Theory of Relativety
	7	23	2	Semi-Condutor
	9	1	1	Introduction to computer
	10	38	1	Introduction to Project managment
	11	38	1	Introduction to Project Designing

7.7 Substituted-Class:-

←T→	sc_id	substituted_tc_id	substitutedBy_t_id	password	date
	1	9	2	qKqP5X	2013-04-03
	2	12	4	YfrbCv	2013-04-03
	3	10	6	ZMsxZN	2013-04-06
	4	12	3	Ei8PYA	2013-04-08
	5	13	3	D0Dz0W	2013-04-08
	6	11	3	E4oDtR	2013-04-08
	7	11	5	Z73hDI	2013-04-11
	8	9	2	ox6IL7	2013-04-12

7.8 Teacher-class:-

←T→	tc_id	t_id	subj_id	subj_section
	6	1	19	A
	9	1	47	C
	10	1	46	C
	11	1	19	D
	12	1	38	A
	13	1	19	B
	15	2	21	A

7.9 Topic-record:-

←T→			tr_id	cr_id	st_id
☐	✎	✕	2	7	11
☐	✎	✕	4	7	13
☐	✎	✕	5	8	11
☐	✎	✕	7	8	13
☐	✎	✕	8	9	22
☐	✎	✕	9	9	25
☐	✎	✕	10	9	28

Chapter No. 8

Interface Design

8.1 Introduction:

The user interface is an important aspect of a product and is often at least as important as the functionality of system. Graphical User interface uses pictures and graphics instead of just word to represent the input and output of the program. The program display certain icons, buttons, dialogue boxes etc. on the screen and user controls the program mainly by moving a pointer on the screen and selecting certain objects by pressing buttons etc. The function of a Graphical User Interface is to facilitate the handling of an application by means of graphical elements.

Designing a good user interface is an iterative process. First, we design and implement a user interface using appropriate techniques. Then we evaluate the design. The result of the evaluation feed the next design and implementation. Note that if we have different user communities (or the same user with different jobs), we may need different user interface, customizable user interfaces or both.

8.2 Login Interfaces:

Following are the interfaces admin and user.

Login screen for admin:

Admin can login to system by providing name and password to perform activities in system.

