

STUDENT INFORMATION AND LEARNING MANAGEMENT SYSTEM



Batch – 07

Group – G107

INTRODUCTION

1. Company Background
2. Problem Statement
3. Solution
4. Benefits

Company Background

The company that we have focused to develop a system is an educational institution which conduct extra classes for students.

They provide the physical area for teachers to conduct their classes.

The name of the institution is NextGen Higher Educational Institution located in Galewela, Dambulla.

This institution has about 20 teachers teaching different subjects for students in different grades. Also has about 200 registered students studying different subjects.

Problem

Considering the present situation in the world this institution had to face various kinds of issues in conducting their teaching and business activities.

They did not have a system of their own to manage the activities.

- ▶ Student, teacher admission.
- ▶ Conducting and allocating classes for students.
- ▶ Getting relevant payments.
- ▶ Managing student, teacher and other information.
- ▶ Providing students with relevant academic activity references

So our main aim was to develop a system to them so that they can

conduct all their activities without any hindrances even in a period

where the whole country is under lockdown.

Solution

Thus using our system they can continue their work as planned.

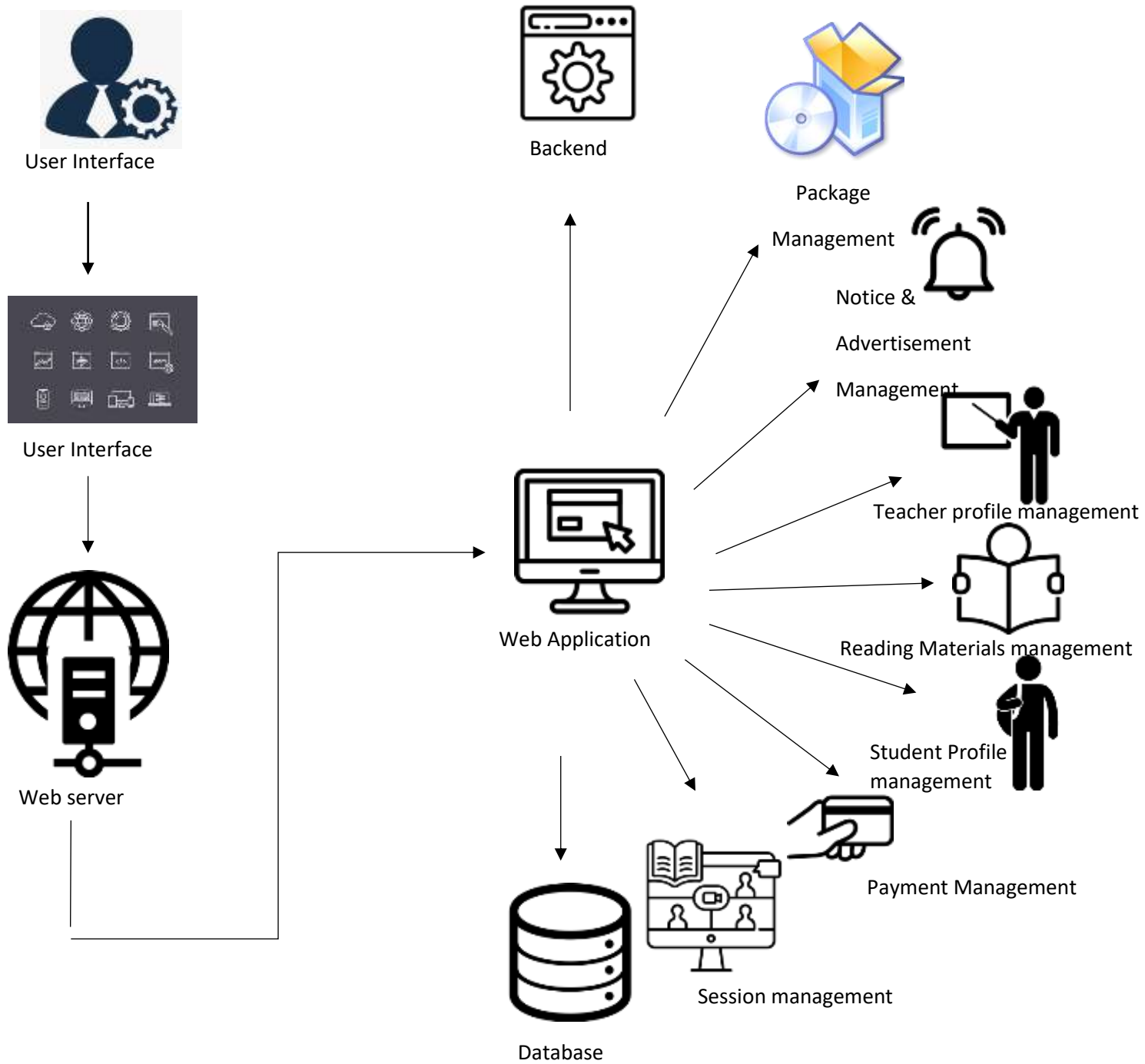
- ▶ They can register students, teachers.
- ▶ Allocate students to relevant sessions.
- ▶ Obtain payments for the online classes done.
- ▶ Provide additional reading materials.
- ▶ Publish their advertisements and notices.
- ▶ Even provide additional study packages for students to learn new things.

