# MINI PROJECT (2020-21) ATTENDANCE MANAGEMENT SYSTEM

#### **FULL PROJECT REPORT**



## **Institute Of Engineering & Technology**

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# **CERTIFICATE**

This is to certify that this report embodies the original work done by Aastha Agarwal, Khushi Sharma, and Ishika Gupta; during this project submission as partial fulfillment of the requirement for the Mini-Project of B.Tech (Computer Science) VI Semester, of GLA University, Mathura.

Mr. Sharad Gupta (Assistant Professor) Department Of CE&A GLA University Mathura.

## **DECLARATION**

We hereby declare that the project report entitled "Attendance Management System" submitted by us to GLA University, Mathura in partial fulfillment for the award of degree of B.Tech in computer science and engineering is a record of bonafide project work carried out by us under the guidance of Mr. Sharad Gupta (Assistant Professor) Department Of Computer Engineering & Applications.

I further declare that the work reported in this project has not been submitted and will not be submitted, either in part or full, for the award of any other degree in this institute or any other institute or University.

Thank you.

Aastha Agarwal (181500002)

Ishika Gupta (181500284)

Khushi Sharma (181500323)

**ACKNOWLEDGEMENT** 

Presentation inspiration and motivation have always played a key role in the success of

any venture. We express our sincere thanks to GLA University, Mathura. We pay our

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We feel to acknowledge our indebtedness and deep sense of gratitude to Udemy,

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Last, but not the least, our parents are also an important inspiration for us to be

successful in whatever we want to do. So, with due regards, We express our gratitude to

them.

Thank you.

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## **ABSTRACT**

The Attendance management system is a web-based application developed for daily student attendance in schools, colleges, and institutes. It facilitates access to the attendance information of a particular student in a particular class. The information is sorted by the operators, which will be provided by the teacher for a particular class. This system will also help in evaluating the attendance eligibility criteria of a student. The purpose of developing attendance management systems is to computerize the traditional way of taking attendance. The purpose of developing this application is to generate the report automatically at the end of the session or in between the session. The scope of the project is the system on which the application will run online, i.e. the project is developed as a desktop application and it will work for a particular institute. But later on, the project can be modified to operate as a mobile application.

To overcome the problems of manual attendance, we have developed a "Web-based Attendance Management System". The Attendance Management System is based on a web server, which can be implemented on any computer. This application, python is a server-side language, MySQL and Django are used as back-end design, and HTML, CSS, and JavaScript are used as front-end tools. The system communicates with databases residing on a remote server. It calculates automatically the attendance percentage of students without any manual paper-based work. The system facilitates the end-users with interactive design and automated processing of attendance management.

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## **INTRODUCTION**

#### 1. Definition

Attendance Management System is software developed for daily student attendance in schools, colleges and institutes. It facilitates access to the attendance information of a particular student in a particular class. The information is sorted by the operators, which will be provided by the teacher for a particular class. This system will also help in evaluating attendance eligibility criteria of a student.

#### 2. Purpose

The purpose of developing attendance management systems is to computerize the traditional way of taking attendance. Another purpose for developing this software is to generate the report automatically at the end of the session or in the between of the session.

#### 3. Scope

The scope of the project is the system on which the software is installed, i.e. the project is developed as a desktop application, and it will work for a particular institute. But later on the project can be modified to operate it online.

#### 4. Overview

The Attendance Management System basically has two main modules for proper functioning:- First module is admin which has the right for creating space for new batch. Any entry of new faculty, Updating in subject if necessary, and sending notice.

Second module is handled by the user which can be a faulty or an operator. Users have a right of making daily attendance, generating reports.

## **DESCRIPTION**

#### 1. Product Perspective

The product Attendances 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 the stored information and optimum performance, thus helping the Colleges to ensure smooth working of these processes

#### 2. Product Functions

Our system has two types of accessing modes-

(i) <u>Administrator</u>- Administrator has rights to manage student details, add a new student. Admin can update his profile, and also can give help to the teachers and students.

(ii) <u>User</u>- There are two users:-

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

Teacher:- Teacher do the login and view the student details.

#### 3. User Characteristics

This software gives access to two kinds of users.

- 1. Administrator- The administrators have features access to add, delete and modify information stored in the database.
- 2. Authorized User- Teaching staff have access to view the data stored in the database. Students have access to view the data stored in the database.

