

PROFESSIONAL TRAINING REPORT
at
Sathyabama Institute of Science and Technology
(Deemed to be University)

Submitted in partial fulfillment of the requirements for the award
of Bachelor of Technology Degree in Information Technology

By

ARCHANA B

38120010



DEPARTMENT OF INFORMATION TECHNOLOGY
SCHOOL OF COMPUTING
SATHYABAMA INSTITUTE OF SCIENCE AND
TECHNOLOGY
JEPPIAAR NAGAR, RAJIV GANDHI SALAI,
CHENNAI – 600119. TAMILNADU

NOVEMBER 2021



SATHYABAMA

INSTITUTE OF SCIENCE AND TECHNOLOGY

(DEEMED TO BE UNIVERSITY)

Accredited with "A" Grade by NAAC

Jeppiaar Nagar, Rajiv Gandhi Salai, Chennai - 600 119.

Phone: 044 - 2450 3150 / 51 / 52 / 54 / 55 Fax: 044 - 2450 2344

www.sathyabama.ac.in



SCHOOL OF COMPUTING

BONAFIDE CERTIFICATE

This is to certify that this Project Report is the bonafide work of **ARCHANA B** (Reg.no. 38120010) who carried out the project entitled "**School Management System using Python**" under our supervision from Jan 2021 to April 2021.

Internal Guide

Dr. Senduru Srinivasulu M.E., Ph.D.,

Head of the Department

Dr. R. Subhashini M.E., Ph.D.,

Submitted for Viva voce Examination held on

Internal Examiner

External Examiner

DECLARATION

I hereby declare that the Project Report entitled “**School Management System using Python**” done by me under the guidance of **Dr. Senduru Srinivasulu M.E., Ph.D.**, and is submitted in partial fulfilment of the requirements for the award of Bachelor of Engineering / Technology degree in Information Technology.

DATE:

PLACE: Chennai

SIGNATURE OF THE CANDIDATE

ACKNOWLEDGEMENT

I am pleased to acknowledge my sincere thanks to Board of Management of **SATHYABAMA** for their kind encouragement in doing this project and for completing it successfully. I am grateful to them.

I convey our thanks to **Dr. T. SASIKALA M.E., Ph.D.**, Dean, School of Computing and **Dr. R. SUBHASHINI M.E., Ph.D.**, Head of the Department, Department of Information Technology for providing us the necessary support and details at the right time during the progressive reviews.

I would like to express my sincere and deep sense of gratitude to my Project Guide **Dr. Senduru Srinivasulu M.E., Ph.D.**, for his valuable guidance, suggestions and constant encouragement paved way for the successful completion of my project work.

I wish to express my thanks to all Teaching and Non-teaching staff members of the Department of **INFORMATION TECHNOLOGY** who were helpful in many ways for the completion of the project.

ABSTRACT

SCHOOL MANAGEMENT SYSTEM USING PYTHON

- **School Management System** using **Python** project that can manage the storing of student information in the system. The purpose of the system safely maintains the organizing of student details inside the campus.
- The project was build as a GUI application called the **Tkinter** module it maintains the interface as a user-friendly interaction. This project is protected by a strict encrypting password you need to enter a user login to access the main system. When the user login he/she can interact with two categories, the student menu, and the fee menu.
- In the student menu, the user can manage the student data such as adding new students, update current status, and deleting existing data. While in the fee menu the user can pay the student payment by entering the student's complete information, Amount of payment, Date, and Admission number. You are also allowed to update the existing data with a balance in order to pay. The system has a feature that can generate a payment receipt for students. The **School Management System** is a simple project that contains all the necessary functionality for organizing the student information inside a campus.

CHAPTER NO	TITLE NAME	PAGE NO
	ABSTRACT	7
	LIST OF FIGURES	9
	LIST OF ABBREVIATION	10
1	INTRODUCTION	12
	1.1 OBJECTIVE	12
	1.2 PROJECT IMPLEMENTATION	12
2	AIM AND SCOPE	13
	2.1 AIM	13
	2.2 SCOPE	13
	2.3 FEASIBILITY STUDY	14
3	SYSTEM ANALYSIS AND DESIGN	17
	3.1 USER INTERFACE	17
	3.2 FRAMEWORK	17
4	RESULT AND DISCUSSION	18
	4.1 SYSTEM REQUIREMENTS	18
	4.2 RESULT	18
5	CONCLUSION AND FUTURE WORK	20
	5.1 CONCLUSION	20
	SCREENSHOTS	21

FIGURE NO	FIGURE NAME	PAGE NO
3.1	DATA FLOW	18
4.1	OUTPUT	20

CHAPTER 1

INTRODUCTION

OBJECTIVE

- The main objective of the package is for the authorities of the school/institute to make their task easier, or we can say this package automated their tasks like marinating students' personal details, marinating cash details, printing of receipts.
- This package helps the administrative & accounts department in maintaining the students personal & fees related details.

