

Student Life Management System

A MINI PROJECT REPORT

Submitted by

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ENGINEERING COLLEGE**
An AUTONOMOUS Institution
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RAJALAKSHMI ENGINEERING COLLEGE

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BONAFIDE CERTIFICATE

Certified that this mini project “**Student Life Management System**” is the bonafide work of “**PONNISH RAJ S P (220701519)**” who carried out the project work under my supervision.

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INTERNAL EXAMINER

EXTERNAL EXAMINER

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Ponnish Raj S P (2116220701519)

ABSTRACT

The Student Life Management System is a web-based platform designed to assist in managing student behavior within a college campus. It primarily supports the role of Student Care, a group of teachers responsible for ensuring that students adhere to campus rules such as punctuality, dress code compliance, and carrying appropriate identification. The platform allows Student Care members to log in and easily enter information regarding student violations, impose fines, and track behavioral issues. On the other side, students can log in to view any fines levied against them, access details about their violations, and pay fines online through an integrated payment system. Both students and teachers use the same website but with distinct login credentials and data access. This system aims to streamline communication between Student Care and students, offering a user-friendly solution for maintaining discipline and encouraging rule compliance. By automating fine collection and enabling students to manage their fines through a digital interface, the platform reduces administrative burden and enhances overall campus discipline management.

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CHAPTER 1

INTRODUCTION

1.1. INTRODUCTION

The Student Life Management System is a comprehensive digital platform designed to manage and enhance the disciplinary environment within a college campus. With the aim of improving accountability and facilitating communication between Student Care (teachers responsible for monitoring student behavior) and students, this system addresses issues such as attendance, dress code compliance, and punctuality. By enabling Student Care to log violations and impose fines while providing students with a straightforward way to view and settle penalties online, the Student Life Management System promotes a respectful, orderly, and engaged campus culture.

1.2. SCOPE OF WORK

The Student Life Management System covers a range of functions to support an efficient and respectful college environment. Key activities include real-time violation tracking and reporting, streamlined data management for tracking student compliance, online payment integration for penalty settlements, and secure access for both teachers and students. It also emphasizes user-friendly interfaces, database integration for scalable record-keeping, and analytical tools to assess trends in student behavior. Through its comprehensive design, the system fosters a proactive approach to behavior management, emphasizing responsibility, transparency, and accountability on campus.

1.3 AIM AND OBJECTIVES

The aim of the Student Life Management System is to provide a centralized and efficient platform for managing student behavior, promoting accountability, and facilitating communication between students and faculty. By integrating technology with campus disciplinary practices, the system aims to create a structured, transparent, and supportive environment that enhances student responsibility and maintains campus standards.

Objectives:

1. **Violation Logging:** Enable Student Care to efficiently log student violations related to attendance, dress code, and punctuality, ensuring quick and accurate documentation.
2. **Fine Management:** Facilitate the imposition and tracking of fines based on recorded violations, offering students a transparent view of their penalties.
3. **Online Payment Integration:** Provide a secure online payment system that allows students to conveniently view and pay fines, reducing administrative burdens and enhancing compliance.
4. **Data Access and Reporting:** Offer students and Student Care access to a user-friendly dashboard for viewing, managing, and analyzing data related to student behavior, fostering awareness and accountability on campus.

