

A  
PROJECT REPORT ON  
**LEARNCARE**  
**Learning Management System**

SUBMITTED IN PARTIAL  
FULFILLMENT OF  
**DIPLOMA IN ADVANCED COMPUTING (PG-DAC)**



**UNDER THE GUIDANCE OF**

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# ACKNOWLEDGEMENT

The project “LMS” was a great learning experience for us and we are submitting this work to Advanced Computing Training School (C-DAC ACTS, Pune).

We are very glad to mention the name of Ms. Shanur & Mr. Akash for valuable guidance to work on this project.

We are highly grateful to Ms. Risha P. R., Manager of ACTS Training Centre, CDAC, for her guidance and support whenever necessary during the course of our journey to acquire PG-Diploma in Advanced Computing (PG-DAC) through CDAC ACTS, Pune.

Our heartfelt thanks go to Ms. Shilpi Shalini (Course Coordinator, PG\_DAC) who gave us all the required support and kind coordination to provide all the necessities to complete the project and throughout the course up to the last day of the course.

We would like to express our sincere gratitude towards Mrs. Madhura Anturkar, our faculty for J2SE and J2EE, who was always there for us. Her guidance and support helped us overcome various obstacles and intricacies during the course of our project work. Without her tremendous support, guidance, and efforts, this project would not have been possible.

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# ABSTRACT

The Learning Management System (LMS) has been established in a number of universities worldwide to help connect students and lecturers without the confines of the traditional classroom. It is an environment with digital software which is designed to manage user learning interventions as well as deliver learning content and resources to students.

Since the LMS system has already been implemented and it has also been made compulsory for the lecturers to apply in their daily lectures, it is vital to identify feedback of students as users of LMS. Previous studies have shown various findings in relation to the impact of using LMS in the higher learning environment in various universities worldwide. Therefore, this paper will provide several insights of the LMS phenomenon.

*Index Terms*—Learning management systems, higher learning, content, acceptance, impact, worldwide.

# 1.INTRODUCTION

The Learning Management System or popularly known as LMS in the community of higher institutions is an online portal that connects lecturers and students. It provides an avenue for classroom materials or activities to be shared easily. It is also a portal that enables lecturers and students to interact out of the classroom, having discussions through forums that could otherwise take up too much of the time supposed to be spent learning in the classroom.

In this era of information technology, the internet is easily available and accessible by urban areas, which is where most universities are situated. The internet is defined as a vast computer network linking smaller computer networks worldwide, and it includes commercial, educational, governmental, and other networks, all of which use the same set of communications protocols.

Most university students nowadays also have access to the internet as their university provides internet access, and usually there are internet cafes within a walking distance from the university campus, catering to students. Some also have internet access within their own home as they subscribe to an internet service provider.

University students are mostly independent in their learning as lecturers usually give out lecture notes, and further information are left for the students to discover on their own, as it is not a one-way learning process which is practiced in the primary and secondary school system. The learning process at the university level is a two-way process, lecturers share their knowledge and students give their opinions or thoughts in return a topic in a class discussion. Therefore, university students need to constantly broaden their knowledge by searching for information.

## **2. PRODUCT OVERVIEW AND SUMMARY**

### **2.1 PURPOSE**

Learning Management System is web based application. Its main objective to helps learners and educators to ease their daily work. In this application we provide registration for students and teachers. Admin can able to set timetable and Student and teacher can access it on daily and weekly basis. Teachers can gives assignment to student as per standers and subject for which they taught and students can also submit their work on portal. And according to this they will get their assignment status. Students can ask their doubt to particular teachers and submit their feedback/complaint about teacher to admin. So by using this application we can improve the efficiency of our education system.

### **2.2 SCOPE**

The scope of e-learning education in India is in fact much wider. The e-learning, though reached India late of course, but it is being fast accepted in a big way. Due to the growing Indian economy, India has a chance to become heart of e-learning programs. The scope of e-learning is much wider in India with many e-learning companies stepping ahead in provided that the service. In India, e-learning situation is still rising and at an investigational stage. The term e-learning comprises a lot more than online education, virtual education, and distributed education, networked or web-based education. As the correspondence “e” in e-learning designed for the word “electronic”, e-learning would include all learning actions that are approved out by people or assembly presentation online or offline, and synchronously or asynchronously through networked or separate computers and extra electronic devices. The future of E-learning industry in India seems to be vibrant as number of Internet users is rising in the country, at fairly a logical rate and more, and extra reputed players are showing their interest in the e-learning business. The global revenue of world stands about US\$36 billion by 2010 and e-learning bazaar in India stands at US\$11 million in 2010. The e-learning bazaar in India is in a toddler phase and in 2002 it was just about US\$ 4-5 million with a predictable four year annual growth rate of twenty to twenty five per cent. Companies such as Net Smart z and e Leap Software are situating action in India which is a positive symbol for the e-learning section.

## **2.3 OVERVIEW**

### **A. TECHNOLOGIES USED**

#### **i. FRONT END**

- HTML
- CSS
- JavaScript
- Bootstrap
- React
- Axios

#### **ii. BACK END**

- Spring Boot
- Spring Data JPA
- Hibernate
- REST

#### **iii. DATABASE MANAGEMENT SYSTEM**

- MySQL

### **B. FEATURE PROVIDED**

#### **1. FOR STUDENT**

Register, Login & Logout – New students can register on the portal. Existing students can then login to access their account information and logout after the use.

Search – Students can search their daily schedule, weekly schedule, attendance, Assignments.

Download: Students can download the assignments according to the Subjects.

Upload / Submit – Once students completed the assignments they can upload / submit it on portal and can see the teacher remark.



## **2. FOR TEACHER**

Login & Logout – Similar to students and admin, teachers can login & logout to access their account.

Search – Teachers can search their daily schedule, weekly schedule.

Add Assignments– Teachers can add new assignments according their subjects & access the submitted assignment uploaded by student & give remarks accordingly.

Update Attendance – Teacher can update attendance of a particular period & after submitting the attendance it will reflect on student attendance section.

## **3. FOR ADMIN**

Login & Logout – Similar to student & teacher, admin can login & logout to access their account.

Accept / Reject Users – The admin can accept or reject students and teacher registration requests.

Set the Schedule – The admin can set the schedule and assign teacher according to the subject.

## **3. REQUIREMENTS FULFILLED**

### **3.1. FUNCTIONAL REQUIREMENTS**

Following are the functional requirements fulfilled by our project:

- Students can login to account and if they are new then they can register or add their account.
- Students can access daily and weekly schedule.
- Students can access & submit the assignment.