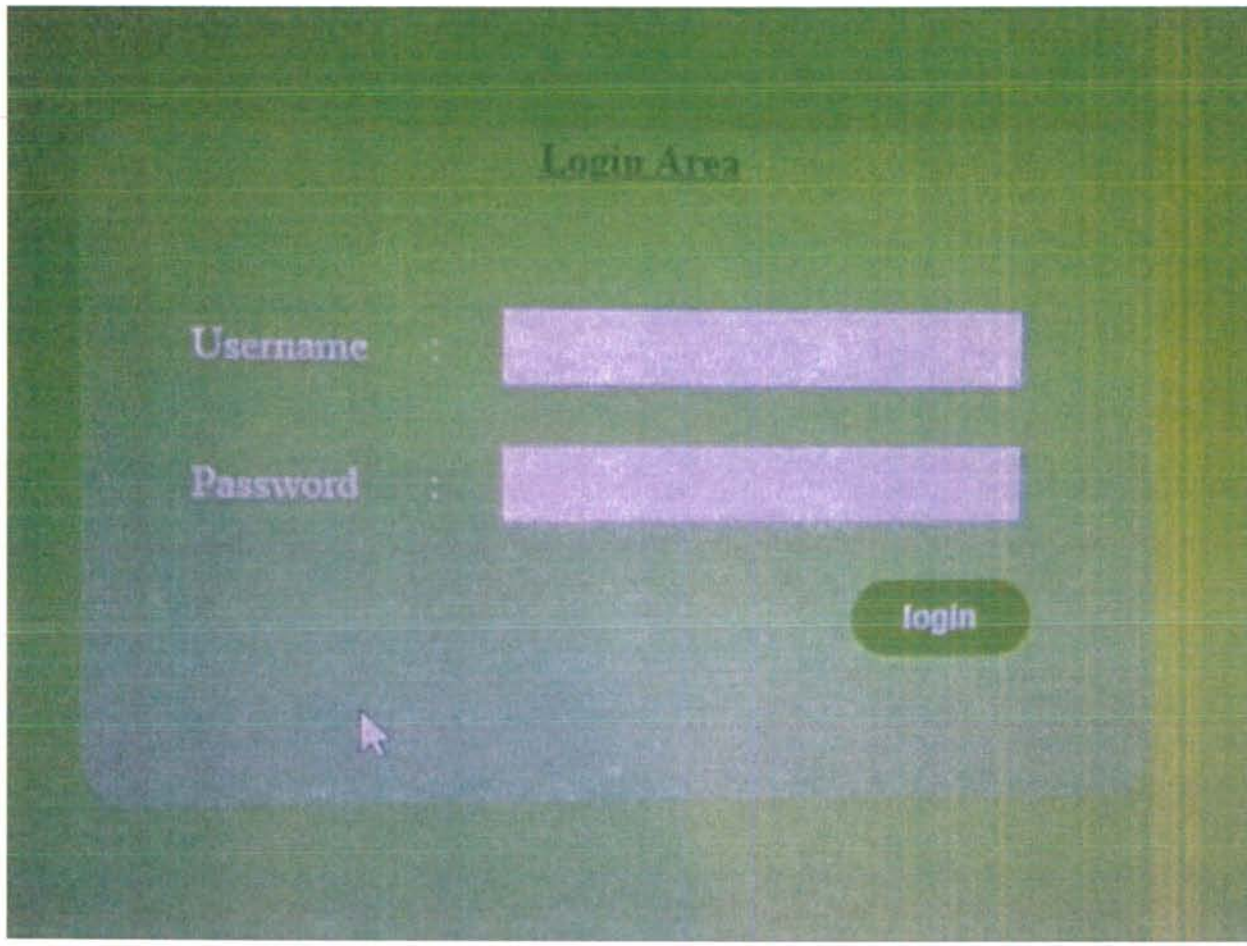


Figure: Admin Login

8.3 Home Page:

Figure: Home Page

Description:

This is the Home page where you can take Attendance of students ,Substitute Teacher and generate report of record data.

8.4 Teacher entry:

Figure: Teacher entry

Description:

This is the page of teacher personal data entry like Name, F-Name, CNIC, DOB, Mobile No and Address.

8.5 Student entry:

Figure: Student entry

Description:

Here is the entry of student personal information such as St-Name, F-Name, CNIC

DOB, Mobile-No and Address etc.

8.6 Subject entry:

Figure: Subject entry

Description:

Subject entry area contain data such as subject code, Name, Created Hours, Marks, Department and Semester.