CHAPTER 2

SYSTEM SPECIFICATIONS

2.1. HARDWARE SPECIFICATIONS

Processor: Intel Core i5 or higher

RAM: 8 GB or higher

Storage: 256 GB SSD or higher

2.2. SOFTWARE SPECIFICATIONS

Operating System: Windows 10 or later, Linux, or macOS

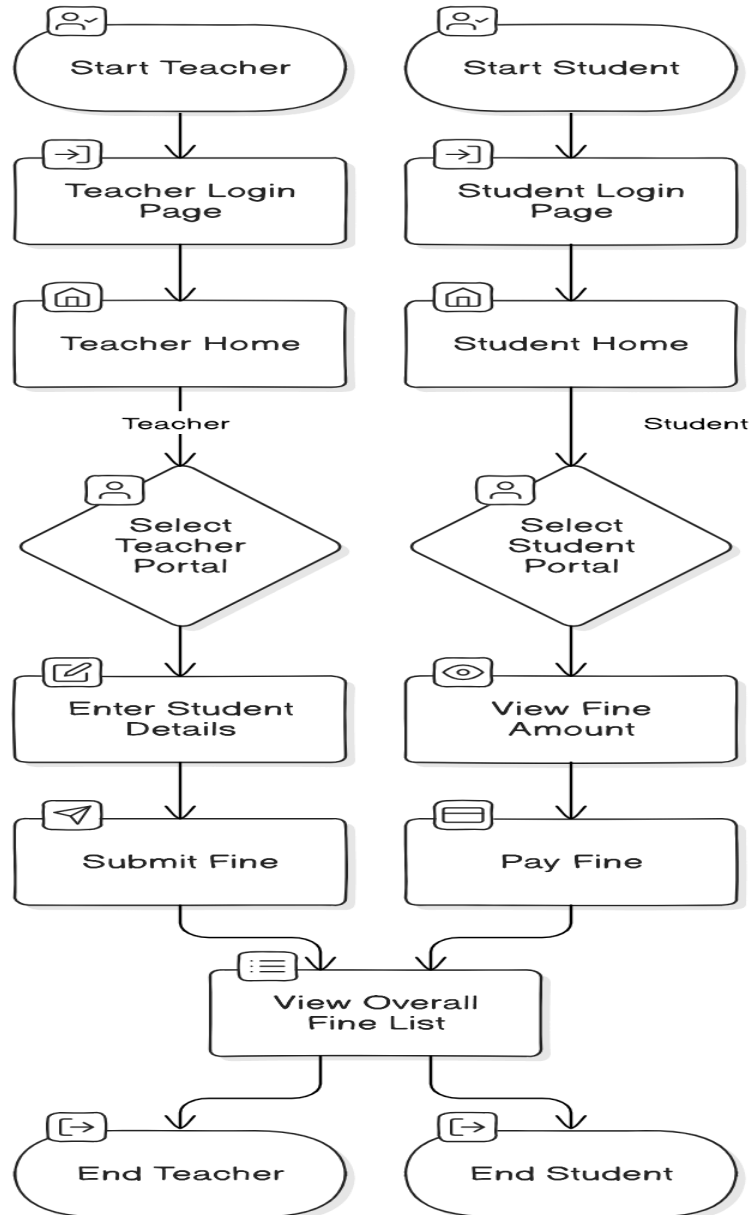
Front-End: HTML, CSS, JavaScript

Back-End: Node.js, MongoDB

CHAPTER 3

ARCHITECTURE DIAGRAM

Teacher and Student Portal Flowchart



CHAPTER 4

MODULE DESCRIPTION

4.1. User Registration and Login Module

The User Registration and Login Module for the Student Life Management System provides secure access for both students and Student Care (teachers responsible for monitoring student behavior). Users can create profiles with essential information, ensuring that Student Care and students have role-based access to the system. This structure maintains data privacy and security, giving each user access to information relevant to their role, whether it's viewing fines or managing student records.

4.2. Violation Logging and Fine Management Module

The Violation Logging and Fine Management Module allows Student Care to efficiently document student violations related to attendance, dress code, and punctuality. This module provides options for recording details of each infraction, assigning fines based on predefined criteria, and generating notifications for students. It ensures transparent record-keeping, with an organized history of violations accessible to authorized users, streamlining the disciplinary process.

4.3. Student Fine Status and Payment Module

The Student Fine Status and Payment Module offers students a convenient way to view their violation history and any outstanding fines. Through this module, students can securely access details about each violation, monitor their fine status, and make payments online. This feature simplifies the payment process, ensuring that students can quickly resolve their fines and stay informed about their status, promoting responsibility and compliance.