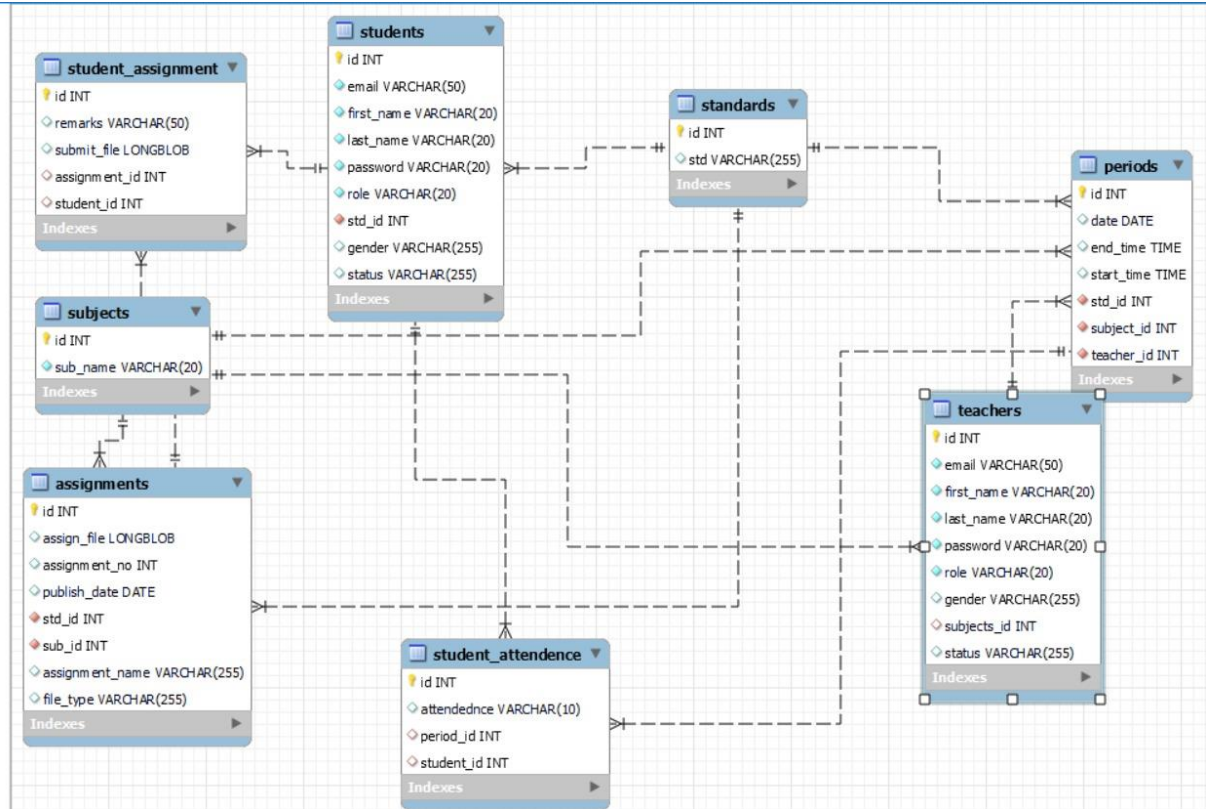
- Students can see their attendance.
- Teachers can login the account and if they are new then they can register or add their account.
- A teacher can mark the attendance status of a student as "Present", "Absent" according to their periods.
- Teacher can upload assignments and give the remark to the assignment uploaded by students.
- Admins can manage the daily and weekly lecture schedule.
- Admins can add or reject the teacher's & student's registration requests.

### **3.2. NON-FUNCTIONAL REQUIREMENTS**

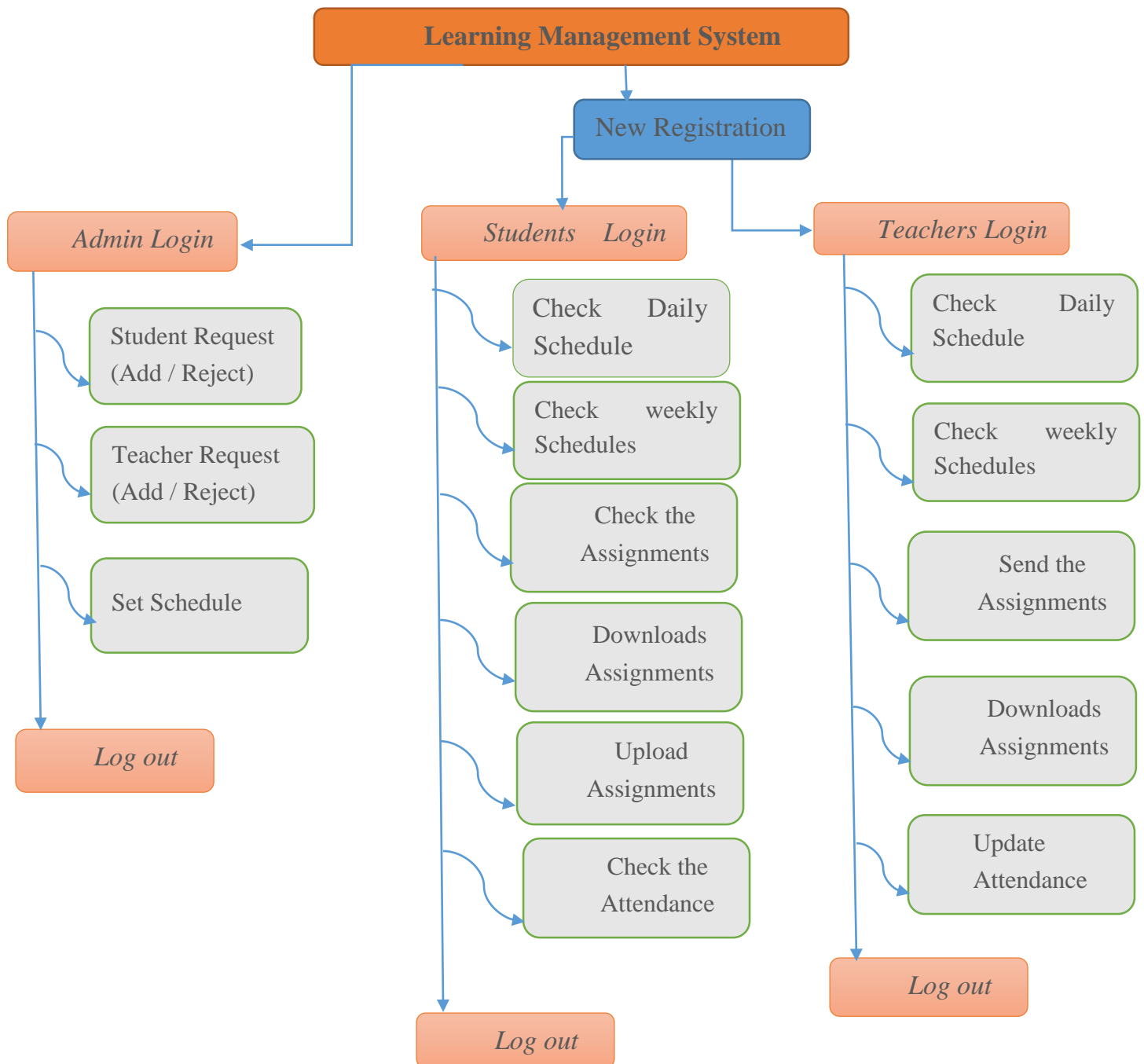
Following are the non-functional requirements fulfilled by our project:

- Since the application uses lightweight and established software components that are also cross-platform, it is remarkably performance and has good support for every operating system.
- The use of React for front end and Spring Boot, Spring Data JPA and Hibernate for back end delivers quick response times to students, teacher and admin alike.
- UI and well-known icons and symbols used throughout the application provides a consistent theme and user-friendly interface that anyone can grasp easily, even without a technical background.

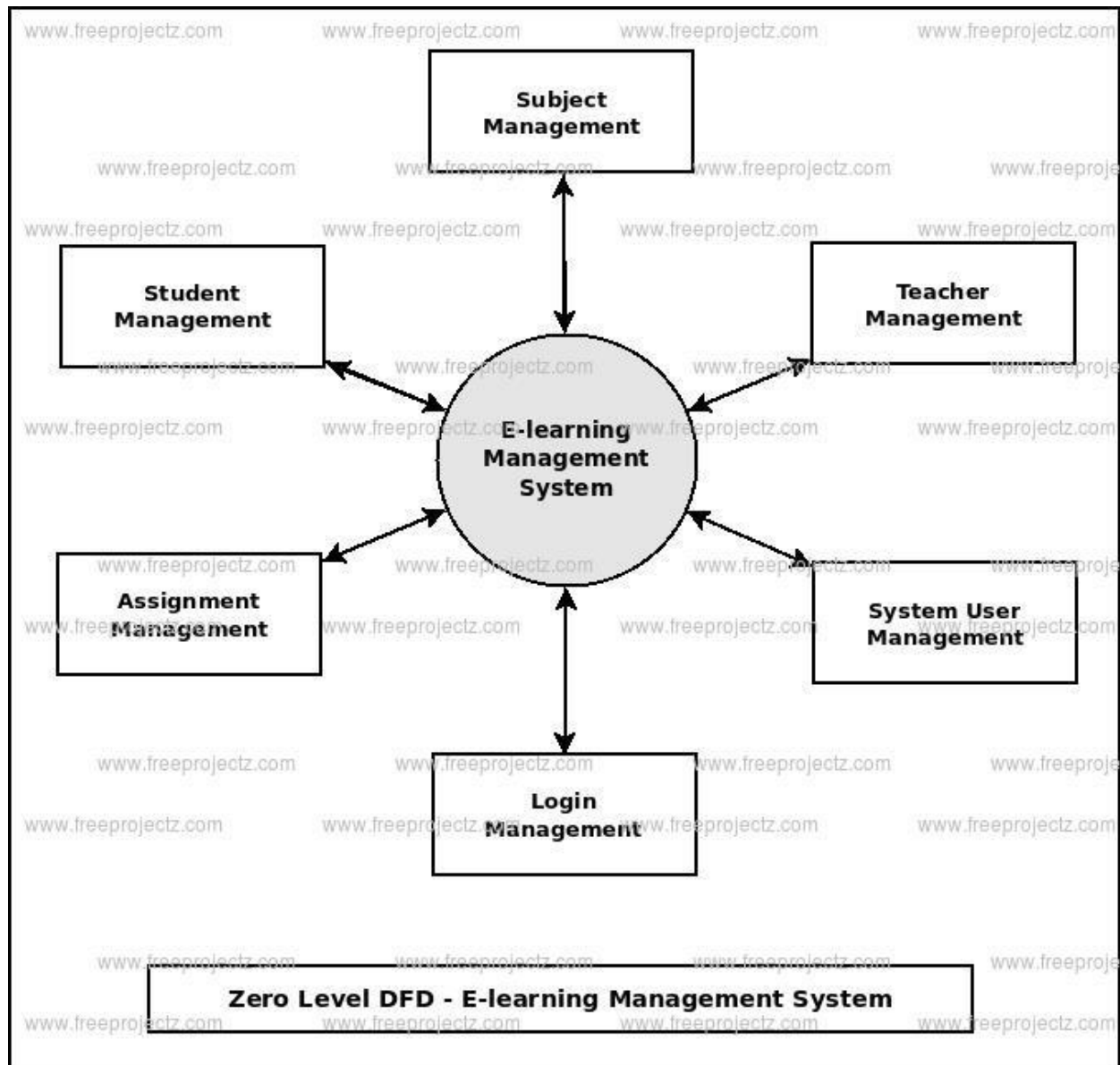
## 4.1. ENTITY RELATIONSHIP DAIGRAM:



## 4.2. FUNCTIONAL DECOMPOSITION DIAGRAM



### 4.3.ACTIVITY DIAGRAMS:

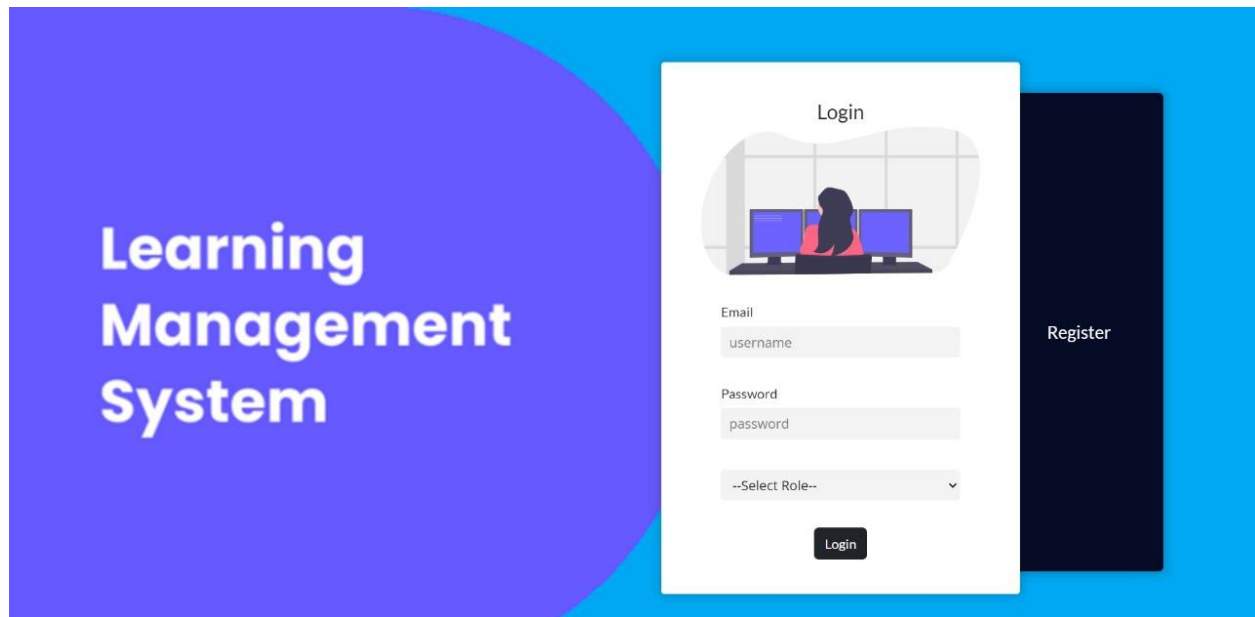


#### 4.4. BENEFITS OF LMS:

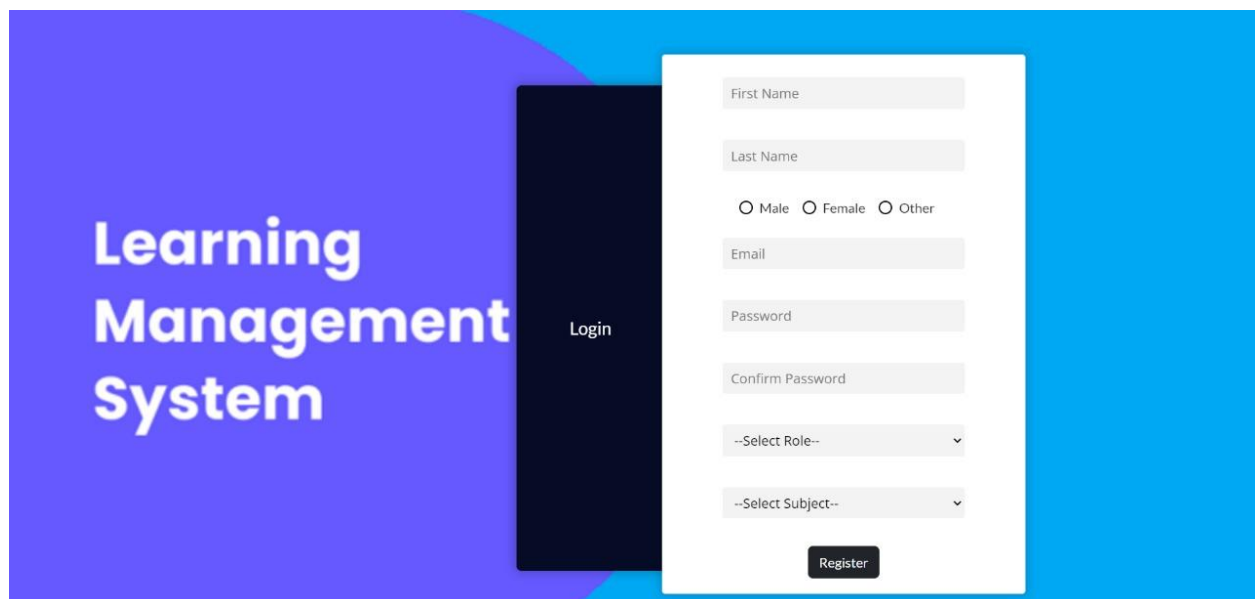


## 5.0 SCREENSHOT:

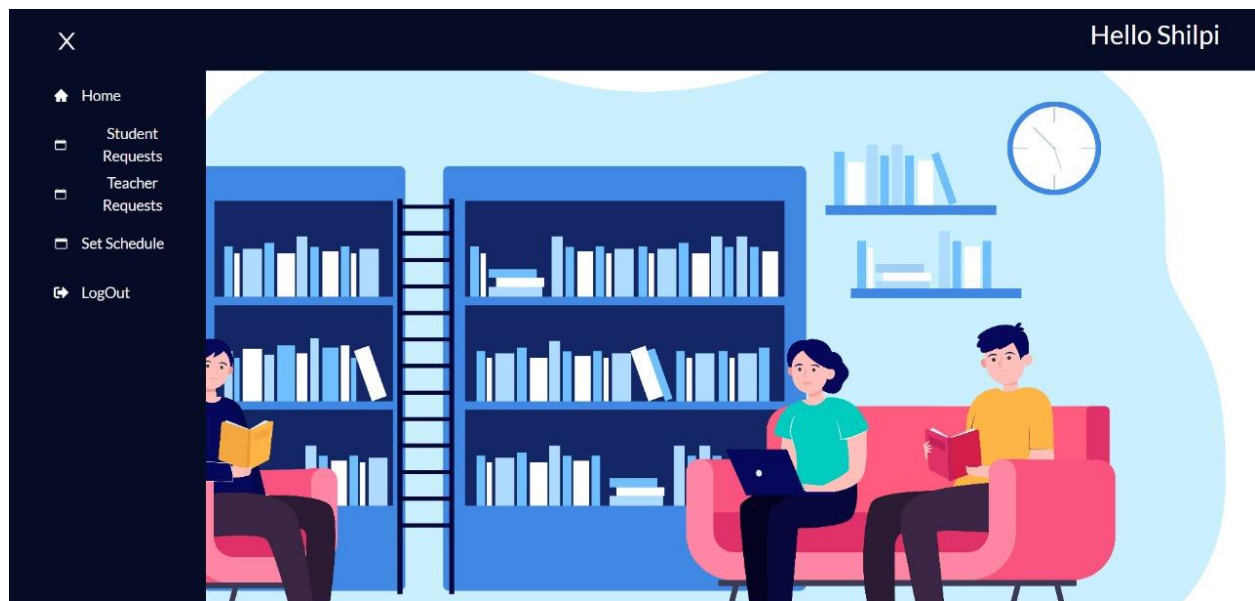
### 5.0.1 Login Page:



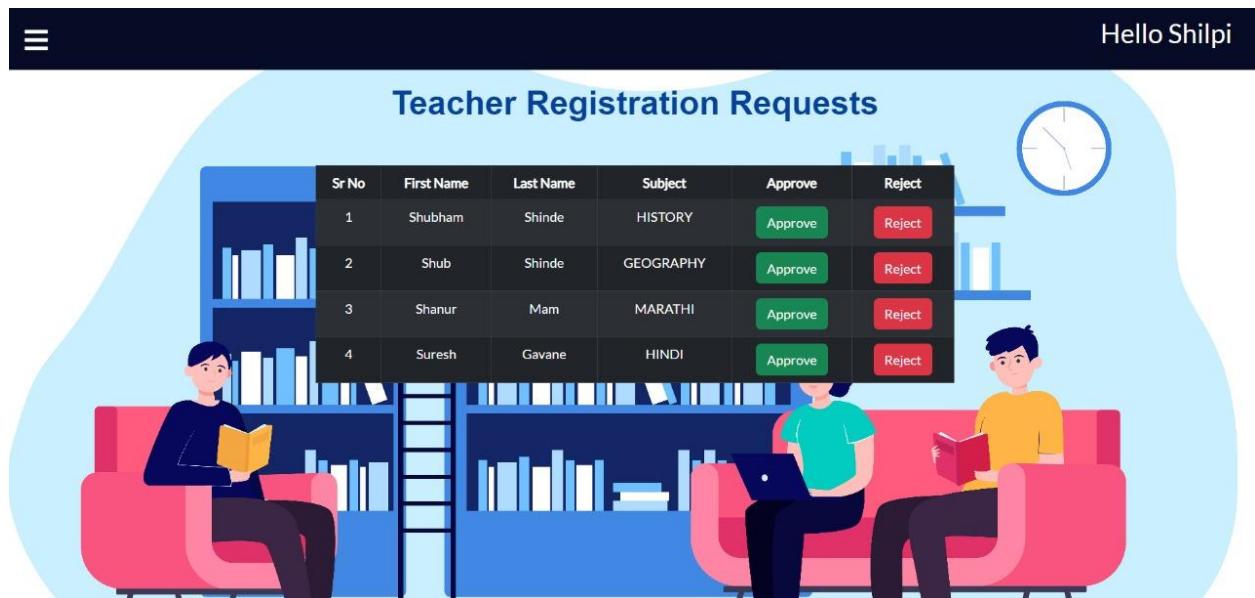
### 5.0.2 Register Page:



### 5.1.1 Admin Home:




### 5.1.2 Teacher Registration Request:





### 5.1.3 Student Registration Request:


Hello Shilpi

### Student Registration Requests

Sr No	First Name	Last Name	Standard	Approve	Reject
1	Rushi	Kadam	4TH	Approve	Reject
2	kds	Gavali	2ND	Approve	Reject
3	sanju	Bhat	3RD	Approve	Reject
4	Pappu	Mishra	5TH	Approve	Reject
5	Raja	Bhawani	1ST	Approve	Reject



