



Education Institute Management System

Sesira online

Sesira online

ITP_WD_B01_10

Group Members

- Malalasekara C.N.P

Content

1.Introduction

- 1.1 Company Background
- 1.2 Problem and Motivation

2.Aim and Objectives

3. Functions

- 3.1 Employee Management
- 3.2 Resource Management
- 3.3 Quiz Management
- 3.4 Teacher Management
- 3.5 Student Management
- 3.6 Subject Management
- 3.7 Financial Management
- 3.8 Notification and News Management

4.Technologies

- 4.1 ASP.NET
- 4.2 Bootstrap
- 4.3 SQL lite
- 4.4 HTML
- 4.5 CSS
- 4.6 JAVA Script

1 Introduction

1.1 Company Background

- Sesira Institute is a prestigious higher education institute in Piliyandala area. They have been providing their services to students and teachers for more than 10 years now.
- Teachers can do their teaching in association with the institute and necessary facilities are provided for that.
- Students can contact the institute and join the classes according to the subject related to their grade
- Currently more than 1000 students are studying in this institute and more than 20 teachers are imparting their knowledge.
- Their goal is to constantly offer students who trust them a high-quality education.

1.2 Problem and Motivation

Sesira institute already has a computer-based system to do some tasks of their daily routine

- Marking attenders
- Adding teachers and classes to systems
- Adding students to the system
- Keep track of student payment
- Getting report (note: to do that they need the support of developer of the system)

Due to the previous pandemic situation and the current road difficulties, the need of a system that can connect through the internet has become a strong request of the staff and as well as the students of the institution. Also, the institute is directed to provide the answers to the questions and the tutorials related to the lessons given to the students through the internet. But the staff is facing some difficulties in implementing the existing system.

Main Drawbacks in current system

- Only one logging to the staff and neither student nor teachers cannot log to the system
- If staff members want to get reports from students, they should meet the developer to get that report
- Every staff member has admin access, access control cannot be done
- Cannot manage the employees(staff)
- Not an online system, cannot be accessed through remote place
- Student cannot pay online

By moving to new system

- There are two main accounts for the staff called admin and receptionist so Institute management can do the access control
- Students do not need to visit institute the can-do quizzers and lessons online and they can find all the study material using the system
- Staff can easily get report about student's teachers employees class grades and quizzes
- Teachers can manage students easily, so teachers are getting motivated to work with institute
- Parent, students can pay online
- Students can focus on their study in online or physically no need to worry about travelling

2.Aim and Objectives

The purpose of introducing this system is to provide proper education to the students through the online system in the face of many problems such as lack of transportation facilities caused by the severe epidemic situation in the country as well as lack of fuel. The main actors of the system are administrators, students, teachers and employees and they will focus on the different interfaces to perform their tasks.

- All the people who want to be associated with this system have been introduced the necessary procedures to register for this system quickly without making them uncomfortable by reducing the time spent on it.
- Students can collect all their study materials(tutes, books, papers) through the new system without going to the institute by wasting time.
- Identify online payment platform. Therefore, students can pay their class fees easily.
- Even in the face of economic problems, teachers can easily provide education to students at the right time according to their schedule.
- And also, through this system, teachers have been provided with all the relevant facilities to conduct the relevant exams through the online system and students have also been given the ability to connect to them easily and the purpose of that is to definitely connect all the students to the exams.
- Students who did not attend their respective classes on that day, can easily contact the respective teachers to join the classes on another day or the students themselves can view timetable and join their classes at their own time.

3. Functions

3.1 Employee Management

Functions Create new receptionist account

- ❖ This function helps to manage the employees (receptionist) in the institute.
- ❖ The admin should be able to manage all the employees related things by using system(work hours , attendance ,salaries ,Access control)
- ❖ Note administrator is also a employee
 - Administrator can create new account for the employees and add critical details (salary, Id, type of account)



Edit details

- Employees can edit personal details in account after admin create the account

Change the access control

- Admin can add and remove access to the employee and limited the functionality.