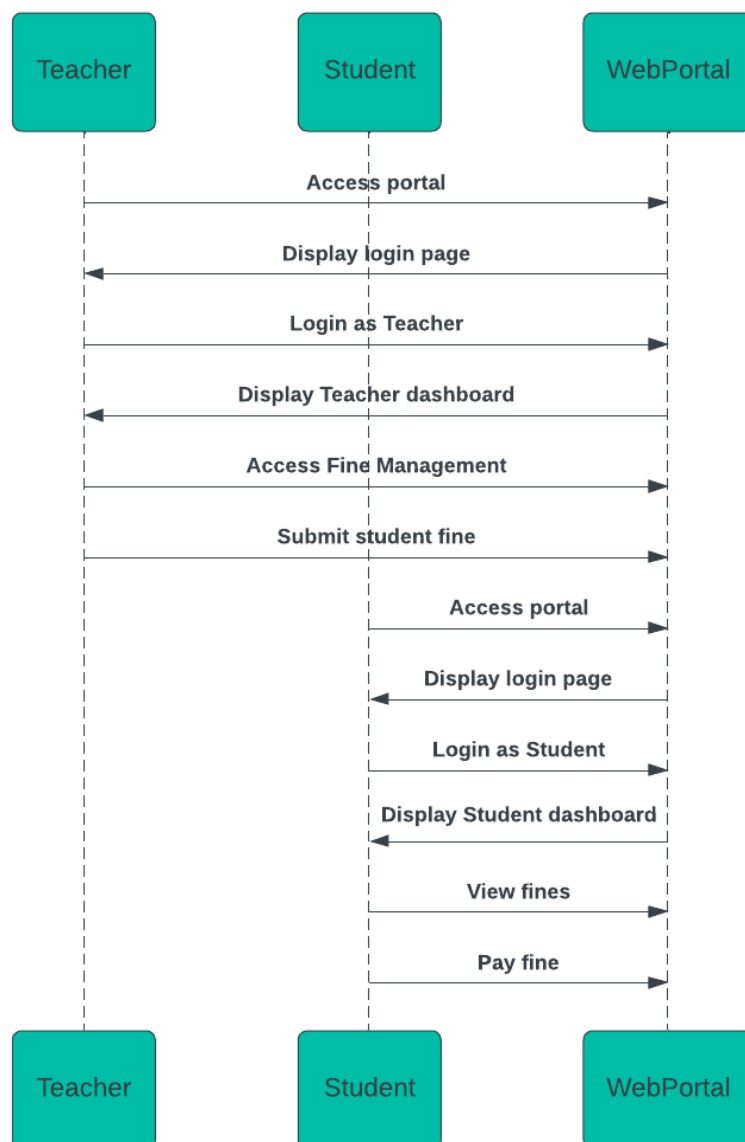
4.4. Admin Module

The Admin Module serves as the central management hub for the Student Life Management System. Administrators are equipped with tools to oversee the system, manage user accounts, assign roles, and configure settings for both Student Care and student users. The module includes a dashboard with analytics and reporting functions, allowing administrators to track trends, make data-driven decisions, and generate reports on student behavior and compliance. Robust security and user management capabilities ensure the system remains organized, secure, and adaptive to changing campus needs.