#### 4. Constraints

Interface is only in English, no other language option is available. Users can login with his assigned username and password, no guest facilities are available.

#### 5. Assumptions and Dependencies

We assume that the Office personnel do all the data entry based on the correct values obtained from forms and registers. We assume that the computers that will use the software will be part of the college LAN. Users with administrator access should be careful in deleting or modifying any information knowingly or unknowingly which will lead to inconsistency of the database. The end users of this software are assumed to have a basic level of computer knowledge i.e. point and click.

## **SYSTEM ANALYSIS**

#### 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 or to sketch a pattern or outline for a plan. To plan and carry out especially by artistic arrangement or in a skillful way. 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.
- → 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 students 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 a flexible report for all students.

#### 2. Existing System-

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 work and the user finds it difficult to use.

## 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. The efficient reports can be generated by using this proposed system. 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 using best user Interface and efficient reports.

## 4. Feasibility Study-

Feasibility analysis begins once the goals are defined. It starts by generating broad possible solutions, which are possible to give an indication of 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 cost 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. 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-

## • Economically Feasibility-

Development of this application is highly economically feasible. The only thing to be done is making an environment with effective supervision. It is cost effective in the sense that it eliminates the paper work completely. 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.

## • Technical Feasibility-

The technical requirement for the system is economic and it does not use any other additional Hardware and software. 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 a report to excel sheet.

## • Operational Feasibility-

The system working is quite easy to use and learn due to its simple but attractive interface. Users require 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.

## **REQUIREMENTS SPECIFICATIONS**

#### 1. Hardware Requirements-

- External Hard Drives or DVDs
- Internet
- Minimum 2GB RAM
- I3 Processor
- 1024 x 765 Display

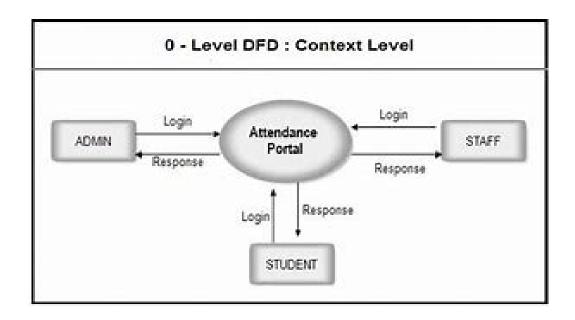
## 2. Software Requirements-

- Operating Systems(Windows 7 or above)
- Programing language(JAVA/Python)
- Front End(HTML, CSS, JAVA Script, Bootstrap)
- Back End(Django)
- Tools(VS Code, Sublime Text Editor, Xampp)

## 3. Functional Requirements-

Attendance Management System involves the following functions-

- Easily track attendance information of students.
- Quickly produce an attendance bulletin.



#### 4.Non-Functional Requirements-

#### • Performance-

Easy tracking of records and updating can be done.

All the requirements relating to performance characteristics of the system are specified in the section below:

There are two types of requirements.

#### ★ Static Requirements-

These requirements do not impose any constraints on the execution 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 online 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 departments of the organization.

## **★** Dynamic Requirements-

These specify constraints on the execution characteristics of the system. They typically include response time and throughout 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.

## • Reliability-

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

## Availability-

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

#### 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 the right to assign permission like creating new accounts and generating passwords.

Only authorized users can access the system with username and password.

#### • Maintainability-

Backups for databases are available.

#### • Portability-

The Software is a windows-based application and is built in HTML and Django so it is platform independent and is independent of the operating system.

#### 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 a 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.

## **SOFTWARE DESCRIPTION**

## **Sublime Text**

Sublime Text is a shareware cross-platform source code editor with a Python application programming interface (API). It natively supports many programming languages and markup languages, and functions can be added by users with plugins, typically community-built and maintained under free-software licenses.

#### Features-

#### ➤ Column selection and multi-select editing

This feature allows users to select entire columns at once or place more than one cursor in text, which allows for simultaneous editing. All cursors then behave as if each of them was the only one in the text. Commands like move by character, move by line, text selection, move by words, move by subwords (CamelCase, hyphen or underscore delimited), move to beginning/end of line, etc., affect all cursors independently, allowing one to edit slightly complex repetitive structures quickly without the need to use macros or regex.<sup>[6]</sup>

## > Auto completion

Sublime Text will offer to complete entries as the user is typing depending on the language being used. It also auto-completes variables created by the user.

