VIMALA COLLEGE
(AUTONOMOUS)
THRISSUR

2024-2025
DEPARTMENT OF COMPUTER SCIENCE
B.Voc WEB TECHNOLOGY

PROJECT REPORT

SDC6WT24(Pr)- INTERNSHIP AND PROJECT

REPORT OF PROJECT

AT

ATEES INDUSTRIAL TRAINING Pvt Ltd THRISSUR, KERALA

From November 2024 to February 2025

Submitted to the Department of Computer Science, Vimala College Thrissur, For partial fulfilment of the requirements for the Award of

B. Voc Web Technology

Submitted By

NEHA K M

Reg No: **VMAWBODO18**

Department of Computer Science

Vimala College Autonomous,

Thrissur

VIMALA COLLEGE

(NAAC Re-accredited (4th Cycle): A+ Grade, CGPA-3.45 on a point scale)

THRISSUR-680 009, KERALA, INDIA

CERTIFICATE

DEPARTMENT OF COMPUTER SCIENCE

Certified that this is a bonafide record of the practical work done by …… of… .....Semester B.Voc in Web Technology during the academic year 2O…... 20…… in partial fulfillment of the requirement for the award of Bachelor's Vocational degree in Web Technology of the University of Calicut.

Head of the Department Asst. Professor in Charge Submitted for the practical examination held on ……...at Vimala College, Thrissur.

***Register* Number :**

***Name* :**

***Paper* :**

Remarks if any

Name & signature of examiners

: 1.

2.

DECLARATION

I am **NEHA K M** (Reg. No. VMAWBOD018) hereby declare that the project report, for the period of 4 month was done with the support of Atees industrial training private limited, Thrissur. For the partial fulfillment of the requirements for award of the Degree of B.Voc in Web Technology, Vimala College (Autonomous), Thrissur is an original work done by me during November 15 to February 22 (2024 - 2025).

Place: Thrissur

Date: **NEHA K M**

ACKNOWLEDGEMENT

I would like to express my sincere thanks to God Almighty, for his constant love and grace that he has shown upon me.

I would like to express my gratitude to **Dr. Sr. Beena Jose**, Principal of Vimala College (Autonomous), Thrissur, for her inspiration and encouragement throughout the project work.

I thank, **Dr. Sareena Rose**, HOD, Department of Computer Science (B.Voc), Vimala College (Autonomous) for granting this opportunity to undergo institutional training with **"Atees industrial training private limited ,Thrissur".**

I would like to express my sincere thanks Ms. Anargha, Hr, and **Ms. Majitha Farzana,** Internship Supervisor, for having permitted me to undergo training at "**ATEES INDUSTRIAL TRAINING PRIVATE LIMITED, THRISSUR**". We express our heartfelt and profound gratitude to our respected supervising guide **Ms. Sangeetha M**, Internal Guide, for their constant support in the design implementation and evaluation of this project.

Finally I wish to express my sincere thanks to all the teachers, non-teaching staff as well as my friends for their suggestions and support.

NEHA K M

ORGANIZATION CERTIFICATE

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INTRODUCTION

1. INTRODUCTION

1.1 ABOUT THE PROJECT

The **Kindercare web application** is essential for ensuring a safe, organized, and nurturing environment for young children. This paper presents a digital **Kindercare** Platform designed to streamline administrative and operational tasks, enhancing communication between parents and tutors while improving overall efficiency. The platform integrates key modules such as child registration and profile management, attendance tracking, parent-teacher communication, fee payment processing, meal and nutrition planning, feedback sharing and timetable management for associated properties.

Nurseries and early childcare centers often struggle with manual, paper-based processes for managing essential daily operations, which can be time-consuming, prone to error, and challenging for both staff and parents. The need for a centralized, digital nursery management platform is clear: with a single, unified system, nurseries can streamline administrative duties, improve communication, and enhance the overall quality of care provided to children. This web application addresses these challenges by offering a user-friendly, all-in-one solution that that improves efficiency, reduces paperwork, and fosters a more collaborative childcare environment.

1.2 OBJECTIVE OF THE SYSTEM

Streamlining Administrative Processes:

- Automating essential tasks such as child registration, attendance tracking, and fee payment processing to reduce manual workload and errors.

Enhancing Parent-Tutor Communication:

- Providing a seamless communication channel for parents and tutors to share updates, Feedback and concern regarding a child's progress and well-being,

Improving Efficiency and Organization:

- Offering a centralized system that integrates scheduling, timetable management. and meal planning for a well-structured learning and care environment.

Ensuring Accurate Record-Keeping:

- Digitally storing and managing child profiles and academic progress for easy access and security.

Reducing Paperwork and Errors:

- Eliminating manual, paper-based documentation to minimize administrative errors and improve record accuracy.

Communication Tools:

- Messaging features enable effective communication between tutor and parent
- Two-way communication channels enhance coordination and information sharing.

User-Friendly Interface:

- The platform is designed with a user-friendly and intuitive interface to facilitate ease of use during high-stress situations.

Supporting Personalized Childcare:

- Enabling caregivers to tailor learning activities and meal plans based on individual child needs, preferences, and dietary requirements.

Enhancing Financial Management:

- Simplifying fee collection, tracking payments, and generating financial reports to support transparent and efficient financial operations.

SYSTEM STUDY

2. SYSTEM STUDY

2.1 EXISTING SYSTEM

Currently, Kindercare centers rely on manual, paper-based processes or disconnected digital tools to manage their daily operations. Child registration, attendance tracking, and fee management are often handled using physical records or spreadsheets, which can lead to inefficiencies, errors, and data loss. Communication between parents and tutors is typically done through phone calls, handwritten notes, or informal messaging apps, making it difficult to maintain organized and trackable interactions. Additionally, financial management remains a challenge, as payments are often collected in cash or via direct bank transfers without proper tracking, leading to transparency and reporting issues.

Meal planning, timetable scheduling, and daily activity management are usually carried out manually, making it difficult to adapt to changes efficiently. Parents also face challenges in receiving real-time updates on their child's attendance, meals, and activities, resulting in concerns about transparency and engagement. Moreover, nurseries that use separate software for different tasks, such as attendance tracking and fee collection, often struggle with fragmented systems that do not integrate seamlessly. These inefficiencies contribute to high administrative workloads, potential security risks, and overall dissatisfaction among parents and staff. Given these limitations, a modern, integrated **Kindercare Web Application** is essential to streamline operations, enhance communication, and improve overall efficiency in nursery management.

2.2 DRAWBACK OF EXISTING SYSTEM

- **Time-Consuming and Inefficient** – Manual record-keeping for child registration, attendance, fee payments, and meal planning requires excessive time and effort from staff, reducing their ability to focus on child care and education.

- **Prone to Errors and Data Loss** – Paper-based records and spreadsheets increase the risk of human errors, misplaced documents, and data loss, leading to inconsistencies in record-keeping.

- **Limited Communication and Transparency** – Parents often struggle to receive timely updates about their child's daily activities, attendance, and progress.

- **Security Risks** – Sensitive information related to children, parents, and finances is at risk when stored in physical files or unsecured digital formats, making it vulnerable to unauthorized access and loss.

- **Financial Management Challenges** – Handling payments manually or through basic banking transfers makes tracking fees, managing outstanding balances, and generating financial reports difficult and error-prone.

2.3 PROPOSED SYSTEM

The nursery management web application is a comprehensive digital platform designed to streamline operations, enhance communication, and support high-quality childcare in nurseries. It centralizes core functions like child registration, attendance tracking, share feedback, Health and Safety Monitoring, Meal and Nutrition Planning. By automating administrative tasks, facilitating real-time updates for parents and providing actionable insights for administrators, the platform improves efficiency and fosters stronger parent engagement. This solution reduces administrative burdens and builds trust between nurseries and families, ultimately creating a organized environment for children.

SYSTEM ANALYSIS

3. SYSTEM ANALYSIS

3.1 HARDWARE SPECIFICATION

Hardware	Description
Processor	11th Gen Intel(R) Core(TM) i3-1125G4
RAM	8.00 GB
Hard Disk Space	512 GB
Monitor	Without Plug and play monitor
Keyboard	Standard

SOFTWARE SPECIFICATION

SOFTWARE	Description
SERVER ENVIRONMENT	
Operating system	Microsoft Windows 11
Programming Tool	Visual Studio Code
Database Server	db.sqlite
CLIENT ENVIRONMENT	
Internet Browser	Microsoft Edge, Google Chrome , Mozilla Firefox

3.2 FEASIBILITY STUDY

Feasibility Study for "KINDERCARE" Python-based childcare management Platform

1. Technical Feasibility:

- Programming Language and Framework*:* Python with Django framework is widely used and well-supported, ensuring technical feasibility in terms of development and maintenance.

- Front-end Technologies: HTML, CSS, JS are standard technologies that are compatible with most browsers, ensuring accessibility.

- Database: SQLite is suitable for small to medium-scale applications, providing adequate storage and performance for the platform.

- Hardware Requirements*:* The specified hardware configuration meets the system's processing and storage needs, ensuring technical feasibility.

2. Operational Feasibility:

- User Interface*:* The user-friendly interface and accessibility features make the platform operational for users with diverse abilities and backgrounds.

- Communication Tools: Two-way communication channels enhance operational efficiency by facilitating effective coordination between parent and tutor.

- Cost-Effectiveness and Resource Optimization: By reducing paperwork, automating repetitive tasks, and minimizing errors, Kindercare helps nurseries save time and operational costs.