8.7 Attendance:

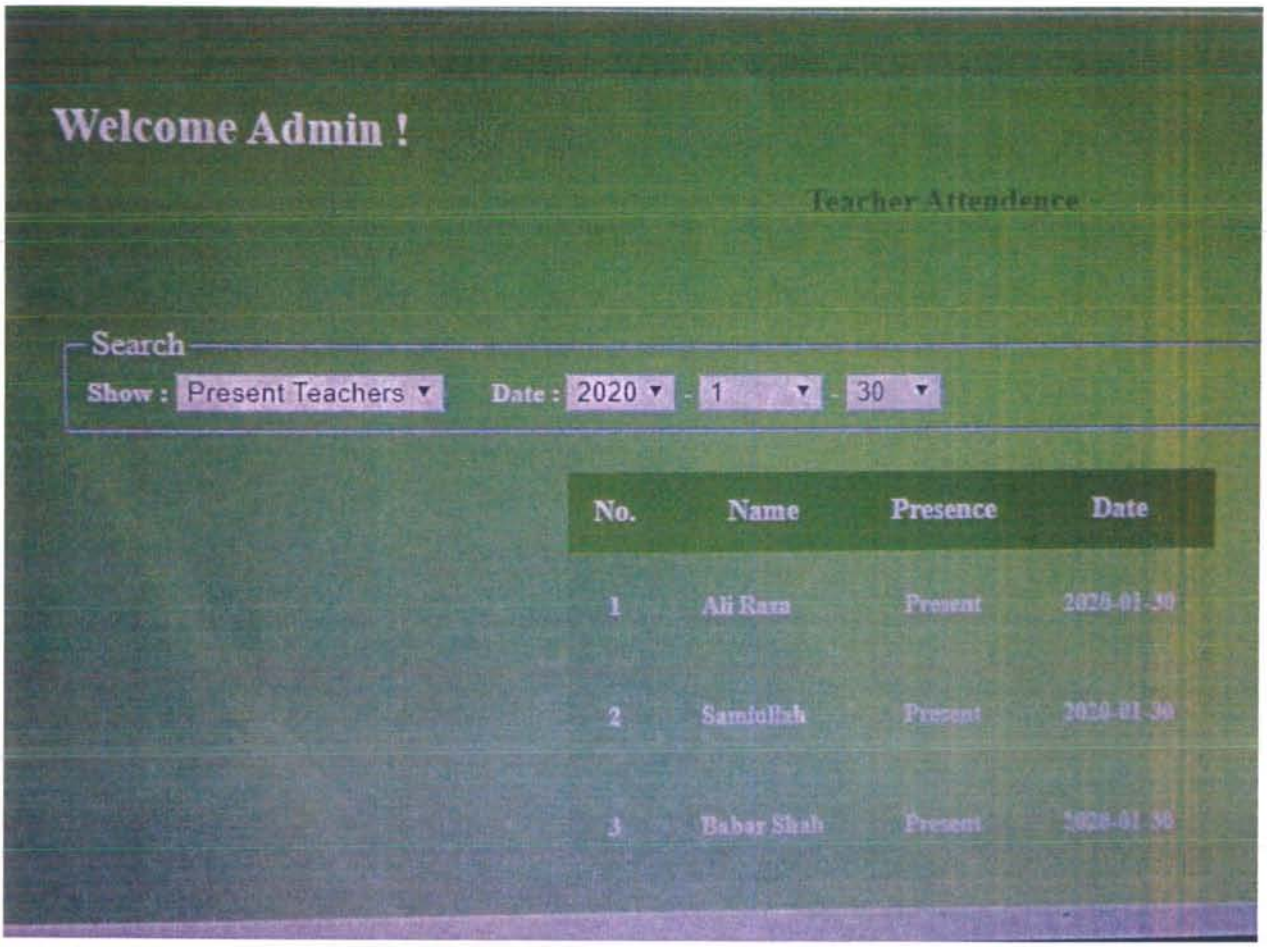


Figure: Attendance

Description:

Attendance portion contain attendance of both teachers and students with their name, date and Reg-no etc.