## ➤ Syntax highlight and high contrast display

The dark background on Sublime Text is intended to reduce eyestrain and increase the amount of contrast with the text. Syntax highlighting also makes syntaxes of the language easier to read.

#### ➤ In-editor code building

This feature allows users to run code for certain languages from within the editor, which eliminates the need to switch out to the command line and back again. This function can also be set to build the code automatically every time the file is saved.

## ➤ Snippets

This feature allows users to save blocks of frequently used code and assign keywords to them. The user can then type the keyword and press tab to paste the block of code whenever they require it.

#### ➤ Goto anything

This feature is a tool that allows users to switch between open, recent or project files and also navigate to symbols within them.

#### Other features-

Sublime Text has a number of features in addition to these including-

- ➤ Auto-save, which attempts to prevent users from losing their work
- ➤ Customizable key assignments, a navigational tool which allows users to assign hotkeys to their choice of options in both the menus and the toolbar
- ➤ Find as you type, begins to look for the text being entered as the user types without requiring a separate dialog box
- ➤ Spell check function corrects as you type
- ➤ Macros
- ➤ Repeat the last action
- ➤ A wide selection of editing commands, including indenting and unindenting, paragraph reformatting and line joining

## **Hypertext Markup Language**

HTML is the standard markup language for documents designed to be displayed in a web browser. It can be assisted by technologies such as Cascading Style Sheets (CSS) and scripting languages such as JavaScript.

Web browsers receive HTML documents from a web server or from local storage and render the documents into multimedia web pages. HTML describes the structure of a web page semantically and originally included cues for the appearance of the document.

HTML elements are the building blocks of HTML pages. With HTML constructs, images and other objects such as interactive forms may be embedded into the rendered page. HTML provides a means to create structured documents by denoting structural semantics for text such as headings, paragraphs, lists, links, quotes and other items. HTML elements are delineated by tags, written using angle brackets. Browsers do not display the HTML tags, but use them to interpret the content of the page.

HTML can embed programs written in a scripting language such as JavaScript, which affects the behavior and content of web pages. Inclusion of CSS defines the look and layout of content. The World Wide Web Consortium (W3C), former maintainer of the HTML and current maintainer of the CSS standards, has encouraged the use of CSS over explicit presentational HTML since 1997.

## **Cascading Style Sheets**

CSS is a stylesheet language used for describing the presentation of a document written in a markup language such as HTML. CSS is a cornerstone technology of the World Wide Web, alongside HTML and JavaScript.

CSS is designed to enable the separation of presentation and content, including layout, colors, and fonts. This separation can improve content accessibility, provide more flexibility and control in the specification of presentation characteristics, enable multiple web pages to share formatting by specifying the relevant CSS in a separate .css file which reduces complexity and repetition in the structural content as well as enabling the .css file to be cached to improve the page load speed between the pages that share the file and its formatting.

Separation of formatting and content also makes it possible to present the same markup page in different styles for different rendering methods, such as on-screen, in print, by voice (via speech-based browser or screen reader), and on Braille-based tactile devices. CSS also has rules for alternate formatting if the content is accessed on a mobile device.

The name cascading comes from the specified priority scheme to determine which style rule applies if more than one rule matches a particular element. This cascading priority scheme is predictable.

Before CSS, nearly all presentational attributes of HTML documents were contained within the HTML markup. All font colors, background styles, element alignments, borders and sizes had to be explicitly described, often repeatedly, within the HTML. CSS let authors move much of that information to another file, the style sheet, resulting in considerably simpler HTML.

#### Inheritance-

Inheritance is a key feature in CSS; it relies on the ancestor-descendant relationship to operate. Inheritance is the mechanism by which properties are applied not only to a specified element, but also to its descendants. Descendant elements may inherit CSS property values from any ancestor element enclosing them. In general, descendant elements inherit text-related properties, but their box-related properties are not inherited. Properties that can be inherited are color, font, letter-spacing, line-height, list-style, text-align, text-indent, text-transform, visibility, white-space and word-spacing. Properties that cannot be inherited are background, border, display, float and clear, height, and width, margin, min- and max-height and -width, outline, overflow, padding, position, text-decoration, vertical-align and z-index.