Delete the receptionist account

- Admin can delete the receptionist account

Overall summary

- Admin needs an overall page of the current information about the institute (active students, teachers, classes, notifications and etc.)
- Receptionists want to have overall detail about their information and the upcoming events(classes)

Arrange classrooms (Only for physical students)

- Receptionist can manage (assign) class room for the physical class according to the number of students

3.2 Resource Management

- ❖ This Function helps to manage all Reference Books, Tutes and Past Papers.
- ❖ Employee (...), Admin can Add or Remove everything in the System.
- ❖ Teacher can Add or Remove only their own subject.
- ❖ Student can only access to the system and assign Reference books Tutes and Past papers and can download as a PDF

Functions

Add Reference Books ,Tutes and Past Papers.

- Employee (...), Admin can Add everything in the System.
- Teacher can Add only their own subject.

View and Edit available Reference Books ,Tutes and Past Papers.

- Employee (...), Admin can View and Edit everything in the System.
- Teacher can View everything and edit only their own subject.

Remove Reference Books ,Tutes and Past Papers.

- Employee (...), Admin can Remove everything in the System.
- Teacher can Remove only their own subject.

Generate Categorize List.

- Employee(..), Admin and Teacher can generate Categorized list for their own uploading files.



3.3 Quiz Management

- ❖ Quiz management is mainly forces on computerizing the process of examination (MCQ).
- ❖ This helps Teachers to manage their quizzers and Students to do the quizzers online without visiting to institute.

Functions

Create Quizzers

- Teachers can create quizzers by adding quizzers and answers.
- All the necessary data will save in the data base

Edit Quizzers

- Teachers can edit current active quizzers by adding new questions for existing quizzers
- Teachers can delete the selected questions from the active quizzes
- Teachers can edit the answer to the question from the selected quiz

Delete Quizzers

- Teacher can search and delete the whole quiz

Answer the quizzers

- Student can go to the provided quiz and answer the questions

Calculating the marks

- Both the teachers and students can see the total marks after the quizzer is finished

Calculate the class summary

- Both students and the teacher can see the summary of class quiz avg marks highest marks
- Teacher can see the students who did the exam



3.4 Teacher Management

- ❖ This function manages the details of all teachers who wish to be associated with this institute.
- ❖ In addition, each teacher should be able to manage subject timetables, classes and examination details.

Functions

- Teacher can register by entering their details and after the validation system allows them to login.



Update Profile

- If the teacher wants to edit their details the system allows them to change their details.

View profile

- Teacher as well as administrator can view the profile.

Create Subject Timetable

- Teacher should be able to create a timetable including all the subject with each grade.

Update Subject Timetable

- Teacher can access to view subject details and update subject timetable for relevant classes.

Create Examination

- Teacher should be able to create the exam page adding examination timetables and other details including special notices, links.

Delete Examination details

- Teacher can delete exam links and past notices when needed.

Update Examination details

- Teacher can also update the exam links and other special notices.

Create a dashboard

- Show the number of students for each grade and subject who have paid the fees for that month with total calculation of the monthly fee as a summary. In addition, display details about the hall.

3.5 Student Management

- ❖ All student information is managed by student management.
- ❖ The company is having difficulty removing students who are no longer using the system while keeping a record of attendance. Student management evolves as a solution.
- ❖ It also facilitates the identification of students through the use of unique identifiers, and student management allows students to easily login and register to the system.

Functions

Add Student

- Students can register in the system after entering the necessary information. The system validates the information and allows students to log in.

View profile details

- Administrator and student allow to view the profile details.

Update profile details

- Student allows to change password email and address. And administrator allows to edit student details.

Remove student

- Administrators have the ability to remove students who are no longer using the system.

Record attendance

- Receptionists are allowed to record attendance using the system.

Generate identity

- When a student registers with the system, the system automatically generates a student ID card with a unique number.