PROJECT IMPLEMENTATION

1. This project was created as a graphical user interface (GUI) programme using the Tkinter module, which displays the interface as a user-friendly interaction. To access the main system, you must enter a user login, which is protected by a rigorous encrypting password.
2. When a user logs in, he or she has access to two menus: the student menu and the fee menu. The user can manage student data under the student menu by adding new students, updating current status, and deleting old data.
3. The user can pay the student's fee by entering the student's complete information, the amount of payment, the date, and the admission number while in the fee menu.
4. In order to pay, you can also update the existing data with a

balance. A component of the system allows students to print a payment receipt.

5. The School Management System is a straightforward project that includes all of the necessary features for organizing student data on a campus.

AIM AND SCOPE

AIM

The main aim of the School Management System is to manage the student information and fees details. This provides the users with a single database to store every data in it.

EXISTING SYSTEM

The Existing System is the school administrator who has to maintain all the details of the student manually in the books. Every time he wants to update the records of the students need to search for the records in the books. Admin has to enter the details manually into the books.

PROPOSED SYSTEM

To overcome all these problems, we are developing a solution that is, we are proposing an automated system using which the admin can store all details about student into this site and he/she can export the details. Instantly we can enter the student admission number and get the details for editing, searching students. Fee details can be added up to date and modify if required. Students can edit their personal details and can view the fee details. Another advantage of the system is that is very easy to edit the details of the student and delete a student when it found unnecessary.

FEASIBILITY STUDY

The main feasibility study activity is to determine whether it would be financially and technically feasible to develop the system or not. First the study often presupposes that when feasibility document is being prepared, The analyst is in a position to evaluate solutions. Secondly, most studies tend to overlook the confusion inherent in the system development-the constraints and the assumed attitudes. If the feasibility study is to serve as a decision document for a project, it must answer 3 key questions.

Three key considerations involved in the feasibility analysis:

- Economical
- Technical
- Implementation

SCOPE

Our project has a big scope to do.

We can:

- ❑ Create student details.
- ❑ Admin can maintain the Fee details of each and every student.
- ❑ We print Fee Receipt.

- Today, the marketplace is flooded with several school management options for school and colleges to choose from. A variety of innovative products and services are being offered spoiling customers for choice.
- School Management System is no more a privilege enjoyed by managers and employees. In the last couple of years, the growth of IT industry has been phenomenal as more have started discovering the benefits of using this platform. Therefore, we will make this system live and provide software as a service (SAS) in future.

FUNCTIONALITIES PROVIDED BY PYTHON ON SCHOOL MANAGEMENT SYSTEM

- It tracks all the information of Student Fees Payment, Student personal Information.
- Manage the information of Student Fees Payment.
- Editing, adding and updating of Records is improved which results in proper students data.

School Management System Project in PythonFeatures

Student Menu

- **Managing Information in the Student Menu**

- The user can manage student information in this menu by inputting the Student Name, Father Name, Mother Name, Address, and so on.
- **Information can be updated.**
- You have permission to make changes to the current student information.
- **Back up your data safely.**
- This project creates a SQL file backup of your database.

Fee Menu

- **Managing Information**
 - In this menu, the user can manage the student payment information by entering the Receipt no, Student name, Admission Number, Date, and Branch
- **Can update information**
 - You can update the existing student balances so that students can pay the remaining balance.
- **Safely Backup**
 - This project automatically backup your database as a SQL file.
- **Generated Receipt**
 - The project can generate a readable receipt after the student pays a balance.