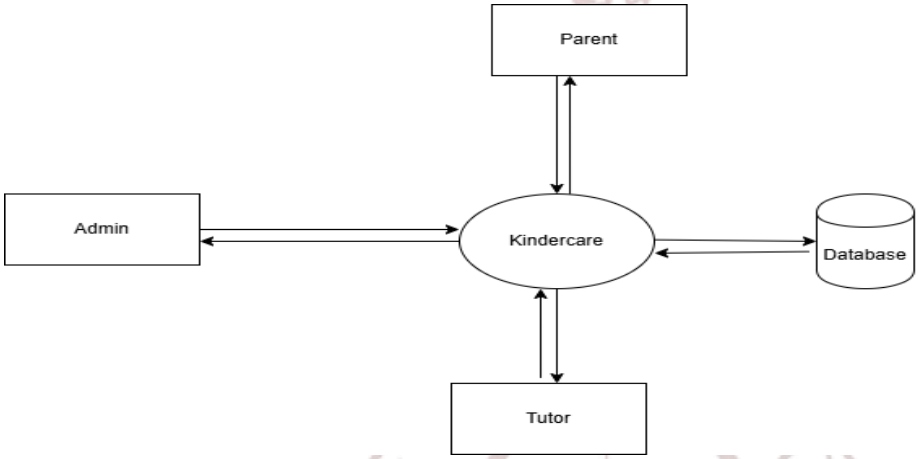
- Security and Reliability: The Kindercare platform is built with ensuring safe and reliable management of sensitive child and financial data. Automated backups and 24/7 system availability enhance reliability.

3. Economic Feasibility:

- Cost of Development: Using open-source technologies like Python and Django reduces development costs. However, funding for long-term maintenance and updates must be considered.

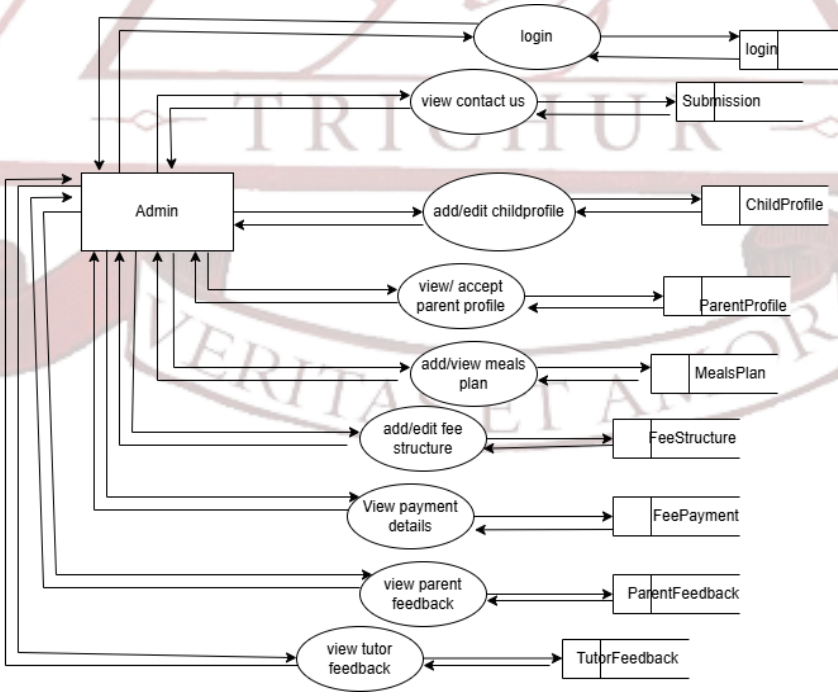
3.3 DATAFLOW DIAGRAM

LEVEL-0

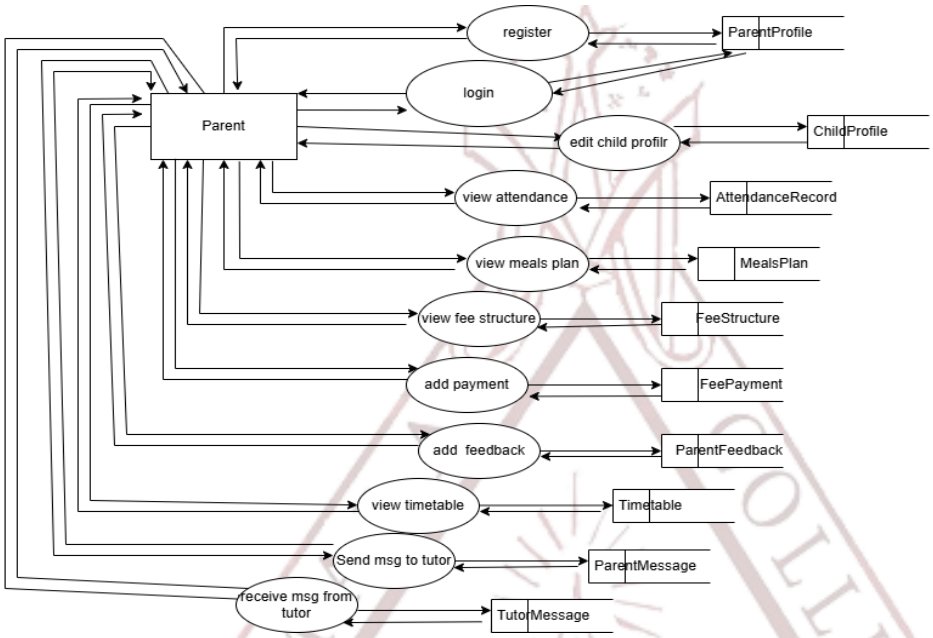


LEVEL -1

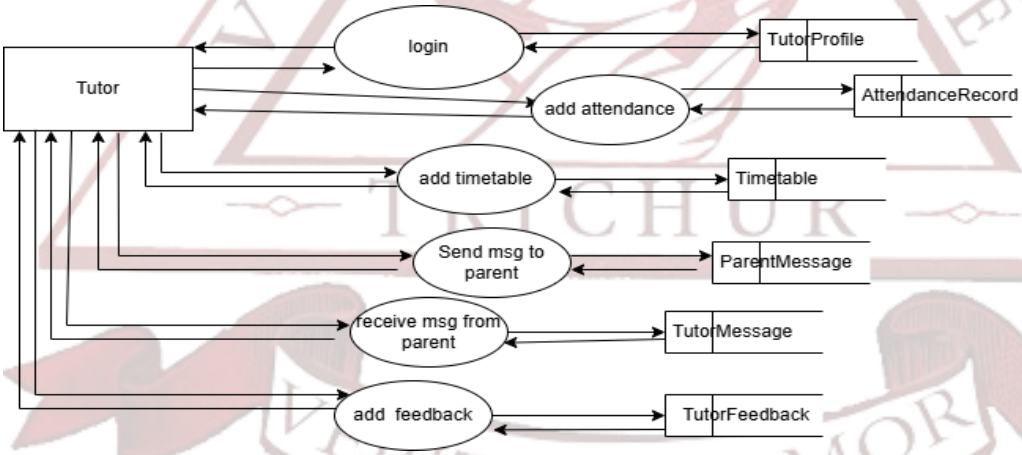
ADMIN:



PARENT :



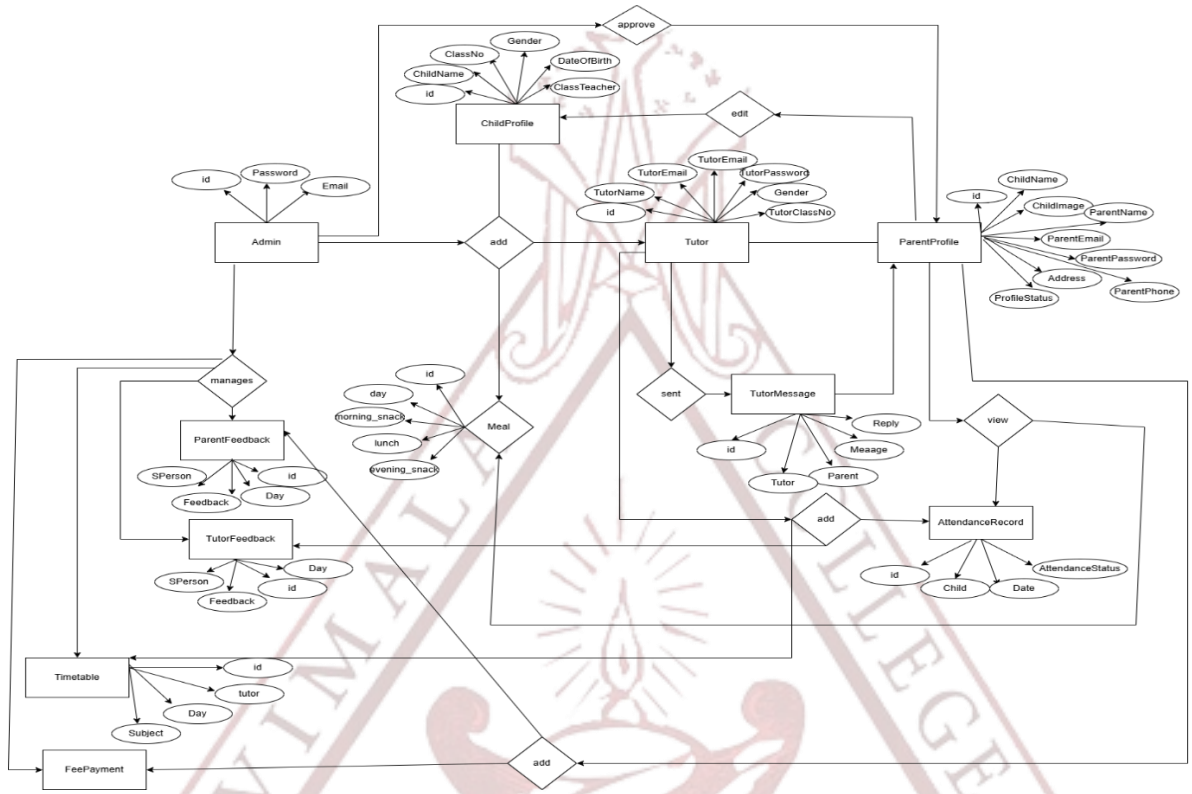
TUTOR



SYSTEM DESIGN

4. SYSTEM DESGIN

4.1 ER DIAGRAM



4.2 DATABASE DESIGN

1. Table Name : TutorProfile

Field Name	Data Type	Length	Constraints
id	INT		PRIMARY KEY
TutorName	VARCHAR	50	NOT NULL
TutorEmail	VARCHAR	100	NOT NULL
TutorEmail	VARCHAR	50	UNIQUE, NOT NULL
TutorPassword	VARCHAR	50	NOT NULL
Gender	VARCHAR	20	NOT NULL
TutorClassNo	VARCHAR		NOT NULL