Benefits

- ▶ Easy storage and retrieval of data.
- ▶ Continue academic as well as business activities effectively and smoothly.
- ▶ Company's growth can be tracked easily.
- ▶ Provide the best resources for students to learn.
- ▶ Keeping track of each student is easy.

System Overview

A graphical representation of
the developing system



BUSINESS FUNCTIONS



**PACKAGE
MANAGEMENT**



**NOTICES AND
ADVERTISEMENT
MANAGEMENT**



**TEACHER PROFILE
MANAGEMENT**



**ADDITIONAL
READING MATERIAL
MANAGEMENT**



**STUDENT PROFILE
MANAGEMENT**



**PAYMENT
MANAGEMENT**



**SESSION
MANAGEMENT**

Study Packages Management

- Study packages are a set of additional study materials where students can follow according to their preferred subjects. They can use them to learn something beyond their normal academic work.
- In this function : -
 - Admin can insert new packages declared by teachers
 - Admin can delete the packages which are not in use much
 - Admin can update the details in these packages.
 - Students can search the packages they need according to their preference
 - Admin can generate a report regarding most used packages, least used, not used packages.

Notices and Advertisement Management

- This function helps to manage the notices and advertisements shown to students at the institute. Function includes advertisement panel on login screen, advertisements and notices management page, notices panel on student profile page.
- Through this function :-
 - Admin and teachers can add special notices to students.
 - Admin can add advertisements on advertisement panel at login screen.
 - Students can view notices from notices panel on student profile page.
 - Admin and teachers can update and delete notices.
 - Admin can update and delete advertisements.
 - Students can search notices by their subject and date.
 - Notices and advertisements' details report is generated.

Teacher User Profile Management

- This function helps to manage the information of the teachers in the institute. Function includes login page of the teacher, teacher user profile page and Our Teachers page.
- Through this function :-
 - Admin can add teachers to the system.
 - Teacher's details are displayed in the user profile section of the teacher's dashboard.
 - Admin and teachers can update and delete teachers' user profiles.
 - Admin can search teachers by their Teacher ID.
 - The teachers' details report is generated.

Additional Reading Material

- This function helps to manage the additional reading materials given to students at the institute. Function includes additional reading materials management page, student additional reading materials page.
- Through this function :-
 - Admin and teachers can add links to additional reading materials such as past papers, reference books, chapters from books which are stored in cloud drive
 - Students can view links to additional reading materials from student additional material page.
 - Admin and teachers can update and delete links to additional reading materials.
 - Students can search additional reading materials by their subject and grade.
 - The additional reading materials' details report is generated.

Student profile Management

- This function includes Student log-in and student profile.
- Student Profile Management is comprehensive profile for information management of the students. Student profile can view only system administrator and the relevant student.
- In this function :
 - Admin can insert new student to the system.
 - Admin can delete the student which are not exist in the institute.
 - Admin can update the details of the student and the student can update their details which can access.
 - Admin can search the student profile and the student can view their profile.
 - Admin can generate a report regarding weekly attendance, new student registrations.