CHAPTER 5

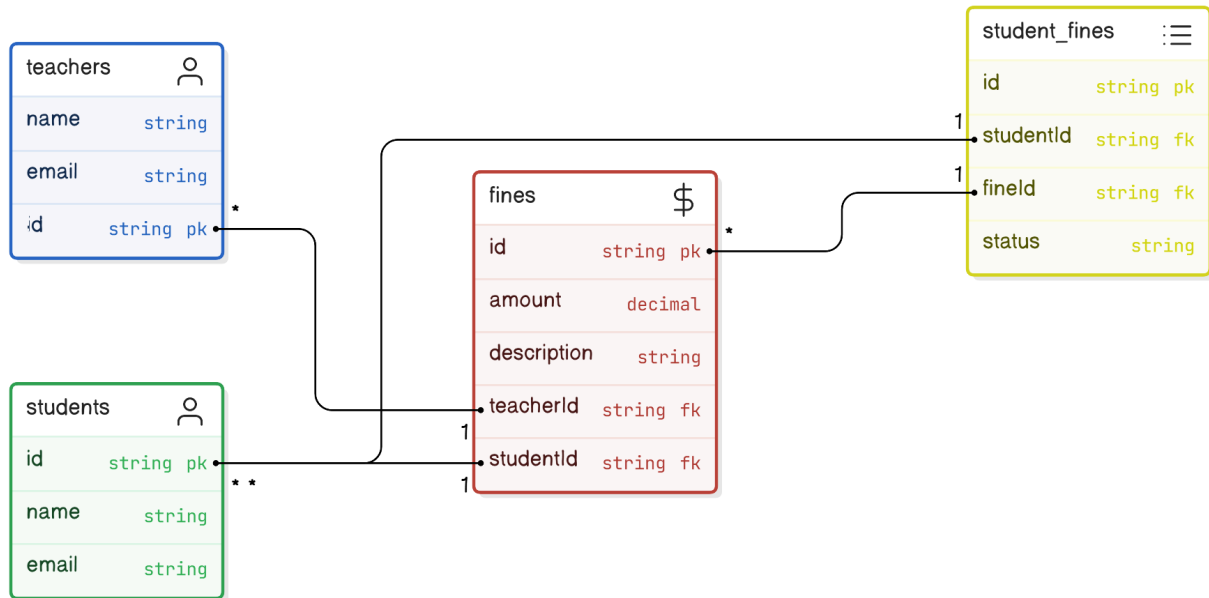
DIAGRAMS

5.1. SEQUENCE DIAGRAM

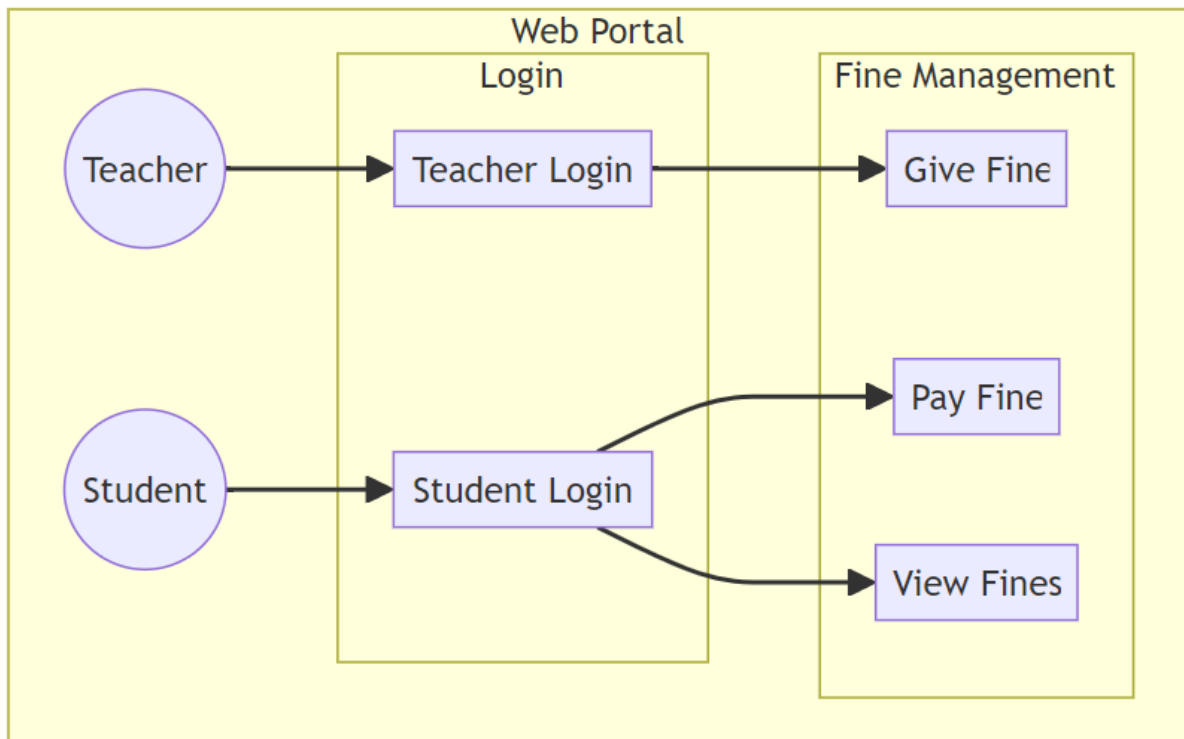


5.2. ER DIAGRAM

Teacher and Student Portal ERD



5.3. USE CASE DIAGRAM



CHAPTER 6

SAMPLE CODING

6.1. INDEX.HTML

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Student & Teacher Portal</title>
  <link rel="stylesheet" href="index.css">

  <link rel="stylesheet"
href="https://cdnjs.cloudflare.com/ajax/libs/font-awesome/6.0.0-beta3/css/all.min.css">
</head>
<body>

  <div class="logo-container">
    
  </div>

  <div class="container">
    <h1>Student Life Portal</h1>
    <div class="portal-boxes">

      <div class="box" onclick="navigateTo('student')">
        <i class="fas fa-user-graduate icon"></i>
        <h2>Student Portal</h2>
      </div>
```

```
<div class="box" onclick="navigateTo('teacher')">
  <i class="fas fa-chalkboard-teacher icon"></i>
  <h2>Teacher Portal</h2>
</div>
</div>
</div>

<script src="connect.js"></script>
</body>
</html>
```

6.2. INDEX.CSS

```
body {
  font-family: 'Poppins', sans-serif;
  background-color: #f5f5dc;
  height: 100vh;
  margin: 0;
  display: flex;
  flex-direction: column;
  justify-content: center;
  align-items: center;
}
```

```
.logo-container {
  margin-top: 20px;
  margin-bottom: 40px;
  text-align: center;
}
```



```
.logo {  
  width: 500px;  
  height: auto;  
}
```

```
.container {  
  color: #fff;  
  text-align: center;  
  background-color: #800080;  
  padding: 30px;  
  border-radius: 15px;  
  box-shadow: 0 8px 30px rgba(0, 0, 0, 0.4);  
}
```

```
h1 {  
  font-size: 48px;  