2. Table Name : Admin

Field Name	Data Type	Length	Constraints
id	INT		Auto-increment
Password	VARCHAR	100	NOT NULL
Email	VARCHAR	100	UNIQUE, NOT NULL

3. Table Name : ChildProfile

Field Name	Data Type	Length	Constraints
id	INT		Auto-increment
ChildName	VARCHAR	200	NOT NULL
ClassNo	VARCHAR	100	NOT NULL
Gender	VARCHAR	100	NOT NULL
DateOfBirth	DATEFIELD		NOT NULL
ClassTeacher	VARCHAR		Foreign Key

4. Table Name : ParentProfile

Field Name	Data Type	Length	Constraints
id	INT		Auto-increment
ChildName	VARCHAR	100	Foreign Key
ChildImage	IMAGEFIELD		NOT NULL
ParentName	VARCHAR	100	NOT NULL
ParentEmail	VARCHAR	100	UNIQUE, NOT NULL
ParentPassord	VARCHAR	100	NOT NULL
Address	TEXTFIELD	200	NOT NULL
ParentPhone	VARCHAR		NOT NULL
ProfileStatus	VARCHAR		NOT NULL

5. Table Name : Meal

Field Name	Data Type	Length	Constraints
id	INT		PRIMARY KEY
day	INT		NOT NULL
morning_snack	VARCHAR	255	NOT NULL
lunch	VARCHAR	255	NOT NULL
evening_snack	VARCHAR	100	NOT NULL

6. Table Name : AttendanceRecord

Field Name	Data Type	Length	Constraints
id	INT		Auto-increment
Child	VARCHAR	50	FOREIGN KEY
Date	DATEFIELD	100	NOT NULL
attendancestatus	VARCHAR		NOT NULL

7. Table Name : MealSuggessionBox

Field Name	Data Type	Length	Constraints
id	INT		Auto-increment
Parent	VARCHAR	100	FOREIGN KEY
Suggession	TEXTFIELD		
SuggessionStatus	VARCHAR	255	

8. Table Name : Timetable

Field Name	Data Type	Length	Constraints
id	INT	100	PRIMARY KEY
tutor	VARCHAR	50	FORIEGN KEY
Day	VARCHAR		
Subject	VARCHAR		

9. Table Name : FeesStructure

Field Name	Data Type	Length	Constraints
id	INT		Auto-increment
Term	VARCHAR		NOT NULL
FeesAmount	INT		NOT NULL

10. Table Name : ParentFeedback

Field Name	Data Type	Length	Constraints
id	INT		Auto-increment
Day	DATEFIELD		NOT NULL
FeedBack	TEXTFIELD		NOT NULL
SPerson	VARCHAR		FOREIGN KEY

11. Table Name : TutorFeedback

Field Name	Data Type	Length	Constraints
id	INT		Auto-increment
Day	DATEFIELD		NOT NULL
FeedBack	TEXTFIELD		NOT NULL
SPerson	VARCHAR		FOREIGN KEY

12. Table Name : ParentMessages

Field Name	Data Type	Length	Constraints
id	INT		Auto-increment
Tutor	VARCHAR		FOREIGN KEY
Parent	VARCHAR		FOREIGN KEY
Message	TEXTFIELD		NOT NULL
Reply	TEXTFIELD		NOT NULL

13. Table Name : TutorMessages

Field Name	Data Type	Length	Constraints
id	INT		Auto-increment
Tutor	VARCHAR		FOREIGN KEY
Parent	VARCHAR		FOREIGN KEY
Message	TEXTFIELD		NOT NULL
Reply	TEXTFIELD		NOT NULL

14. Table Name : FeesPayment

Field Name	Data Type	Length	Constraints
id	INT		Auto-increment
PaymentStatus	VARCHAR		NOT NULL
Fee	VARCHAR		FOREIGN KEY
Parent	VARCHAR		FOREIGN KEY
CardHolder	VARCHAR		NOT NULL
CardNumber	BIGINTEGER		NOT NULL
CVV	INT		NOT NULL
DateOfPayment	DATEFIELD		

15. Table Name : Submission

Field Name	Data Type	Length	Constraints
id	INT		Auto-increment
name	VARCHAR	50	NOT NULL
email	EMAILFIELD		NOT NULL
phone	VARCHAR	10	NOT NULL
message	TEXTFIELD		NOT NULL
timestamp	DATETIMEFIELD		NOT NULL

SYSTEM DEVELOPMENT

5. SYSTEM DEVELOPMENT

5.1 CODE:

base.html:

```
<!DOCTYPE html>
<html lang="en">
<head>
  <!-- Basic -->
  <meta charset="utf-8" />
  <meta http-equiv="X-UA-Compatible" content="IE=edge" />
  <!-- Mobile Metas -->
  <meta name="viewport" content="width=device-width, initial-scale=1, shrink-to-fit=no" />
  <!-- Site Metas -->
  <meta name="keywords" content="" />
  <meta name="description" content="" />
  <meta name="author" content="" />
  <title>{% block title %}{% endblock %}</title>
<!-- slider stylesheet -->
  <link rel="stylesheet" type="text/css"
href="https://cdnjs.cloudflare.com/ajax/libs/OwlCarousel2/2.1.3/assets/owl.carousel.min.css" />


  <!-- bootstrap core css -->
  <link rel="stylesheet" type="text/css" href="/static/css/bootstrap.css" />
<!-- fonts style -->
<linkhref="https://fonts.googleapis.com/css?family=Lato:400,700|Poppins:400,700|Roboto:400,
700&display=swap" rel="stylesheet" />
```

```
<!-- Custom styles for this template -->
  <link href="/static/css/style.css" rel="stylesheet" />
  <!-- responsive style -->
  <link href="/static/css/responsive.css" rel="stylesheet" />
  {% block extra %}{% endblock %}
</head>


<body>
  <div class="hero_area">
    <!-- header section strats -->
    <header class="header_section">
      <div class="container">
<nav class="navbar navbar-expand-lg custom_nav-container ">
          <a class="navbar-brand" href="index.html">
            <img src="images/logo.png" alt="" />
            <span>
              KinderCare
            </span>
          </a>
 <button class="navbar-toggler" type="button" data-toggle="collapse" data-
target="#navbarSupportedContent" aria-controls="navbarSupportedContent" aria-expanded="false"
aria-label="Toggle navigation">
            <span class="navbar-toggler-icon">{% if current_tutor %}Logined as Tutor
              {% elif current_parent %}
```

```
Logined as Parent
          {% else %}
         {% endif %}</span>
        </button>

        <div class="collapse navbar-collapse" id="navbarSupportedContent">
         <div class="d-flex ml-auto flex-column flex-lg-row align-items-center">
          <ul class="navbar-nav  ">
           <li class="nav-item active">
            <a class="nav-link" href="/">
             Home </a>
</li>
           <li class="nav-item">
            <a class="nav-link" href="#about"> About </a>
           </li>

           <li class="nav-item">
            <a class="nav-link" href="#offers"> Offers </a>
           </li>
 {% if current_tutor %}
           <li class="nav-item">
            <a class="nav-link" href="/tutor_logout"> Logout </a>
           </li>
           {% elif current_parent %}
           <li class="nav-item">
            <a class="nav-link" href="/parent_logout"> Logout </a>
           </li>
           {% else %}
```

```
<li class="nav-item dropdown">
                <a class="nav-link dropdown-toggle" href="#" id="navbarDropdown" role="button" data-toggle="dropdown" aria-haspopup="true" aria-expanded="false">
                  Login
                </a>
                <div class="dropdown-menu" aria-labelledby="navbarDropdown">
                  <a class="dropdown-item" href="/admin">As Admin</a>
                  <a class="dropdown-item" href="/parent_login">As Parent</a>
                  <a class="dropdown-item" href="/tutor_login">As Tutor</a>
                </div>
              </li>
              {% endif %}
            <li class="nav-item">
              <a class="nav-link" href="#contact"> Contact us</a>
            </li>
          </ul>
        </div>
</div>
      </nav>
    </div>
  </header>
  <!-- end header section -->
  {% block body %}{% endblock %}
  <!-- footer section -->
 <section class="container-fluid footer_section">
  <p>
    &copy; 2025 All Rights Reserved By
    <a href="/">KinderCare</a>
  </p>
 </section>
```

```
<script type="text/javascript" src="/static/js/jquery-3.4.1.min.js"></script>
  <script type="text/javascript" src="/static/js/bootstrap.js"></script>


  <script>
    // This example adds a marker to indicate the position of Bondi Beach in Sydney,
    // Australia.
    function initMap() {
      var map = new google.maps.Map(document.getElementById("map"), {
        zoom: 11,
        center: {
          lat: 40.645037,
          lng: -73.880224
        }
      });
      var image = "images/maps-and-flags.png";
      var beachMarker = new google.maps.Marker({
        position: {
lat: 40.645037,
          lng: -73.880224
        },
        map: map,
        icon: image
      });
    }
  </script>
  <!-- google map js --><script
src="https://maps.googleapis.com/maps/api/js?key=AIzaSyA8eaHt9Dh5H57Zh0xVTqxVdBFCvFM
qFjQ&callback=initMap">
  </script>


  <!-- end google map js -->
```

```
<script>
   function openNav() {
     document.getElementById("myNav").style.width = "100%";
   }

   function closeNav() {
     document.getElementById("myNav").style.width = "0%";
   }
  </script>
</body>
</html>
```