### 5.1.4 Set Schedule:

Hello Shilpi

### Set Schedule

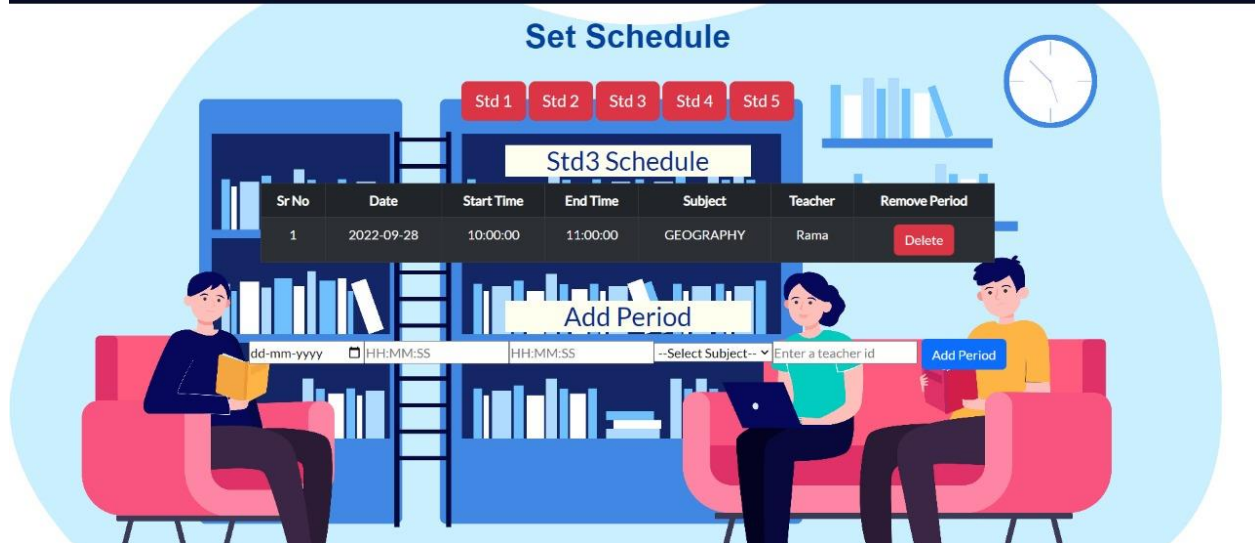
Std 1 Std 2 Std 3 Std 4 Std 5

Std3 Schedule

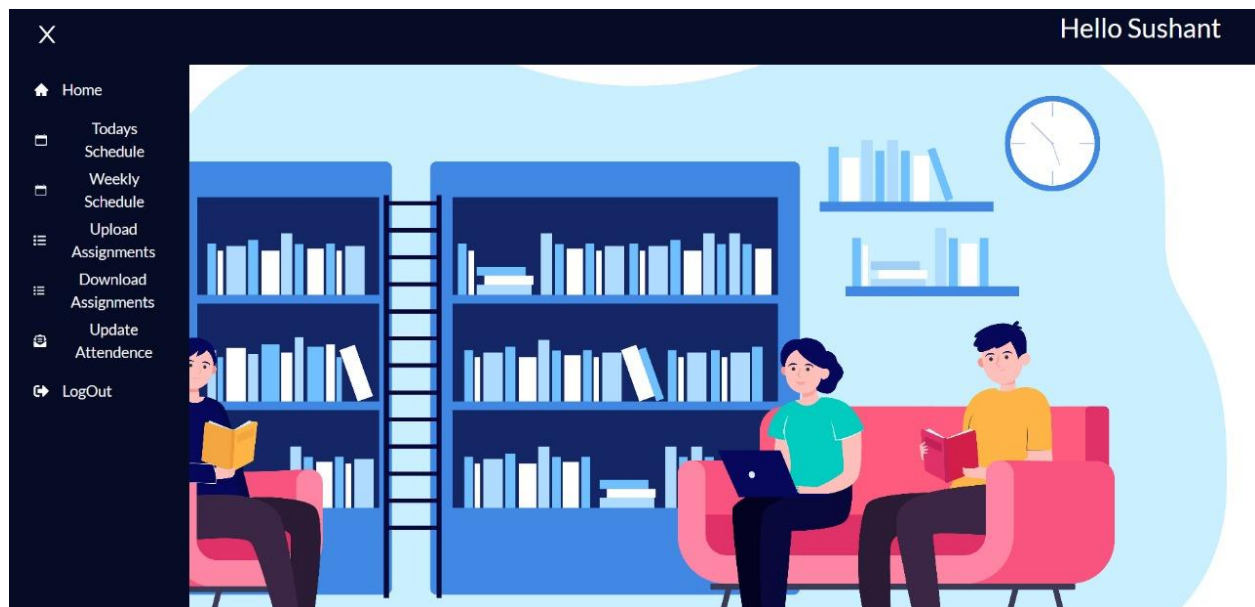
Sr No	Date	Start Time	End Time	Subject	Teacher	Remove Period
1	2022-09-28	10:00:00	11:00:00	GEOGRAPHY	Rama	Delete

Add Period

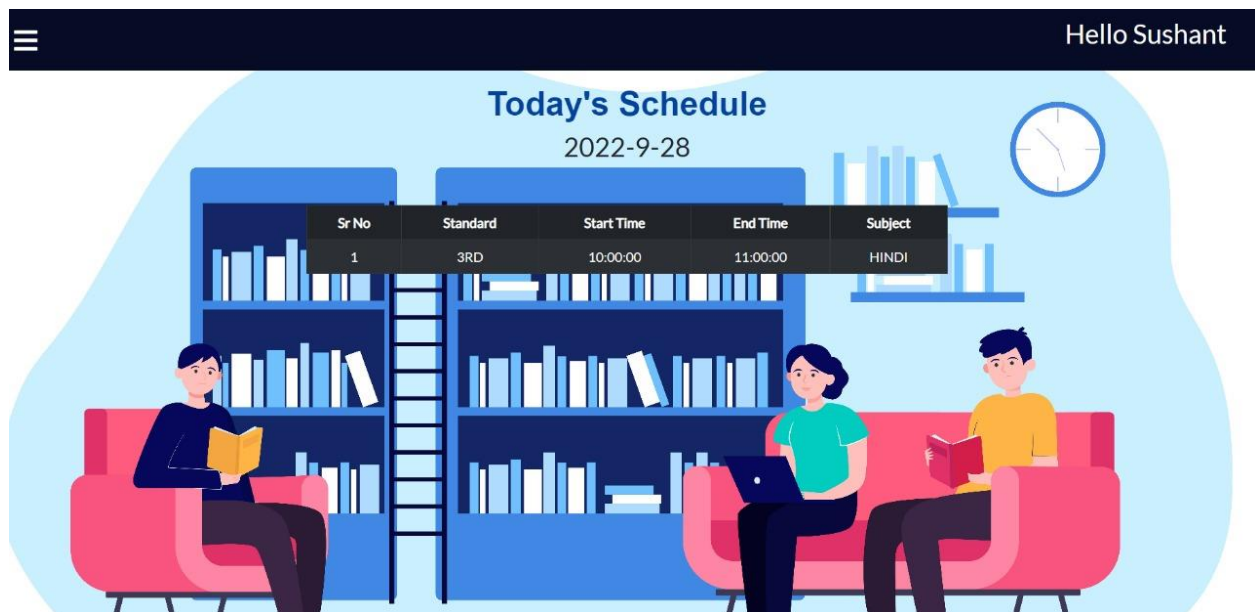
dd-mm-yyyy HH:MM:SS HH:MM:SS --Select Subject-- Enter a teacher id Add Period



## 5.2.1 Teacher Home:



## 5.2.2 Daily Schedule:

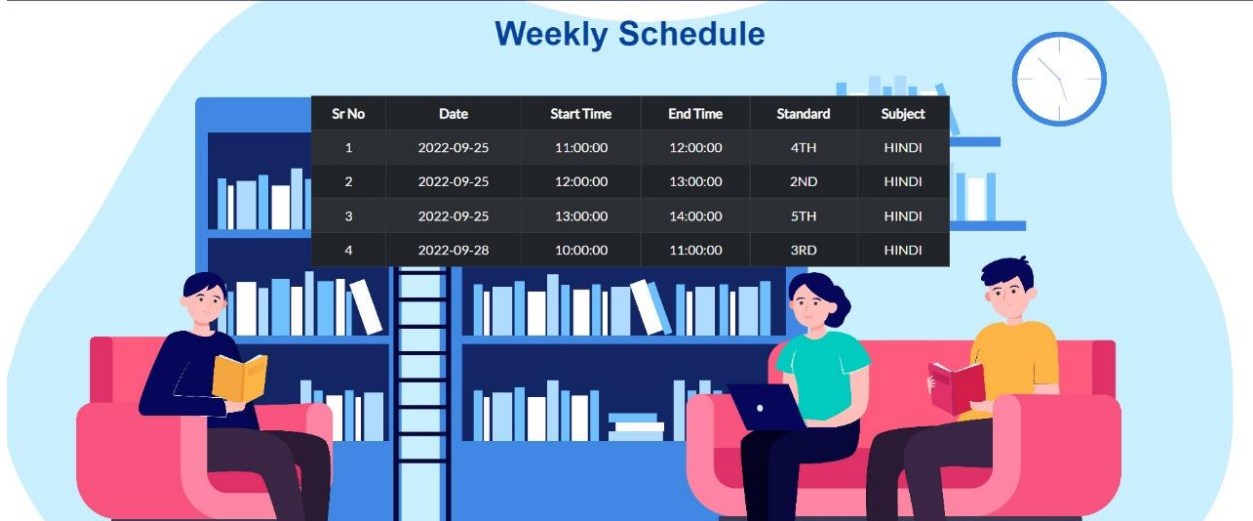


## 5.2.3 Weekly Schedule:

Hello Sushant

### Weekly Schedule

Sr No	Date	Start Time	End Time	Standard	Subject
1	2022-09-25	11:00:00	12:00:00	4TH	HINDI
2	2022-09-25	12:00:00	13:00:00	2ND	HINDI
3	2022-09-25	13:00:00	14:00:00	5TH	HINDI
4	2022-09-28	10:00:00	11:00:00	3RD	HINDI