8.8 Substitute:

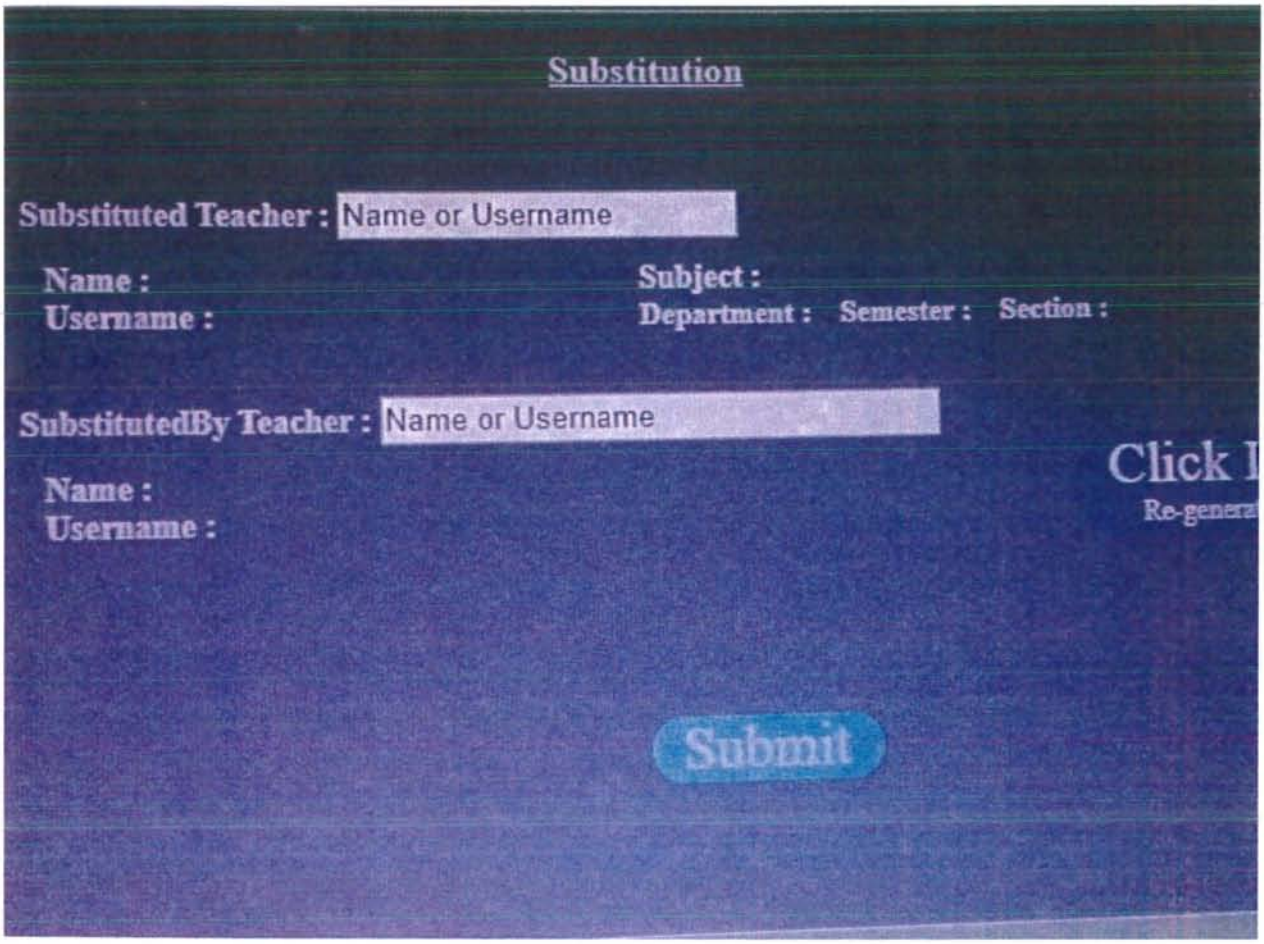


Figure: Substitute

Description:

This is the important part, in which if any teacher come not in the class. Than we can replace it with other teacher who come in department.

Chapter No.9

Conclusion and Future Enhancement

9.1 Conclusion:

In this work , the web based attendance management system is developed using PHP server-side scripting language and CSS,HTML ,JavaScript for designing which is fully meet the system's goals.

This system overcome many limitations incorporated in attendance, this system saves a great amount of time and reduces errors which may occur during attendance calculation.

The system I have developed is fully responsive which can be used in different operating systems.

Some other benefits are,

- Automated and web-based for easy accessibility
- It is a dynamic and flexible system
- It excludes paperwork and the possibility of making mistakes while using paper for taking attendance
- It is very user friendly and handy
- The records of current and previous can be available in prompt and an immediate.

9.2 Future Enhancement:

Nothing in this world is perfect except ALLAH Almighty. Similarly this project is not perfect for all problems. This statement has to be proved to be motivating factor for me. For me, there is still possibility to improve and enhance performance of this project. I have certain ideas in my mind, regarding future enhancement of Online Attendance Management system.

- Access can be given to users with login to get more data so we can perform further analysis on different aspects.
- The more data we get the more useful patterns we can extract from it by using different analysis methods.
- We can convert this web based system to android also in future.