Inheritance can be used to avoid declaring certain properties over and over again in a style sheet, allowing for shorter CSS.

## **Django**

Django is a Python-based free and open-source web framework that follows the model-template-views (MTV) architectural pattern. It is maintained by the Django Software Foundation (DSF), an American independent organization.

Django's primary goal is to ease the creation of complex, database-driven websites. The framework emphasizes reusability and "pluggability" of components, less code, low coupling, rapid development, and the principle of don't repeat yourself. Python is used throughout, even for settings, files, and data models.

Django also provides an optional administrative create, read, update and delete interface that is generated dynamically through introspection and configured via admin models.

Some well known sites that use Django include PBS, Instagram, Mozilla, The Washington Times.

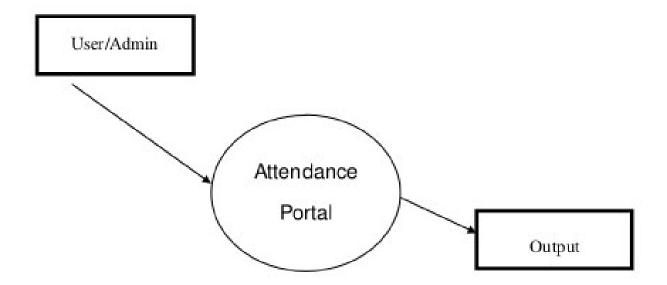
Django can be run in conjunction with Apache, Nginx using WSGI, Gunicorn, or Cherokee using flup (a Python module).

Django officially supports five database backends: PostgreSQL, MySQL, MariaDB, SQLite, and Oracle.