## 5.2.4 Attendance:

Hello Sushant

### All Schedule

Sr No	Date	Start Time	End Time	Standard	Subject	Update Attendance
1	2022-09-22	09:00:00	10:00:00	1ST	HINDI	<a href="#">Update</a>
2	2022-09-22	11:00:00	12:00:00	2ND	HINDI	<a href="#">Update</a>
3	2022-09-23	11:00:00	12:00:00	2ND	HINDI	<a href="#">Update</a>
4	2022-09-25	11:00:00	12:00:00	4TH	HINDI	<a href="#">Update</a>
5	2022-09-25	12:00:00	13:00:00	2ND	HINDI	<a href="#">Update</a>
6	2022-09-25	13:00:00	14:00:00	5TH	HINDI	<a href="#">Update</a>
7	2022-09-28	10:00:00	11:00:00	3RD	HINDI	<a href="#">Update</a>





Hello Sushant

Date	Start Time	End Time	Standard	Subject
2022-09-28	10:00:00	11:00:00	3RD	HINDI



### Student Attendance Table

Sr No	First Name	Last Name	Attendance
1	Gaurav	Konkane	<input type="radio"/> Present <input type="radio"/> Absent
2	rahul	shinde	<input type="radio"/> Present <input type="radio"/> Absent
3	Ravikant	Madane	<input type="radio"/> Present <input type="radio"/> Absent

## 5.2.5 Upload Assignment:



Hello Sushant


### Upload HINDI Assignment

--Select Standard-- Choose File No file chosen

Upload



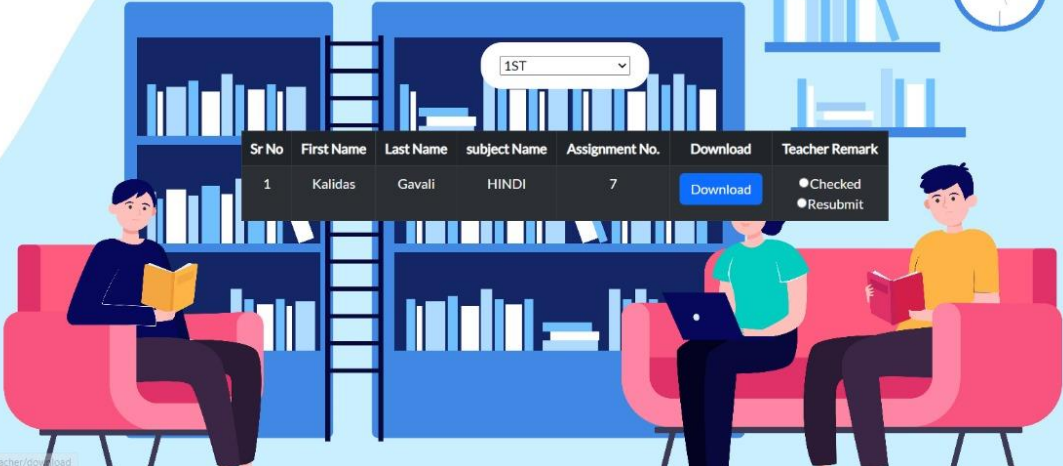
## 5.2.6 Download Students Assignments:

Hello Sushant

### Download Submitted Assignments

1ST


Sr No	First Name	Last Name	subject Name	Assignment No.	Download	Teacher Remark
1	Kalidas	Gavali	HINDI	7	<a href="#">Download</a>	<input checked="" type="radio"/> Checked <input type="radio"/> Resubmit





localhost:3000/teacher/download


## 5.3.1 Student Home:


XKalidas, Std:1ST


Home


Today's Schedule

Weekly Schedule

Assignments


Attendance

Logout





### 5.3.2 Daily Schedule:

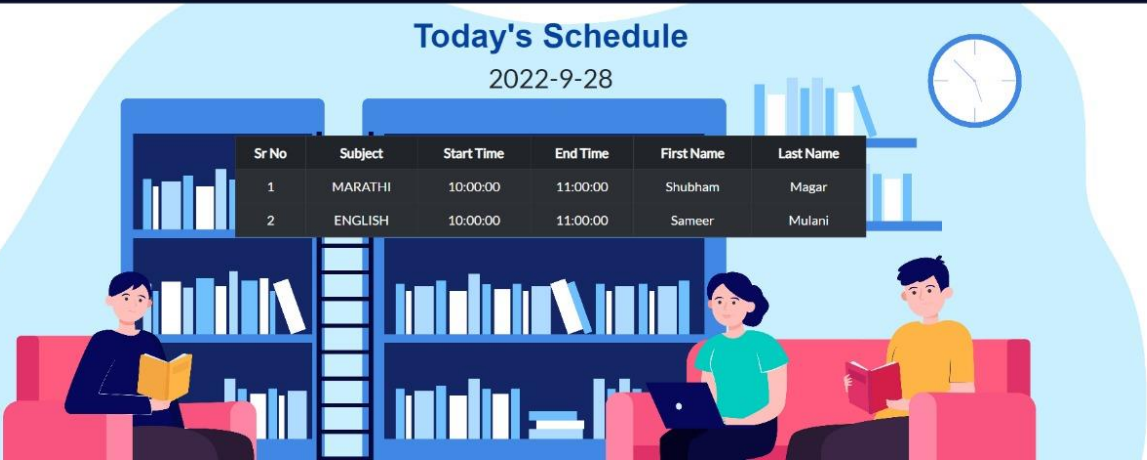


Kalidas, Std:1ST


#### Today's Schedule

2022-9-28

Sr No	Subject	Start Time	End Time	First Name	Last Name
1	MARATHI	10:00:00	11:00:00	Shubham	Magar
2	ENGLISH	10:00:00	11:00:00	Sameer	Mulani