Base2.html

```
<!DOCTYPE html>
<html lang="en">
<head>
   <meta charset="UTF-8">
   <meta name="viewport" content="width=device-width, initial-scale=1.0">
   <title>{% block title %}{% endblock %}</title>
   <link rel="stylesheet" href="https://cdnjs.cloudflare.com/ajax/libs/font-awesome/6.0.0-beta3/css/all.min.css">
   <link rel="stylesheet" href="https://maxcdn.bootstrapcdn.com/bootstrap/4.5.2/css/bootstrap.min.css">
   {% block content %}{% endblock %}
   <style>
 body {
          font-family: 'Poppins', sans-serif;
          background: #fafafa;
       }
```

```
p {
        font-size: 1.1em;
        font-weight: 300;
        line-height: 1.7em;
        color: #999;
    }

    .navbar {
        padding: 15px 10px;
        background: #fff;
        box-shadow: 1px 1px 3px rgba(0, 0, 0, 0.1);
    }

    .wrapper {
        display: flex;
        align-items: stretch;
        width: 100%;
    }
#sidebar {
        min-width: 250px;
        max-width: 250px;
        background: #7386D5;
        color: #fff;
        transition: all 0.3s;
    }

    #sidebar.active {
        margin-left: -250px;
    }
 #sidebar .sidebar-header {
        padding: 20px;
        background: #6d7fcc;
    }

    #sidebar ul.components {
        padding: 20px 0;
        border-bottom: 1px solid #47748b;
    }

#sidebar ul li a {
        padding: 10px;
        font-size: 1.1em;
        display: block;
        color: #fff;
    }
```

```
#sidebar ul li a:hover {
        color: #7386D5;
        background: #fff;
    }

    ul ul a {
        font-size: 0.9em !important;
        padding-left: 30px !important;
        background: #6d7fcc;
    }

    ul.CTAs {
        padding: 20px;
    }

    ul.CTAs a {
        text-align: center;
        font-size: 0.9em !important;
        display: block;
        border-radius: 5px;
        margin-bottom: 5px;
    }

    #content {
        width: 100%;
        padding: 20px;
        min-height: 100vh;
        transition: all 0.3s;
    }
```

```
@media (max-width: 768px) {
        #sidebar {
            margin-left: -250px;
        }
        #sidebar.active {
            margin-left: 0;
        }
        #sidebarCollapse span {
            display: none;
        }
    }
    .footer_section {
        background-color: #252525;
        padding: 20px;
        background-color: #7386D5;
    }
    .meals-plan-table {
        background: #fff;
        box-shadow: 1px 1px 5px rgba(0, 0, 0, 0.1);
        border-radius: 8px;
        padding: 20px;
    }
    .meals-plan-table h2 {
        text-align: center;
        margin-bottom: 20px;
    }
    .meals-plan-table th, .meals-plan-table td {
        text-align: center;
    }
```

```
.attendance-table {
        background: #fff;
        box-shadow: 1px 1px 5px rgba(0, 0, 0, 0.1);
        border-radius: 8px;
        padding: 20px;
    }

    .attendance-table h2 {
        text-align: center;
        margin-bottom: 20px;
    }
    .attendance-table th, .attendance-table td {
        text-align: center;
    }
    .footer_section {
        background-color: #7386D5;
        padding: 20px;
        color: #fefdfc;
        text-align: center;
    }

    .footer_section p {
        margin: 0;
        color:#fefdfc
    }

    .footer_section a {
        color: #fefdfc;
    }

   h2 {
        text-align: center;
        color: #333;
    }
    .message-list {
        list-style: none;
        padding: 0;
    }
.message-item {
        background: #f9f9f9;
        margin-bottom: 15px;
        padding: 15px;
        border-radius: 5px;
        box-shadow: 0 1px 3px rgba(0, 0, 0, 0.1);
    }
```

```
.message-item h3 {
        margin: 0;
        font-size: 18px;
        color: #007BFF;
    }
    .message-item p {
        margin: 5px 0;
        font-size: 16px;
        color: #555;
    }
    .message-item .priority {
        font-weight: bold;
        color: #d9534f;
    }
    .message-item .priority.medium {
        color: #f0ad4e;
    }
.message-item .priority.low {
        color: #5bc0de;
    }
    h2 {
        text-align: center;
        color: #333;
    }
form {
        display: flex;
        flex-direction: column;
    }
```

```
label {
        margin-bottom: 10px;
        font-weight: bold;
        color: #555;
    }
    input, textarea, select, button {
        margin-bottom: 15px;
        padding: 10px;
        font-size: 16px;
        border: 1px solid #ccc;
        border-radius: 4px;
    }
    textarea {
        resize: none;
    }
    button {
        background-color: #007BFF;
        color: white;
        border: none;
        cursor: pointer;
    }
    button:hover {
        background-color: #0056b3;
    }

</style>
</head>
<body>
<div class="wrapper">
  <!-- Sidebar  -->
  <nav id="sidebar">
    <div class="sidebar-header">
        <img
src="static\C:\Users\neham\OneDrive\Desktop\5sem\mainproject\static\images\logo.png" alt="" />
        <span>KinderCare</span>
    </div>

<ul class="list-unstyled components">
        <li class="active"><a href="/parentdashboard">Profile</a></li>
        <li><a href="/attendance">Attendance</a></li>
```

```
 {% if current_parent %}
        <li><a href="/mealstable">Meals plan</a></li>
        <li><a href="/mysuggessions">Suggessions</a></li>
        <li><a href="/feesstructure">Fees</a></li>
        <li><a href="/payment_status">Payment Status</a></li>
        <li><a href="/msg_to_tutor">Message to Tutor</a></li>
        <li><a href="/rply_from_parent">Messages from tutor</a></li>
        {% endif %}
        <li><a href="/timetable">Timetable</a></li>
        {% if current_tutor %}
<li><a href="/reply_from_tutor">Message from parents</a></li>
        <li><a href="/msg_to_parent">Message to parents</a></li>
        {% endif %}
        <li><a href="/feedback">Feedback</a></li>
      </ul>
      <ul class="list-unstyled CTAs">
        <li><a href="/" class="article">Back to home</a></li>
      </ul>
</nav>


   <!-- Page Content  -->
   <div id="content">
<nav class="navbar navbar-expand-lg navbar-light bg-light">
        <div class="container-fluid">
          {% if current_tutor %}
          <h6>Logged in as {{ tutor.TutorName }}</h6>
          <div class="collapse navbar-collapse" id="navbarSupportedContent">
            <ul class="navbar-nav ml-auto">
              <li class="nav-item">
```

```
 <a class="nav-link" href="/tutor_logout">Logout</a>
                    </li>
                  </ul>
                </div>
               {% elif current_parent %}
               <h6>Logged in as {{ parent.ParentName }}</h6>
               <div class="collapse navbar-collapse" id="navbarSupportedContent">
                 <ul class="navbar-nav ml-auto">
                    <li class="nav-item">
                       <a class="nav-link" href="/parent_logout">Logout</a>
                    </li>
                 </ul>
              </div>

               {% endif %}

               </div>
          </nav>
          {% block body %}{% endblock %}
     </div>
</div>

<!-- Footer Section -->
<section class="footer_section">
     <p>
          &copy; 2025 All Rights Reserved By
          <a href="">KinderCare</a>
     </p>
</section>
```

```
<script type="text/javascript" src="/static/js/jquery-3.4.1.min.js"></script>
<script type="text/javascript" src="static/js/bootstrap.js"></script>
<script src="https://code.jquery.com/jquery-3.6.0.min.js"></script>
<script src="https://cdnjs.cloudflare.com/ajax/libs/popper.js/1.16.1/umd/popper.min.js"></script>
<script src="https://stackpath.bootstrapcdn.com/bootstrap/4.5.2/js/bootstrap.min.js"></script>
<script>
    $(document).ready(function () {
        // Sidebar toggle



        // Enable form for editing
        $('#editButton').on('click', function () {
            $('#studentForm input, #studentForm textarea').prop('disabled', false);
            $('#submitButton').prop('disabled', false);
            alert('Health status updated successfully!');
        });
    });
</script>
</body>
</html>
```

Parent_login

```
{% extends 'base.html' %}
{% block title %}KinderCare-Parent Login{% endblock %}
{% block body %}
<section class="contact_section layout_padding">
    <div class="container ">
        <div class="heading_container ">
            <h2 class="">
                Parent
```

```
<span>
                Login
            </span>
        </h2>
    </div>
</div>
  <div class="container">
    <div class="row justify-content-center"> <!-- Add justify-content-center here -->
      <div class="col-md-6">
        {% if messages %}
        <div class="alert alert-{{messages.tags}}">
          {% for i in messages %}
          {{i}}
          {% endfor %}
        </div>
        {% endif %}
        <form action="#" method="POST">
          {% csrf_token %}
          <div>
            <input type="email" name="email" placeholder="Enter Your Email" required />
          </div>
          <div>
            <input type="password" name="password" placeholder="Enter Your Password"
required />
          </div>

          <div class="d-flex mt-4">
            <button type="submit">
              Login Now
            </button>
          </div>
```

```
            <div class="d-flex mt-4">
               Create a new account?  <a href="/parent_register">Sign-up Here</a>
            </div>
          </form>
        </div>
      </div>
</div>
</section>
{% endblock %}
```

Parent_register

```
{% extends 'base.html' %}
{% block title %}KinderCare-Parent Register{% endblock %}
{% block body %}

<section class="contact_section layout_padding">
   <div class="container ">
      <div class="heading_container ">
         <h2 class="">
            Register
            <span>
               Parent profile
            </span>
         </h2>
      </div>
   </div>
```

```
<div class="container">
    <div class="row justify-content-center"> <!-- Add justify-content-center -->
      <div class="col-md-6">
        {% if messages %}
        <div class="alert alert-{{messages.tags}}">
          {% for i in messages %}
          {{i}}
          {% endfor %}
        </div>
        {% endif %}
<form class="form" method="POST" enctype="multipart/form-data">
          {% csrf_token %}
          <div>
            <label>Select Your Child:</label>
            <select name="child" class="form-control" style="border-radius: 50px; height:
50px;">
              <option>Select Child Name:</option>
              {% for i in child %}
              <option value="{{i.id}}" class="form-control">{{i.ChildName}}</option>
              {% endfor %}
            </select>
          </div>
          <div>
<div>
            <label>Parent Name:</label>
            <input type="text" name="name" placeholder="Enter your name" required />
          </div>
          <div>
```

```
<div>
                <label>Parent EmailID:</label>
                <input type="email" name="email" placeholder="Enter your email" required />
            </div>
            <div>
                <label>Profile Password:</label>
                <input type="password" name="password" pattern="(?=.*\d)(?=.*[a-z])(?=.*[A-
Z]).{8,}"
                    placeholder="Enter your password" required />
            </div>
            <div>
                <label>Repeat Password:</label>
                <input type="password" name="conpassword" placeholder="confirm password"
required />
            </div>
            <div>
<div>
                <label>Your Address:</label>
                <input type="text" name="address" placeholder="Type your address" required />
            </div>
            <div>
                <label>Mobile Number:</label>
                <input type="text" name="phone" placeholder="Phone Number" required />
            </div>
```

```
<div>
                <label>Upload Your Child's Image:</label>
                <input type="file" name="profileimage" class="form-control" required />
              </div>
              <div class="d-flex mt-4">
                <button type="submit">
                  Sign-up Now
                </button>
              </div>
            </form>
          </div>
        </div>
    </div>
</section>
{% endblock %}
```