  text-shadow: 3px 3px 6px rgba(0, 0, 0, 0.4);  
  letter-spacing: 2px;  
}
```

```
.portal-boxes {  
  display: flex;  
  justify-content: center;  
}
```

```
.box {  
  background-color: rgba(255, 255, 255, 0.8);  
  padding: 20px;  
  margin: 15px;  
  border-radius: 15px;  
  box-shadow: 0 6px 20px rgba(0, 0, 0, 0.3);  
}
```

```
    transition: transform 0.4s ease-in-out, box-shadow 0.4s ease-in-out;
    width: 220px;
    cursor: pointer;
    text-align: center;
    display: flex;
    flex-direction: column;
    align-items: center;
}
```

```
.box:hover {
    transform: scale(1.15) rotate(3deg);
    box-shadow: 0 0 40px rgba(255, 255, 255, 0.7);
}
```

```
.icon {
    font-size: 48px;
    color: #333;
    margin-bottom: 15px;
}
```

```
h2 {
    margin-bottom: 10px;
    font-size: 24px;
    color: #000;
    text-shadow: 2px 2px 5px rgba(0, 0, 0, 0.3);
}
```

```
p {
    font-size: 16px;
    color: #333;
}
```

6.3. INDEX.JS

```
document.addEventListener("DOMContentLoaded", function () {  
  const title = document.getElementById("projectTitle");  
  const sections = document.querySelectorAll(".page-section, .split-section,  
.new-split-section");  
  const typewriterText = document.querySelector(".typewriter-text");  
  let typingSpeed = 150;
```

```
function animateTitle() {  
  const titlePosition = title.getBoundingClientRect().top;  
  const screenPosition = window.innerHeight / 1.3;  
  
  if (titlePosition < screenPosition) {  
    title.classList.add("animate-title");  
  } else {  
    title.classList.remove("animate-title");  
  }  
}
```