Payment Management

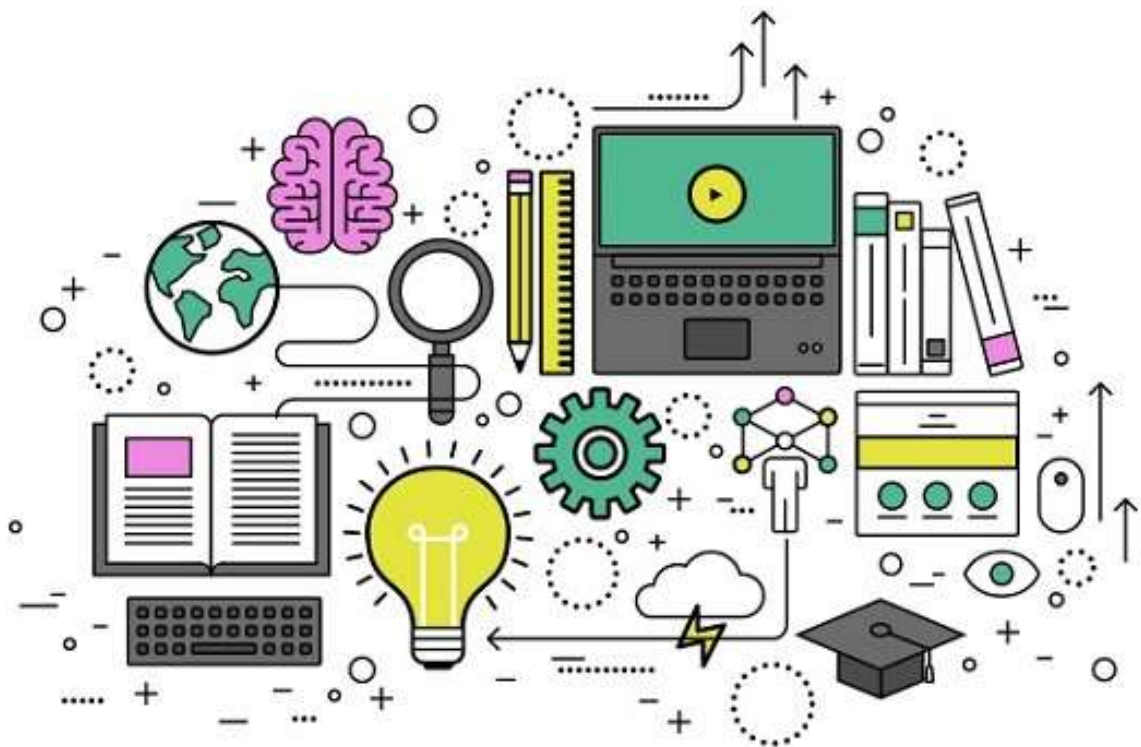
The Payment Management function helps to manage all the details of the payment processes in this institute. Admin manages the payment details. This function includes Add payment page, Change payment details page, Institute payment details page and Monthly income report page .

- Through this function:
- Student can add his payment details.
- Student can update his payment details if it is required.
- Student can delete his payment details.
- The admin can search and retrieve the payment details of a relevant student.
- Admin can generate payment bill and monthly income.

Session Management

- The session management function mainly manages all the details of the sessions held in the institute. This function gives privileges to the admin to manage sessions according to a proper schedule.
- With this function :
 - A session can be identified uniquely
 - Admin can create sessions where students are enrolled
 - Admin can update or delete a session according to academic issues
 - Admin can search sessions by subject name or teacher's name
 - A report can be generated about sessions with all the details
 - If a sudden update or cancellation of a session is published in the notices & advertisements section admin must do the relevant changes inside sessions.

TOOLS & TECHNOLOGY



Java

Java is a high-level, class-based, object-oriented programming language that is designed to

have as few implementation dependencies as possible.

Heroku

Heroku Postgres is the Cloud database (DBaaS) service for Heroku based on PostgreSQL.

PostgreSQL

PostgreSQL is a powerful, open source object-relational database system that uses and

extends the SQL language combined with many features that safely store and scale the

most complicated data workloads.

Github

It offers the distributed version control and source code management functionality

HTML

HTML is the standard markup language for documents designed to be displayed in a web browser.

CSS

Cascading Style Sheets is a style sheet language used for describing the presentation of a document written in a markup language such as HTML.