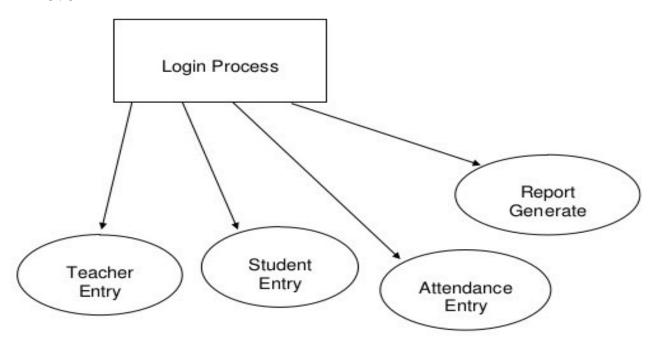
# **DIAGRAMS**

# 1. <u>Data-Flow Diagrams-</u>

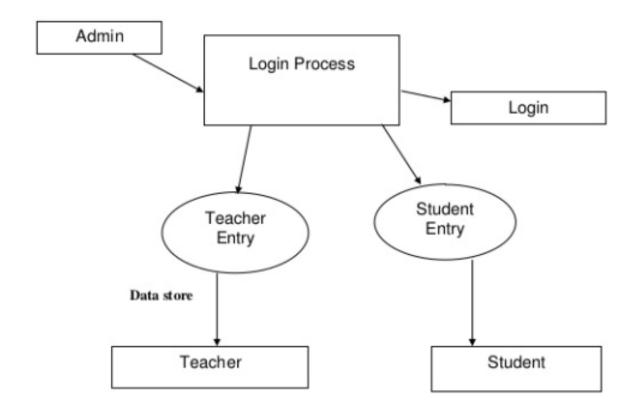
# • 0-level DFD



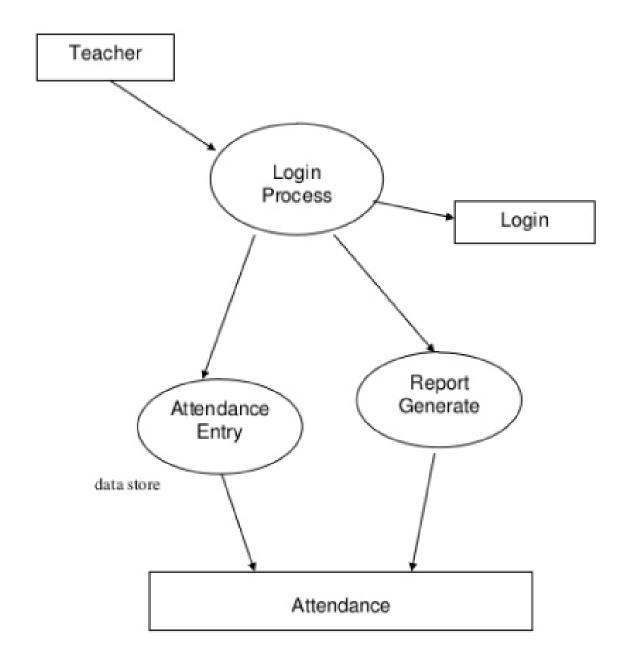
# • 1-level DFD



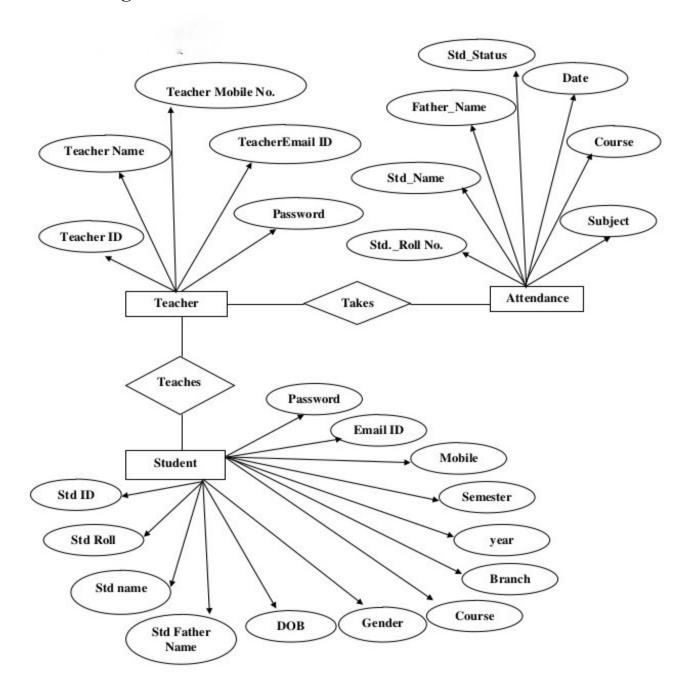
# • 2-level DFD



# • 3-level DFD



# 2. E-R Diagram-



## **Input Design-**

Input design is part of overall system design that requires special attention, designing input data is to make the data entered easy and free from errors.

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 the most expensive part of the system design. Since the input has to be planned in such a manner so as to get relevant information, extreme care is taken to obtain pertinent information.

This project first will enter 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 systems.

## **Output Design-**

Output design of the 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. One of the most important factors of the system is the output it produces.

This system refers to the results and information generated. Basically the output from a computer system is used to communicate the result of processing to the user. Attendance management systems show the report subject wise attendance maintained by staff.

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## **PROJECT DESCRIPTION**

#### 1. Problem Definition-

There are some problems in the conventional attendance tracking system like one is missing out a student's name, while the other leads to a false attendance record. Another issue of having the attendance record in a hardcopy form is that a lecturer may lose the attendance sheet.

For student attendance analysis, to obtain the student attendance percentage, manual computation has to be performed by faculty.

Technological improvements can be useful tools to help in the development of new systems to eliminate the disadvantages of classical methods while enhancing its advantages.

#### 2. Project Overview-

The Attendance Management System basically has two main modules for proper functioning.

The Admin module has rights for creating any new entry of faculty and student details.

Users have the rights of making daily attendance, generating reports. Attendance report can be taken by given details of student details, date, and class.

## 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 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.

# **SYSTEM TESTING**

#### 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 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.

Internal program logic is exercised using —White box test case design Techniques. Software requirements are exercised using —Black 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.

## 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-

#### 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 is stored in the database and retrieved. If you want a required module to access input or get the output from the End user. Any error will accrued the time will provide the handler to show what type of error will occur.

#### 2. System testing-

System testing is actually a series of different tests whose primary purpose is to fully exercise the computer-based system. It is to check all modules worked on input basis. If you want to change any values or inputs will change all information. so specified input is must.

## 3. 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 table, codes. It will generate reports fast. Entered correct data will show the result in a few milliseconds. just used only low memory of our system. Automatically do not get access to another software. Get user permission and access to other applications.