Tutor_login

```
{% extends 'base.html' %}
{% block title %}Nursery-login{% endblock %}
{% block body %}
<section class="contact_section layout_padding"  >
    <div class="container " >
      <div class="heading_container ">
        <h2 class="">
          Tutor
          <span>
            Login
          </span>
        </h2>
      </div>
```

```
</div>
   <div class="container" >
      <div class="row justify-content-center"> <!-- Add justify-content-center -->
         <div class="col-md-6">
            {% if messages %}
            <div class="alert alert-{{messages.tags}}">
               {% for i in messages %}
               {{i}}
               {% endfor %}
            </div>
            {% endif %}
            <form method="POST" enctype="multipart/form-data">
               {% csrf_token %}
               <div>
                  <input type="email" name="email" placeholder="Enter Your Email" required />
               </div> <div>
     <input type="password" name="password" placeholder="Enter Your Password" required />
               </div>
               <div class="d-flex mt-4">
                  <button>
                     Login Now
                  </button>
               </div>
            </form>
         </div>
      </div>
   </div>
</div>
</section>
{% endblock %}
```

5.2 FEATURES OF FRONT-END AND BACK-END

Front-end Features:

1. **HTML:** Provides the structure of web pages.

2. **CSS:** Adds styles and designs to HTML elements, enhancing the visual appeal.

3. **JavaScript (JS):** Adds interactivity and dynamic behavior to web pages.

4. **Responsive Design:** Ensures that the web application adapts to different screen sizes and devices.

5. **User Interface (UI):** Includes elements like forms, buttons, navigation menus, etc., for user interaction.

6. **Client-Side Validation:** Validates parent and tutor input on the client side before submitting to the server.

7. **Front-end Frameworks**: Such as Bootstrap for efficient and consistent UI development.

Back-end Features (Python Django):

1. **Model-View-Template (MVT) Architecture:** Django follows this pattern for organizing code into models, views, and templates.

2. **ORM (Object-Relational Mapping):** Simplifies database operations by using Python classes to represent database tables and objects.

3. **Admin Interface:** Provides an automatic admin interface for managing site content and user permissions.

4. **Forms and Validation:** Handles form submission, data validation, and error handling.

5. **Security:** Includes built-in security features like CSRF protection, user authentication, and authorization.

6. **Database Connectivity:** SQLite

7. **Session Management:** Manages Parent and tutor sessions and data persistence across requests.

TESTING

6. TESTING

6.1 TYPES OF TESTING

1. **Unit Testing*:*** Done Unit Testing that involves testing individual components or units of code, such as functions or methods, to ensure they work correctly in isolation.

2. **System Testing:** Done System Testing which evaluates the entire system as a whole to validate that all components and functionalities work together seamlessly and meet the project requirements.

3. **User Acceptance Testing (UAT):** Done UAT which involves testing the system from the end user's perspective to ensure that it meets the user's requirements and expectations

4. **Functional Testing:** Done Functional testing which verifies that each function or feature of the system behaves as intended and meets the functional requirements specified in the project..

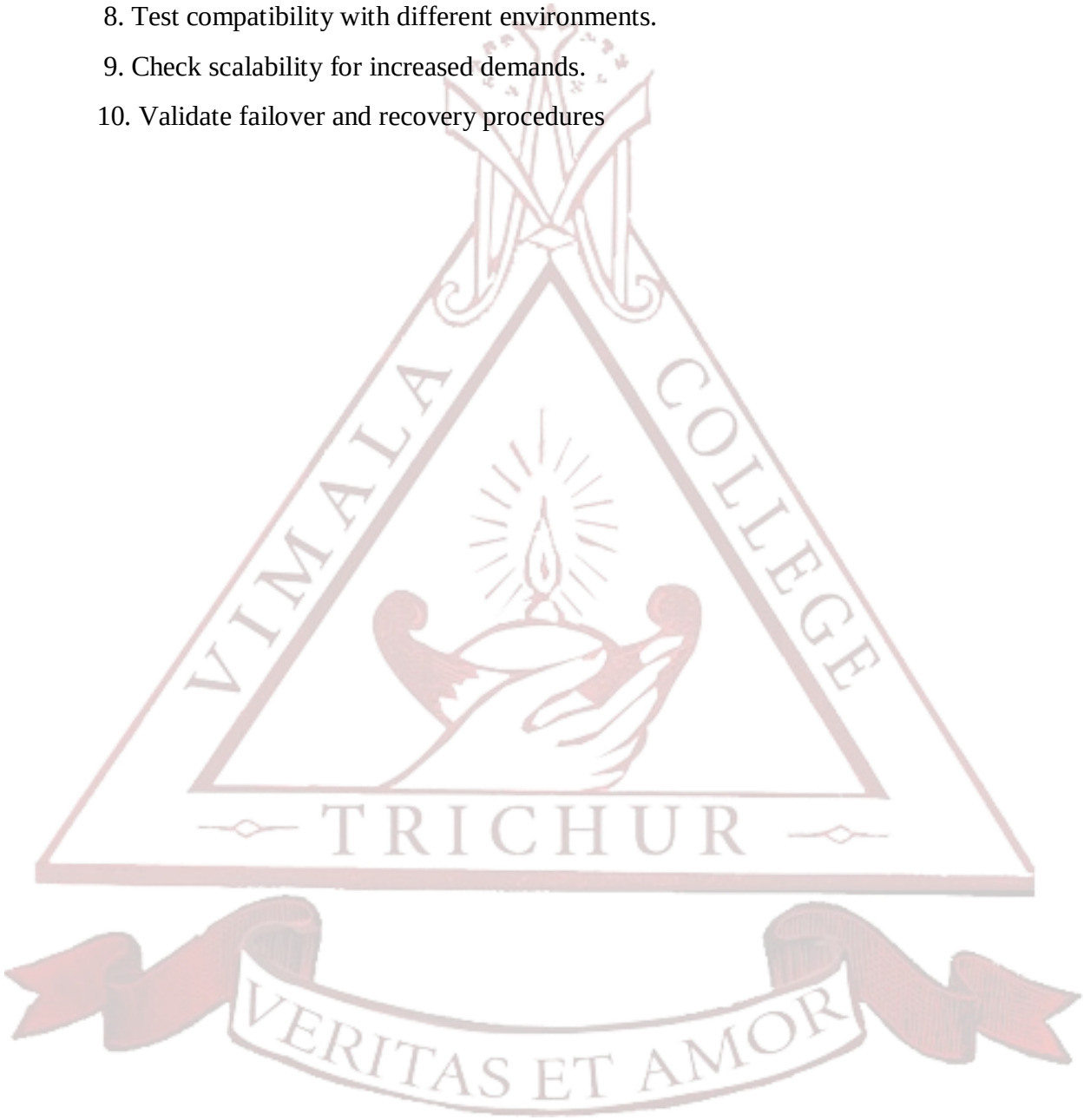
6.2 TESTING STRATEGY

1. Requirements Analysis: Understand and document system requirements.
2. Test Planning: Develop a plan with clear objectives and timelines.
3. Functional Testing: Verify individual components, integration, and end-to-end functionality.
4. Non-functional Testing: Assess performance, security, usability, compatibility, and scalability.
5. Regression Testing: Rerun tests after updates to ensure existing functionality.
6. Data Integrity Testing: Ensure accurate data storage and processing.
7. Documentation Review: Confirm accuracy of user manuals and system documentation.

6.3 SYSTEM TESTING

1. Verify entire system functionality from start to finish.
2. Confirm correct integration between modules.
3. Evaluate system performance under various loads.
4. Identify and address security vulnerabilities.
5. Assess user interface usability.

6. Rerun tests to check for new issues.
7. Ensure data accuracy and consistency.
8. Test compatibility with different environments.
9. Check scalability for increased demands.
10. Validate failover and recovery procedures



SYSTEM IMPLEMENTATION

7. SYSTEM IMPLEMENTATION

System implementation for the "KINDERCARE" platform involves design and features into functional components using the chosen technologies. Here's an overview of the system implementation process:

1. ***Setting Up the Development Environment:***

- Install Python, Django framework, and other necessary dependencies.

- Configure the development environment for local testing and development.

2. ***Database Design and Setup:***

- Design the database schema using Django models to represent data entities such as parent, tutor etc.

- Configure database settings in Django settings.py and create migrations to set up the database structure.

3. ***Backend Development (Python Django):***

- Implement the backend logic using Python Django, following the Model-View-Template (MVT) architecture.

- Develop models for data storage, views for handling HTTP requests, and templates for rendering HTML pages.

- Implement business logic for features such as real-time updates, parent-tutor communication tool, payment processing, communication tools, attendance tracking etc.

4. ***Frontend Development (HTML/CSS/JS):***

- Create HTML templates for different pages and components of the web application.

- Style the templates using CSS to enhance visual appeal and ensure responsiveness across devices.

- Add interactivity and dynamic behavior using JavaScript (JS) for features like form validation and dynamic content loading.

5. ***User Interface (UI) Design and Development:***

- Design user-friendly and intuitive interfaces for ease of use during emergencies.

- Implement UI elements such as forms, buttons, navigation menus, modals, etc., following design principles and accessibility guidelines.

- Ensure responsiveness and compatibility with different screen sizes and devices using responsive design techniques.

6. ***Security Implementation:***

- Implement security measures such as user authentication, authorization, and session management.

- Apply HTTPS encryption for secure data transmission and implement CSRF protection to prevent cross-site request forgery attacks.