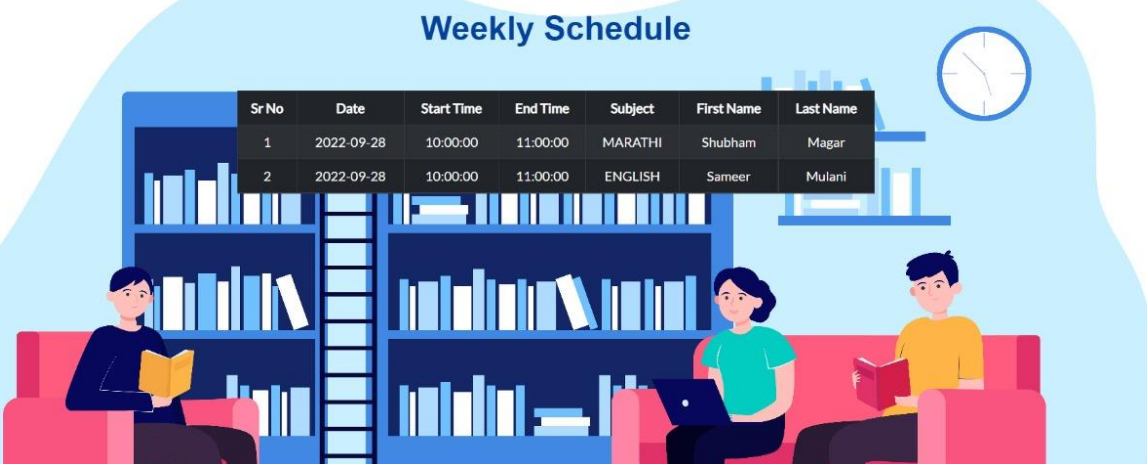
### 5.3.3 Weekly Schedule:



Kalidas, Std:1ST

#### Weekly Schedule

Sr No	Date	Start Time	End Time	Subject	First Name	Last Name
1	2022-09-28	10:00:00	11:00:00	MARATHI	Shubham	Magar
2	2022-09-28	10:00:00	11:00:00	ENGLISH	Sameer	Mulani



### 5.3.4 Student Attendance:

Kalidas, Std:1ST

#### Attendance By Subject


EnglishHindiMarathiHisotryGeography

#### Attendance for English

Sr No	Date	Start Time	End Time	Subject	First Name	Last Name	Attendance Status
1	2022-09-28	10:00:00	11:00:00	ENGLISH	Sameer	Mulani	Pending



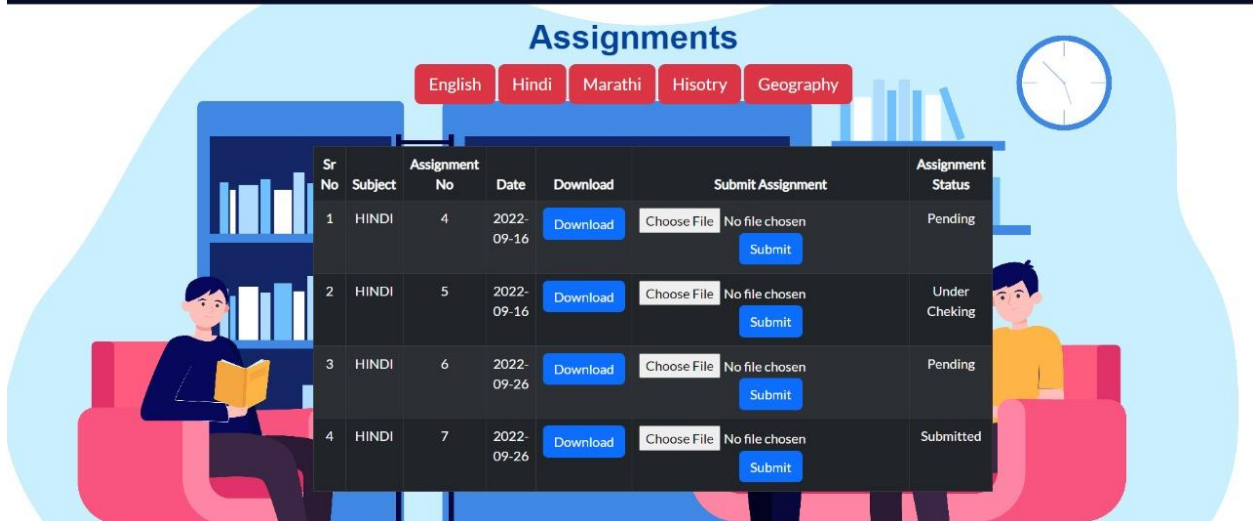
### 5.3.5 Student Assignment:

Kalidas, Std:1ST

#### Assignments

EnglishHindiMarathiHisotryGeography

Sr No	Subject	Assignment No	Date	Download	Submit Assignment	Assignment Status
1	HINDI	4	2022-09-16	<a href="#">Download</a>	<div>Choose FileNo file chosen</div> <div>Submit</div>	Pending
2	HINDI	5	2022-09-16	<a href="#">Download</a>	<div>Choose FileNo file chosen</div> <div>Submit</div>	Under Cheking
3	HINDI	6	2022-09-26	<a href="#">Download</a>	<div>Choose FileNo file chosen</div> <div>Submit</div>	Pending
4	HINDI	7	2022-09-26	<a href="#">Download</a>	<div>Choose FileNo file chosen</div> <div>Submit</div>	Submitted



## 6. CONCLUSION

LMS has been a great help in the traditional institution centered environment for the course delivery. However, as technology and learning needs change, the learning environment is becoming more and more open, learner-centered, and collaborative. Future LMS is expected to transform itself as a learning portal that satisfies needs of multiple parties and multiple levels of learning. A comprehensive set of features include traditional content management and learning management, but also include more learner focused personal, social, and collaboration activities in learning



## 7. FUTURE SCOPE

Using whatever we have learnt over the duration of this course, we tried to make our project as user-friendly and gave it as many features as possible in the limited time allotted for the project work. That said, there are certainly more features that can be added to our application. Some of those are mentioned below:

- The future will see lots of young and tech savvy learners continuing with their learning process and will prefer bite sized modules that they can easily complete and learn.
- The admins will find that content library will be used more to solve acute learning needs that are more like job training than tradition instructor led training. This year will see that superior reports will help to ultimately shape the culture within the organizations in order to feature lifelong learning.
- Adult learners often have their specific needs and are more knowledgeable and experienced. Adaptive learning will have a great impact on how learners enroll in the courses and how they can use it as per their convenience of time, learning path and interest.
- Latest LMS will focus more on learner's engagement and experience and not only on information delivery. Traditional LMS will have to enhance their features to remain competitive in the market. Future LMS will also see more engaging features like personalized learning, social learning, gamification and personal coaching and support.

## 8. REFERENCES

Following is the list of research paper we referred during the course of our project:

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