## **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 an existing system in a changing environment. Backup for the entire database files are taken and stored in storage devices like 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 passed proposed change

## **SCREENSHOTS**

#### **Command Prompt-**

```
Command Prompt - python manage.py runserver
     leaves= leave.objects.all()
AttributeError: 'function' object has no attribute 'objects'
[25/Nov/2020 22:23:05] "GET /leave/ HTTP/1.1" 500 61214
 :\Users\OS\Desktop\AMS\atten>python manage.py runserver
Natching for file changes with StatReloader
Performing system checks...
system check identified no issues (0 silenced).
lovember 25, 2020 - 22:23:38
Django version 3.1, using settings 'atten.settings'
Starting development server at http://127.0.0.1:8000/
Quit the server with CTRL-BREAK.
25/Nov/2020 22:24:06] "GET / HTTP/1.1" 200 7105

[25/Nov/2020 22:24:08] "GET / HTTP/1.1" 200 7105

[25/Nov/2020 22:24:08] "GET /logout/ HTTP/1.1" 302 0

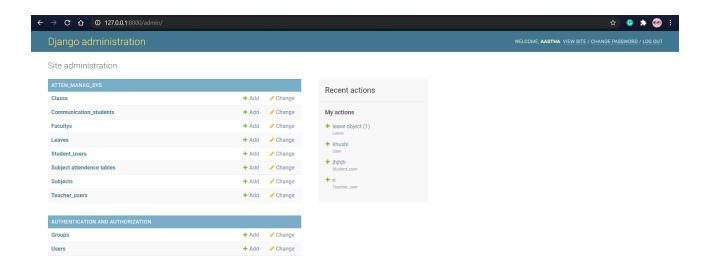
[25/Nov/2020 22:24:08] "GET /stu_login/ HTTP/1.1" 200 1046

[25/Nov/2020 22:24:09] "GET /static/css/%7B%%20static%20'images/333.png'%20%%7D HTTP/1.1" 404 1769

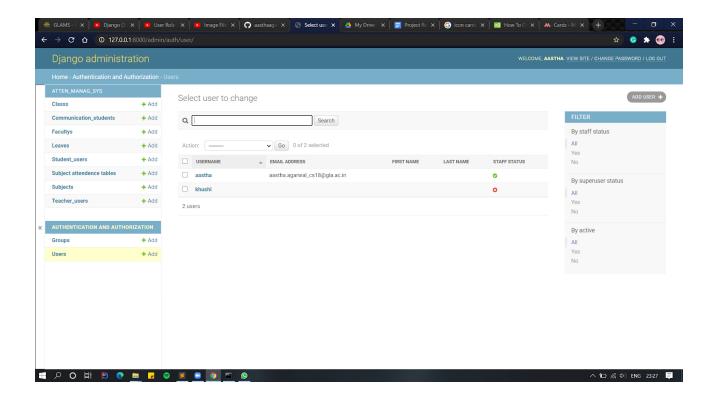
[25/Nov/2020 22:24:27] "POST /stu_login/ HTTP/1.1" 302 0

[25/Nov/2020 22:24:27] "GET / HTTP/1.1" 200 7105
:\Users\OS\Desktop\AMS\atten>python manage.py runserver
Watching for file changes with StatReloader
Performing system checks...
System check identified no issues (0 silenced).
lovember 25, 2020 - 22:30:30
Jiango version 3.1, using settings 'atten.settings'
 tarting development server at http://127.0.0.1:8000/
 uit the server with CTRL-BREAK.
```