```
function animateOnScroll() {  
  sections.forEach(section => {  
    const sectionPosition = section.getBoundingClientRect().top;  
    const screenPosition = window.innerHeight / 1.3;  
  
    if (sectionPosition < screenPosition) {  
      section.classList.add("scroll-animate");  
    }  
  });  
}
```

```
        if (section.classList.contains("new-split-section") &&  
!typewriterText.classList.contains('typing-started')) {  
            startTypewriter(typewriterText);  
            typewriterText.classList.add('typing-started');  
        }  
    } else {  
        section.classList.remove("scroll-animate");  
    }  
});  
}
```

```
animateTitle();  
animateOnScroll();
```

```
window.addEventListener("scroll", function() {  
    animateTitle();  
    animateOnScroll();  
});
```

```
function startTypewriter(element) {  
    const text = element.getAttribute("data-text");  
    let index = 0;  
  
    function type() {  
        if (index < text.length) {  
            element.insertAdjacentText('beforeend', text.charAt(index));  
            index++;  
        }  
    }  
}
```

```

        if (element.scrollWidth > element.clientWidth) {
            element.insertAdjacentText('beforeend', '\n');
        }

        setTimeout(type, typingSpeed);
    }
}

element.textContent = "";
type(); // Start typing
}

const slider = document.querySelector(".image-slider");
const images = document.querySelectorAll(".slider-image");
let currentIndex = 0;

function slideImages() {
    currentIndex = (currentIndex + 1) % images.length;
    slider.style.transform = `translateX(${ -currentIndex * 100 }%)`;
}

setInterval(slideImages, 3000); // Change slide every 3 seconds
});

document.addEventListener("DOMContentLoaded", function() {
    const content = document.getElementById('contentToAnimate');
    const fadeElements = document.querySelectorAll('.fade-slide');

    function checkPosition() {
        const contentPosition = content.getBoundingClientRect().top;
        const screenPosition = window.innerHeight;
    }

```

```

    if (contentPosition < screenPosition) {
        content.classList.add('visible');
        fadeElements.forEach(element => {
            element.classList.add('visible');
        });
    }
}

window.addEventListener('scroll', checkPosition);
checkPosition(); // Check on load in case already in view
});

const animatedElements = document.querySelectorAll('.animate-text');

function isElementInViewport(el) {
    const rect = el.getBoundingClientRect();
    return (
        rect.top >= 0 &&
        rect.left >= 0 &&
        rect.bottom <= (window.innerHeight || document.documentElement.clientHeight) &&
        rect.right <= (window.innerWidth || document.documentElement.clientWidth)
    );
}

function checkAnimation() {
    animatedElements.forEach(el => {
        if (isElementInViewport(el)) {
            el.classList.add('animate-in');
        } else {
            el.classList.remove('animate-in');
        }
    });
}

```