- Follow best practices for secure coding, data validation, and input sanitization to mitigate security risks.

7. ***Testing and Quality Assurance:***

- Conduct thorough testing using various types of testing including unit testing, integration testing, system testing, user acceptance testing (UAT), functional testing, non-functional testing, regression testing, load testing, security testing, accessibility testing, and usability testing.

- Write test cases, perform test executions, and document test results to ensure the system meets quality standards and functional requirements.

SYSTEM MAINTENANCE AND SECURITY

8. SYSTEM MAINTENANCE AND SECURITY

8.1 SYSTEM MAINTENANCE

Software maintenance is the process of modifying a software system or component after its delivery in order to correct faults, improve the performance and the other attributes. Maintenance covers a wide range of activities including correcting the coding and design errors, updating the documentation test data, and upgrading the user support. There is an aging process that calls for periodic maintenance of hardware software. Maintenance can be classified as corrective, adaptive or perceptive.

- **Corrective maintenance**: Reactive modification of a software product performed after delivery to correct discovered problems.
- **Adaptive maintenance**: Modification of a software product performed after delivery to keep a software product usable in a changed or changing environment.
- **Perfective maintenance**: Modification of a software product after delivery to improve performance or maintainability.

8.2 SYSTEM SECURITY

System security is paramount for the "KINDERCARE" platform, especially considering the for child nursery management.

1. ***Authentication and Authorization:***

- Implement strong authentication mechanisms such as multi-factor authentication (MFA) to verify user identities securely.

- Enforce user access control with role-based permissions to ensure that users have appropriate levels of access to system features and data.

2. ***Data Encryption:***

- Use HTTPS protocol for secure communication over the network to protect data during transmission.

3. ***Secure Coding Practices:***

- Follow secure coding practices to prevent common vulnerabilities such as cross-site request forgery (CSRF).

- Validate and sanitize user inputs to mitigate injection attacks and data manipulation.

4. ***Session Management:***

- Implement secure session management practices such as session expiration, session tokens, and session hijacking prevention techniques.

- Use secure cookies and tokens for session identification and management.

5. ***User Education and Awareness:***

- Educate users, administrators, and stakeholders about security best practices, phishing awareness, password hygiene, and safe browsing habits.

- Provide regular security training and awareness programs to promote a security-conscious culture within the organization.

9. CONCLUSION

The **Kindercare** web application represents a significant advancement in the realm of nursery and early childcare management. By integrating essential administrative and operational functions into a single, user-friendly platform, this solution addresses the prevalent challenges faced by childcare centers.

By adopting this digital solution, nurseries can significantly improve their administrative efficiency, reduce errors, and foster a collaborative environment that prioritizes the well-being and development of children. The Kindercare web application not only meets the current needs of childcare centers but also sets the stage for future enhancements, ensuring that the platform remains adaptive to the evolving demands of early childhood education.

The technologies used in developing "KINDERCARE," such as Python, Django, HTML, CSS, JS, and db.sqlite3, along with a comprehensive testing strategy covering various testing types and scenarios, ensure the platform's functionality, security, performance, and usability.

In conclusion, **Kindercare** web application is poised to revolutionize the way nurseries operate, providing a robust foundation for delivering high-quality care and education to young children.

10. SCOPE OF THE FUTURE ENHANCEMENT

1. Mobile Application: Develop a companion mobile app to make the platform more accessible for parents and staff on the go. This will facilitate real-time updates and communication.

2. AI Integration: Incorporate artificial intelligence to predict attendance patterns, dietary preferences, and learning needs, providing personalized recommendations for each child.

3. Video Conferencing: Add video conferencing capabilities for virtual parent-teacher meetings, remote learning sessions, and real-time classroom monitoring for parents..