3.6 Subject Management

- ❖ This gives the access to the teacher and student to continue their activities
- ❖ Teachers have access to manage enrolled subject and Studies have limited access continues their studies without having a problem

Features

View subject

- A student can view the subject page with limited access and teachers can view subject with more features

Add subject materials –

- teachers can add subjects' materials to the subject page

Remove subject materials

- teachers can remove outdated subject materials from subject page

Create subject

- teachers can create a new subject in main subject page

Generate a summery

- System can generate activity summery and display it and update the details in real time



3.7 Financial Management

- ❖ Financial management is planning, organizing, directing and controlling the financial activities of the Institute, using financial resources efficiently and effectively.
- ❖ The financial management of the institute helps class institute to draw up a budget, set objectives, identifies the sources in terms of human resources, time allocation, teaching and learning materials and appropriate costing.

Functions

Establish financial office in the Institute

- The class fees of the students and the amount charged for their admission and the monthly salaries of the teachers, their allowances and the salaries of all other employees are done through the Finance manager.

Creating an online payment system

- Informing students about how to make their payments.
- Providing specific time for payment of class fees

Record students' fees

- Create a fee documentation system and class fees are recorded by finance officers

Remove student

- students Not pay their class payment they have to remove and ID cards are not allowed in institute

3.8 Notification & News Management



- ❖ This function manages the details of all notifications & news in this institute.
- ❖ In addition, teachers and administration can handle all controls in this notifications & news.
- ❖ They can manage their classes, exams , seminars , special events , news.

Functions

Create Notifications

- Teachers can insert & update daily notifications into the system.

Update Notifications

- Teacher can manage their message in this system (delete & update)

Publish Notifications

- Teachers can inform their students about new timetables, extra classes, exams, seminars, special events, updated news, new rules and conditions.
- Teacher can inform academics and nonacademic updates

View Notifications

- Students can log in to the system & get information's about their classes & notices given by their teachers & administration.

Admin Notifications create

- The administration can insert updates and delete information & notification in this system.

Delete Admin Notifications

- Students and teachers can view institution information's by logging in together

4. Technologies

4.1 ASP.NET

What is ASP.NET?

The name stands for Active Server Pages Network Enabled Technologies. It is an open-source web framework that allows you to create fast and secure web applications and services in Asp.NET. One of the most appealing features of Asp.NET is that it is cross-platform, which means it can run on Windows, Linux, and Mac OS. As a result, we will be able to create ASP.NET web applications on any operating system. ASP.NET is an object-oriented web application development framework that supports inheritance, polymorphism, and other common OOP features.



4.2 Bootstrap

Bootstrap is a free and open-source CSS framework for front-end web development that focuses on responsive design. It includes design templates for typography, forms, buttons, navigation, and other interface components in HTML, CSS, and JavaScript. Bootstrap enables designers and developers to quickly create fully responsive websites.



4.3 MicroSoft SQL Server

SQLite is a relational database management system that is organized as a C programming library.

SQLite is "stand-alone" or "self-contained" in the sense that it relies on few other dependencies. It is compatible with any operating system.

SQLite is a software library that allows you to manage relational databases. SQLite's lite denotes ease of setup, database administration, and resource requirements.

SQLite has the following distinguishing characteristics: self-containing, server less, zero-configuration, and transactional.

4.4 HTML

- HTML is the language for **describing the structure of Web pages**. HTML gives authors the means to: Publish online documents with headings, text, tables, lists, photos, etc. Retrieve online information via hypertext links, at the click of a button.

HTML Introduction

- HTML stands for Hyper Text Markup Language.
- HTML is the standard markup language for creating Web pages.
- HTML describes the structure of a Web page.

4.5 CSS

- HTML (the Hypertext Markup Language) and CSS (**Cascading Style Sheets**) are two of the core technologies for building Web pages. HTML provides the structure of the page, CSS the (visual and aural) layout, for a variety of devices.



4.6 JAVA SCRIPT

- JavaScript (JS) is a **lightweight, interpreted, or just-in-time compiled programming language with first-class functions**. While it is most well-known as the scripting language for Web pages, many non-browser environments also use it, such as Node.js, Apache CouchDB and Adobe Acrobat.