USER INTERFACE

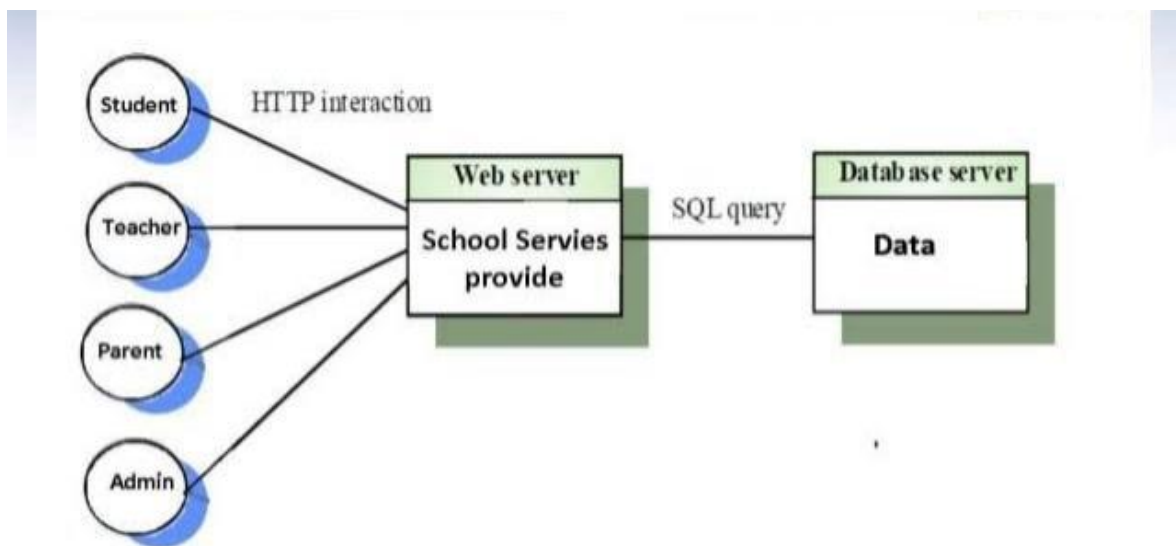
The user interface (UI) is the point of human-computer interaction and communication in a device. This can include display screens, keyboards, a mouse

and the appearance of a desktop. It is also the way through which a user interacts with an application or a website

PYTHON WEB FRAMEWORK

A Web framework is a collection of packages or modules which allow developers to write Web applications or services without having to handle such low-level details as protocols, sockets or process/thread management. The Python web framework used in this project is Flask.

DATA FLOW



RESULTS AND DISCUSSION

SYSTEM REQUIREMENTS

- Programming Language: Python
- Package Used: Tkinter Module
- IDE: Python IDLE
- Operating System: Windows
- Cache: 1MB

FUNCTIONAL REQUIREMENTS

Creation of new record:

This function creates a record for a new student.

Deletion of record:

This function is used to delete the existing record of any student.

Updation in record:

This function updates the information in a record of any student.

Display of data in record:

This function displays the record of the students.

Searching a record:

This function is used to search the records of students.

NON-FUNCTIONAL REQUIREMENTS

Requirement specification plays an important part in the analysis of a system. Only when the requirement specifications are properly given. It is possible to design a system, which will fit into the required environment. It rests largely with the users of the existing system to give the requirement specifications because they are the people who finally use the system.

This is because the requirements have to be known during the initial stages so that the system can be designed according to those requirements. It is very difficult to change the system once it has been designed and on the other hand designing a system, which does not cater to the requirements of the user, is of no use.

The main Non-Functional Requirements of school management system are Security, Performance, User friendly, Maintainability, etc.,

CONCLUSION

- Our project is only a humble venture to satisfy the needs in a school to manage their project work. Several user-friendly coding have also been adopted. This package shall prove to be a powerful package in satisfying all the requirements of the school.
- The objective of software planning is to provide a framework that enables the manager to make reasonable estimates made within a limited time frame at the beginning of the software project and should be updated regularly as the project progresses.

OUTPUT

Login Menu

Username	admin
Password	****
Login Reset Exit	

School Management System

STUDENT PROFILE

FEE REPORT

STUDENT INFORMATION		STUDENT DATABASE
Name	Archana	1 Archana Baskar Parimala Chennai 6579857904 archana@gmail.com 4/6/2001 Female
Father Name	Baskar	2 Archana Baskar Parimala Chennai 6579857904 archana@gmail.com 4/6/2001 Female
Mother Name	Parimala	
Address	Chennai	
Mobile Number	6579857904	
Email ID	archana@gmail.com	
Date of Birth	4/6/2001	
Gender	Female	

SAVE DISPLAY RESET UPDATE DELETE SEARCH EXIT

FEE REPORT

Informations		Fee Receipt
Receipt No. :	5687	RECEIPT
Student Name :	Kaviya	Receipt No. :5687
Admission No. :	5667899	Student Name :Kaviya
Date :	2020-10-14	Admission No. :5667899
Branch :	IT	Date :2020-10-14
Semester :	7	Branch :IT
		Semester :7
	TOTAL AMOUNT : 15000	Total Amount :15000.0
	PAID AMOUNT : 12000	Paid Amount :12000.0
	BALANCE : 3000.0	Balance :3000.0

1 4566 archana 1245434 2020-10-14 it 6 0 13200 1800

2 5687 Kaviya 5667899 2020-10-14 IT 7 0 12000 3000

SAVE DISPLAY RESET UPDATE SEARCH DELETE RECEIPT EXIT