4. Multi-language Support: Enhance the platform by supporting multiple languages to cater to a diverse user base.

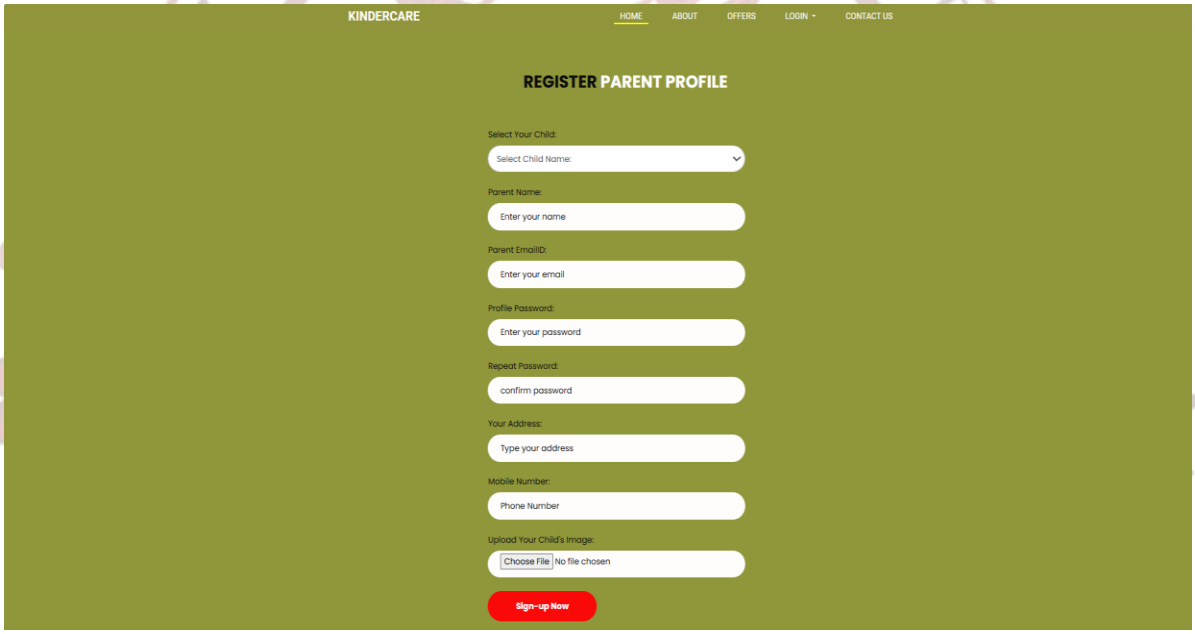
APPENDIX

11. APPENDIX

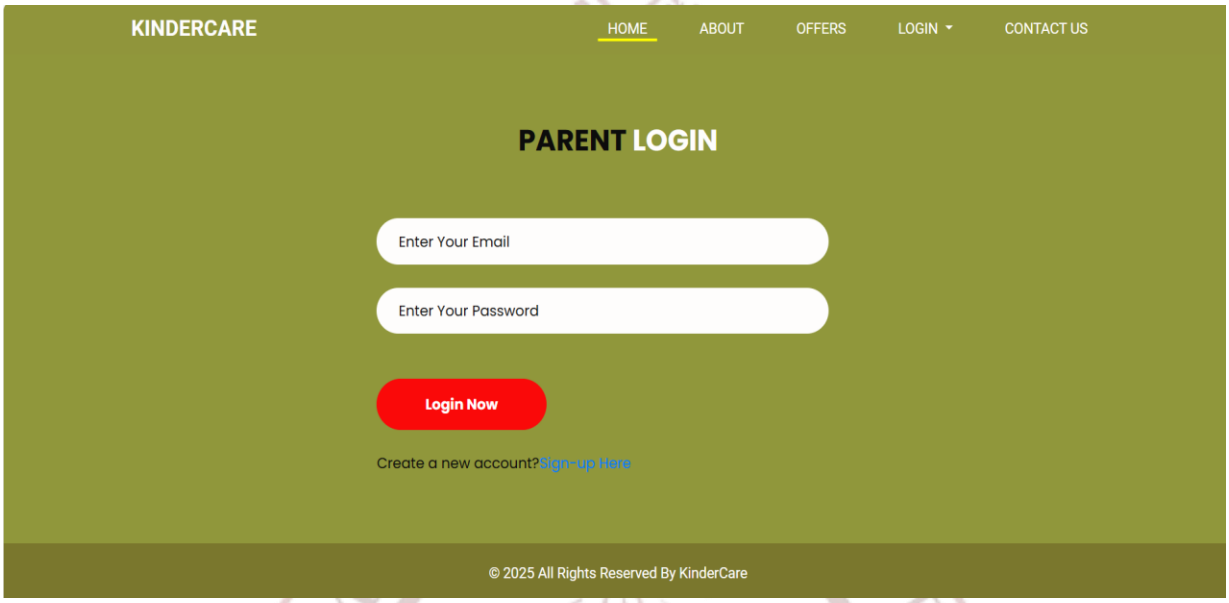
SCREEN SHOTS OF OUTPUTS

Welcome page

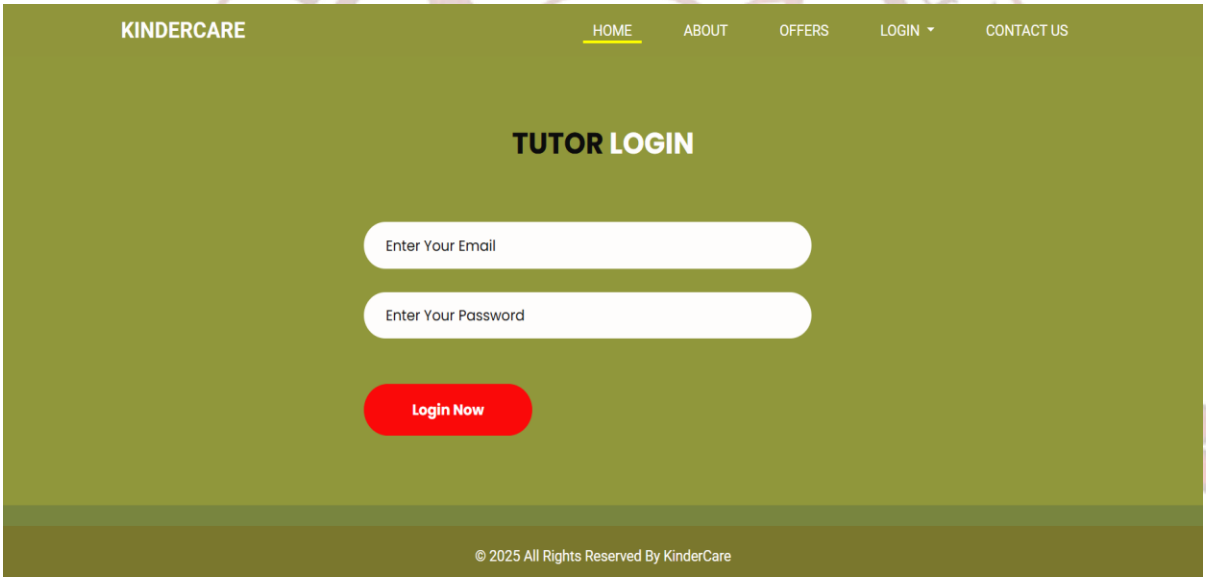
Parent register page



Parent login

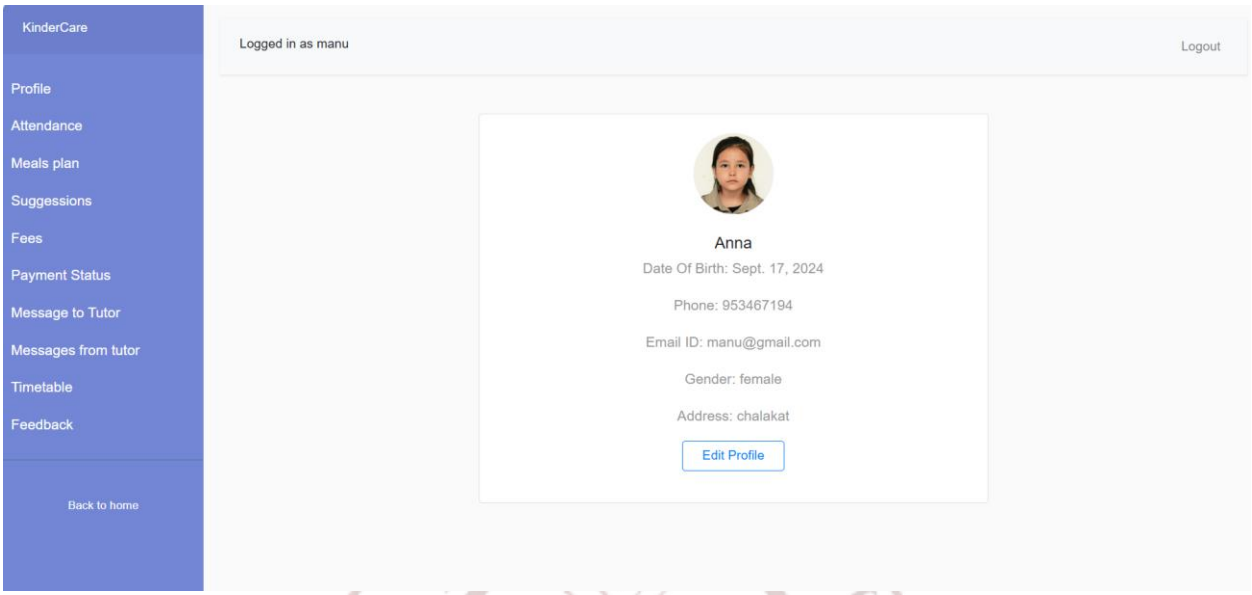


Tutor login