JavaScript

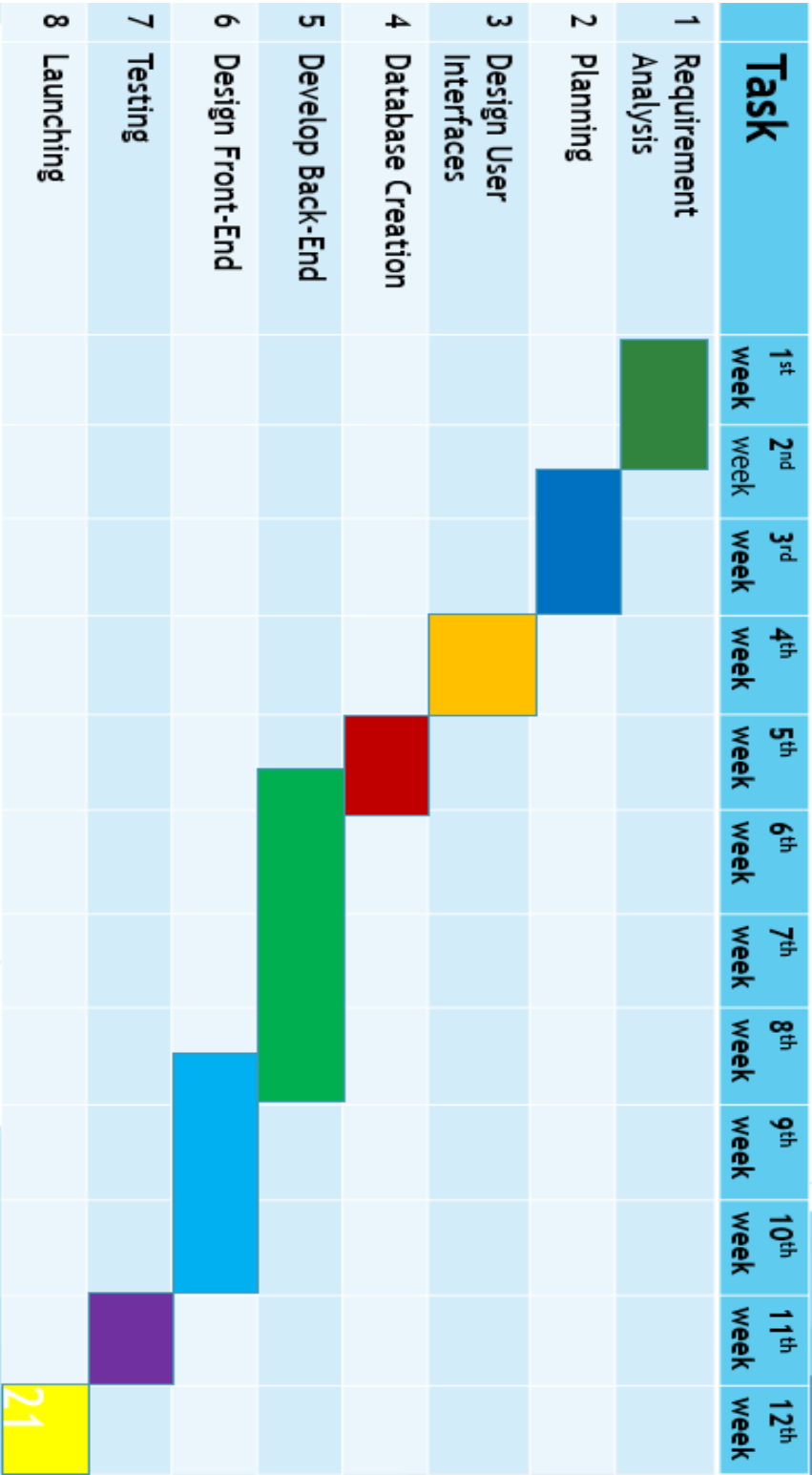
JavaScript to program the behavior of web pages

Eclipse IDE

The Eclipse IDE is famous for our Java Integrated Development Environment (IDE),

Project Management Plan

Gantt Chart



Work Distribution

Work Distribution

Name	Registration Number	Function
S.L.D.P Pramodya	IT20219598	Package management
T.D.S Perera	IT20228262	Notices and Advertisement management
H.D.S Romeshika	IT20144326	Teacher profile management
R.K.D.D Sulakshana	IT20247690	Additional reading material management
R.M.N Kavindya	IT20192228	Student profile management
A.M.K.A.P Amarasinghe	IT20257040	Payment management
A.A.K Venush	IT20145866	Session management