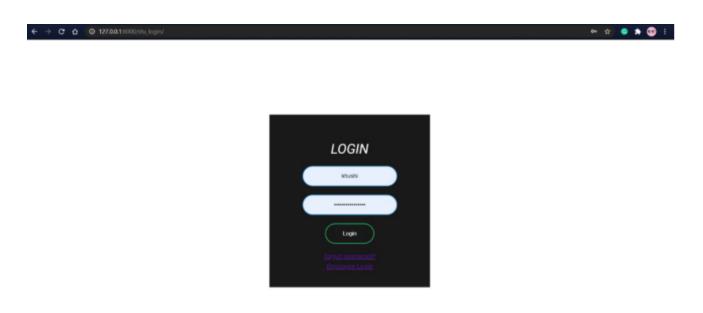
# **Admin Page-**



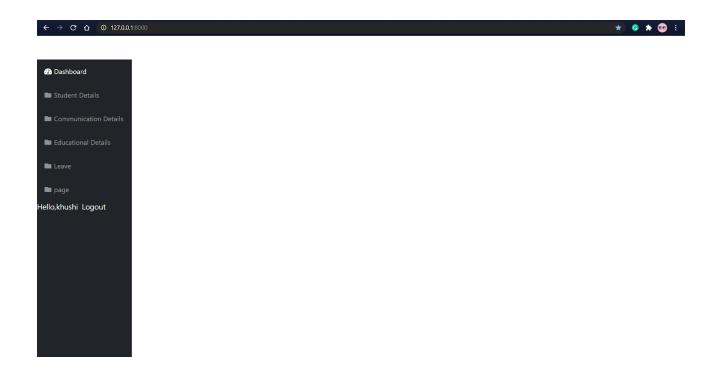
## **Admin Page-**



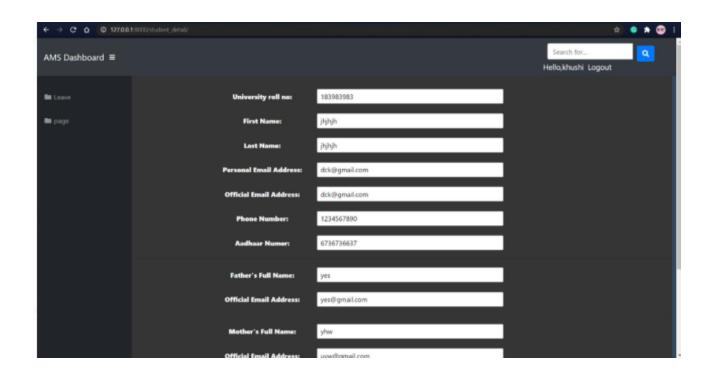
# **Student Login Page-**



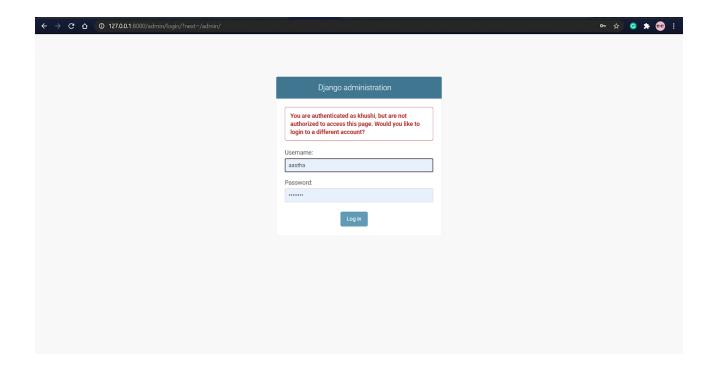
## Dashboard-



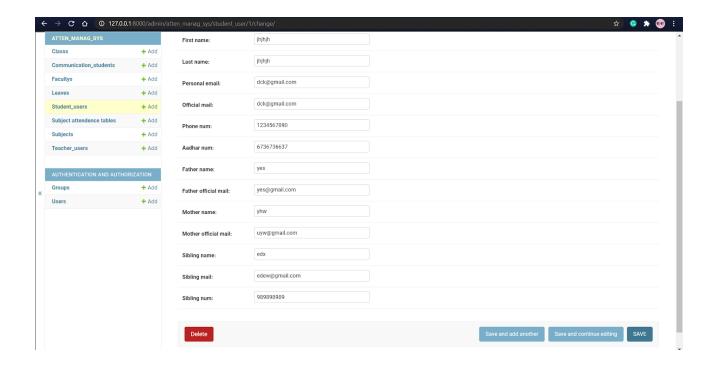
# **Student Entry-**



# Admin Login-



# **Student Detail View Page-**



# **CERTIFICATES**







# **REFERENCES**

- Book References(Web Engineering Book)
- www.w3school.com
- www.javapoint.com
- www.udemy.com
- www.youtube.com
- www.geeksforgeeks.com
- Faculty Guidelines: Mr. Sharad Gupta