```
    }  
  });  
}
```

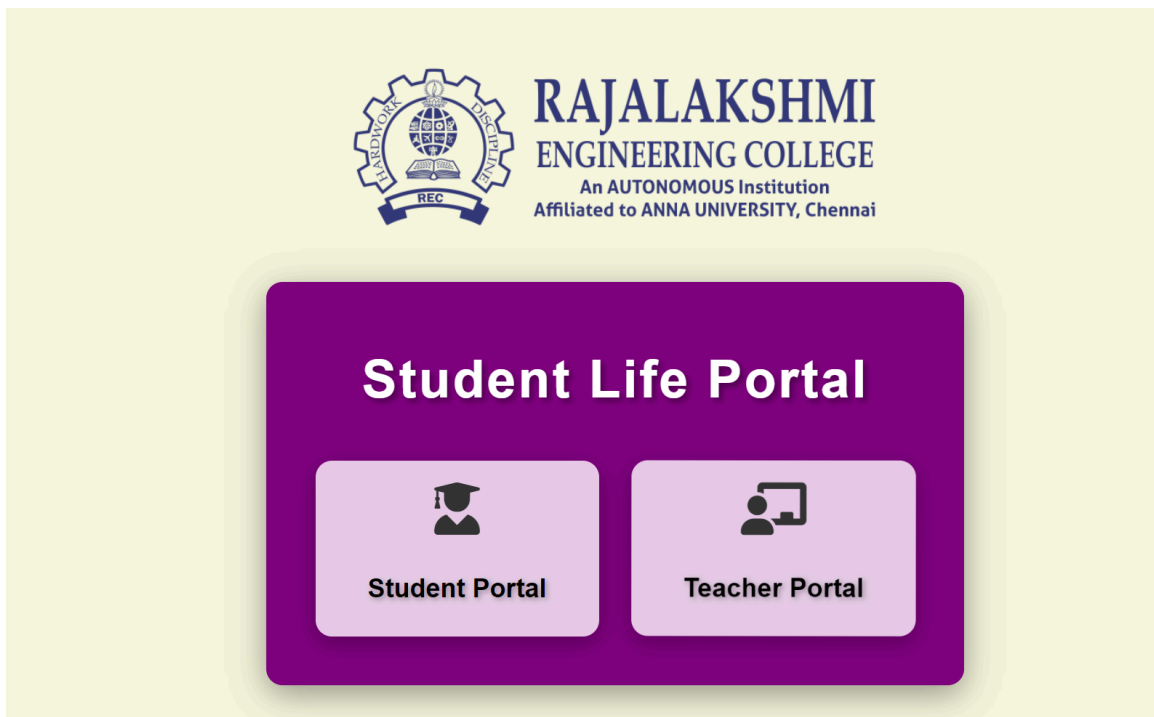
```
// Event listener for scrolling to trigger animation  
window.addEventListener('scroll', checkAnimation);
```

```
// Trigger the animation initially if the element is already in view  
window.addEventListener('load', checkAnimation);
```

CHAPTER 7

SCREENSHOTS

7.1. HOMEPAGE



SIGN IN

or use email or password


Forgot Your Password

SIGN IN

Welcome to REC

Registration with your personal details

SIGN UP



RAJALAKSHMI
ENGINEERING COLLEGE
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Student Profile

John Doe

ID: 123456

Course: Computer Science

Student Information

Email: john.doe@example.com

Phone: +91 9876543210

Address: 123, Street Name, City, State

Penalties

- Bunked Classes - ₹500
- Not wearing ID card - ₹200
- Improper Dress Code - ₹100

View Fine Details

Pay Fine

Enter Student Details

Roll Number / Student ID

Class

Section

Violations

☐

Bunked Classes (Rs. 50)

☐

Not Wearing ID Card (Rs. 50)

☐

Improper Dress Code (Rs. 50)

☐

Improper Behavior (Rs. 50)

Total Penalty: Rs. 0

Submit

CHAPTER 8

CONCLUSION

In conclusion, the development and implementation of the Student Life Management System are vital for promoting accountability, discipline, and communication within a college campus. This system provides a structured approach for monitoring and managing student behavior, allowing Student Care (teachers) to efficiently document violations and students to view and settle fines seamlessly through an online platform. By integrating technology into behavior management, the system fosters a respectful and orderly campus environment.

The Student Life Management System not only addresses immediate disciplinary concerns but also contributes to the overall development of a positive learning environment. It encourages students to take responsibility for their actions while providing educators with streamlined tools for tracking and reporting behavior. Regular updates and refinements to the system ensure it remains relevant and effective in meeting the changing needs of campus life.

Furthermore, the use of digital tools, such as data analytics, enhances the system's capabilities, allowing for trend analysis and proactive measures to improve campus culture. This proactive approach to managing student behavior supports a sustainable and engaging campus community. In essence, the Student Life Management System serves as a model for modern educational institutions, ensuring a balanced approach to discipline, accountability, and student support.

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3. Content Details– <https://rajalakshmi.org/>
4. Images and related – <https://www.careers360.com/>
5. Font Awesome Icons – www.fontawesome.com
6. Animation and effect - www.youtube.com