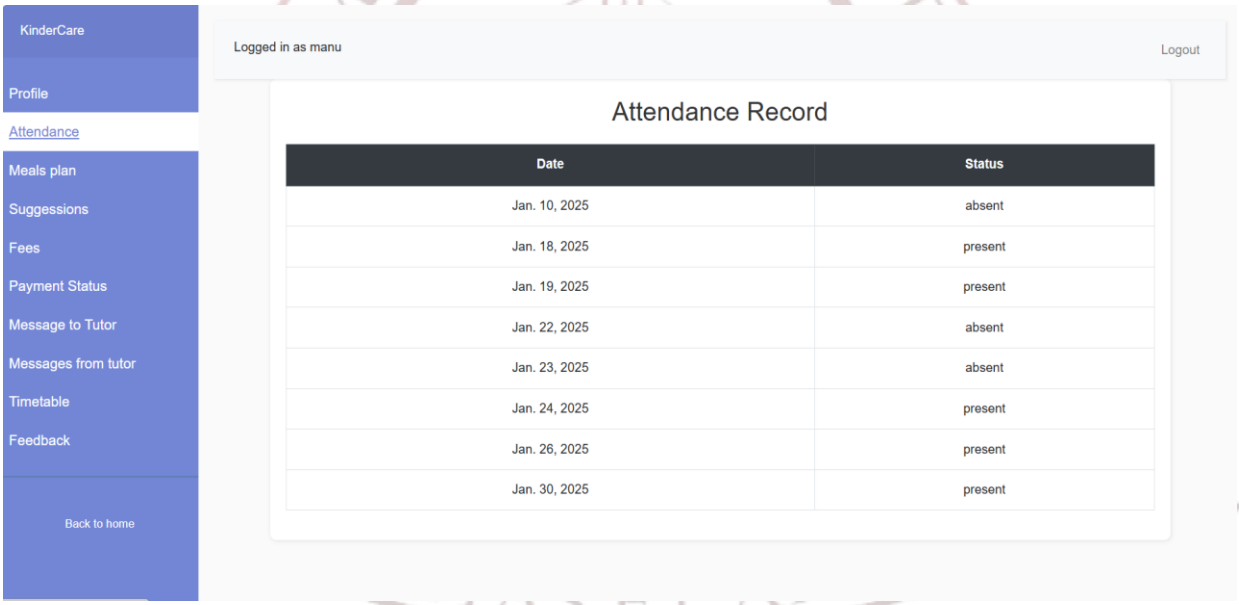


Parent-side

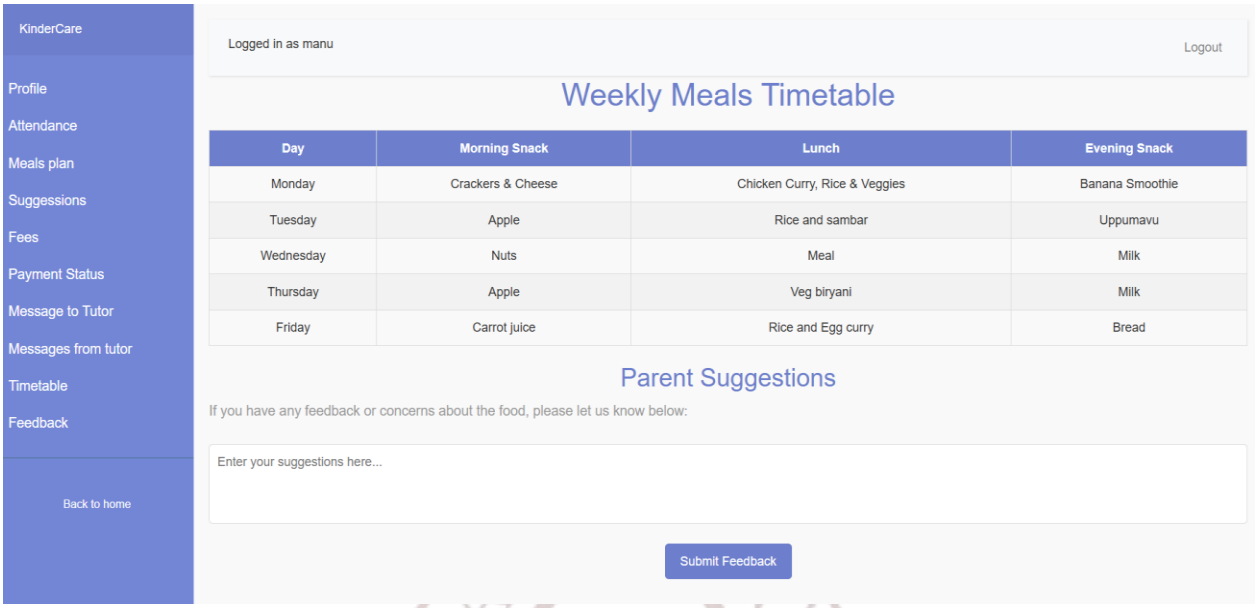
Parent profile



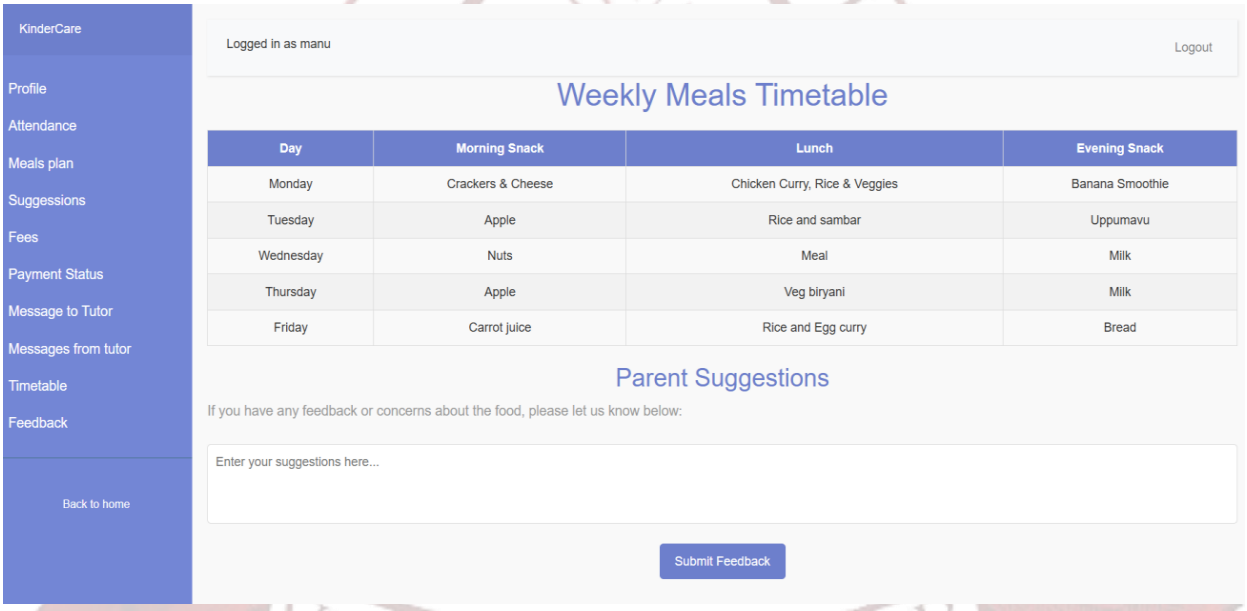
Attendance page

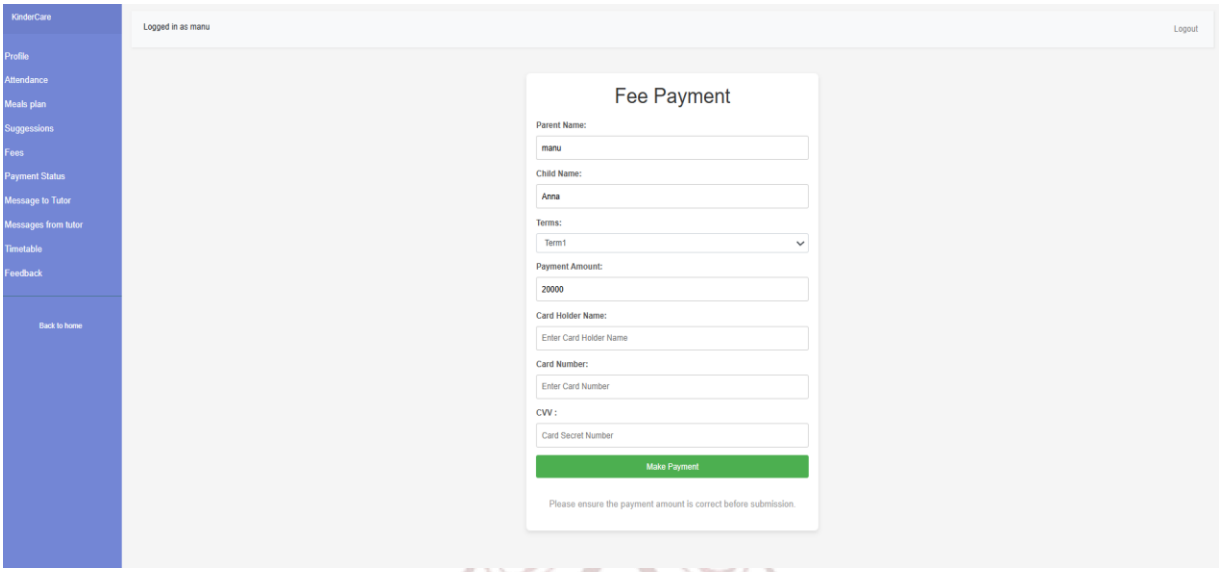


Meals plan page

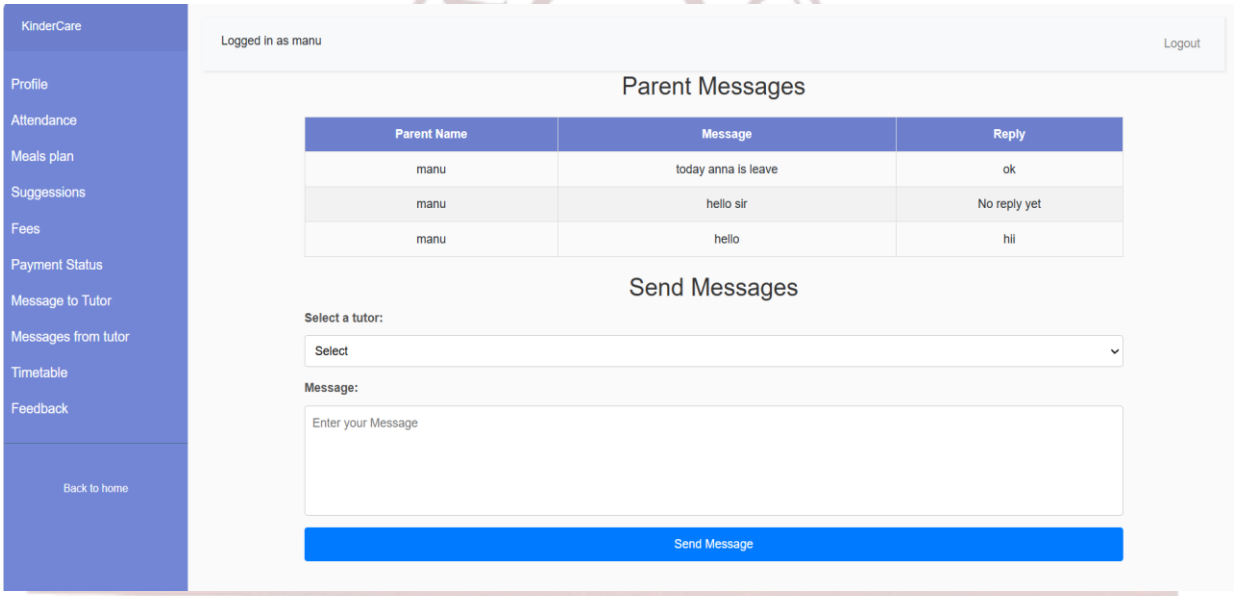


Payment page

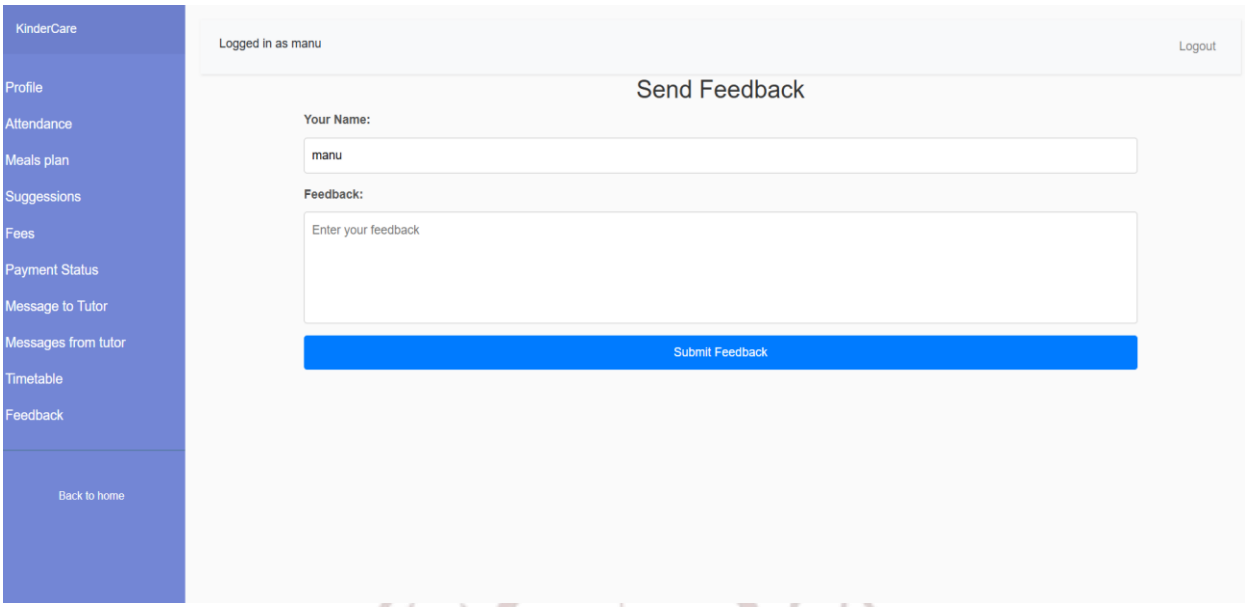




Message page

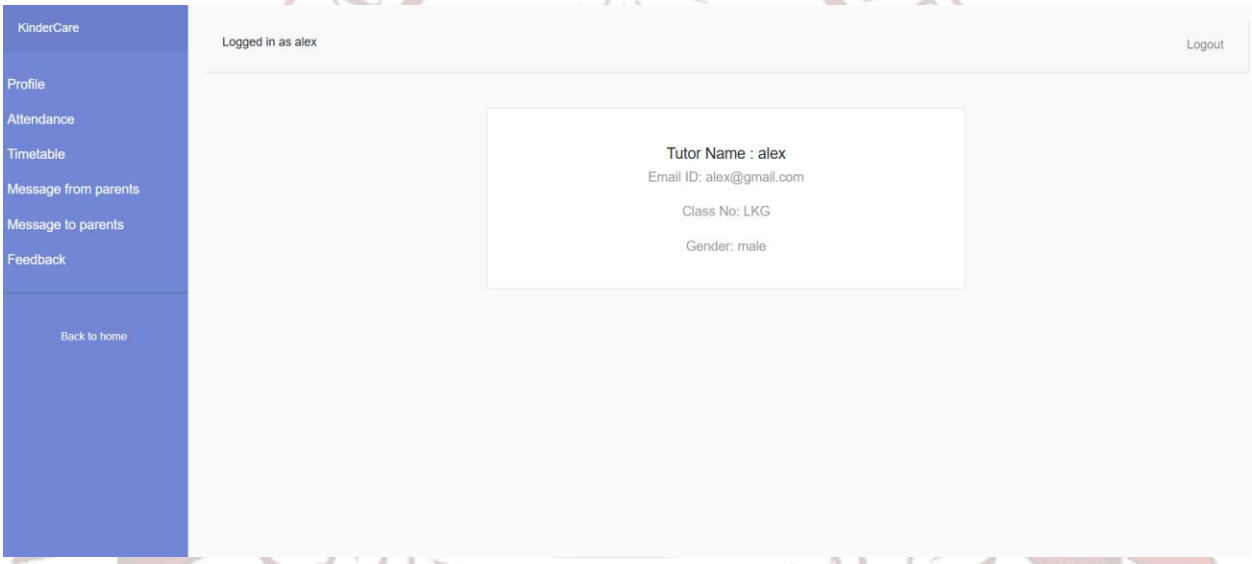


Parent feedback

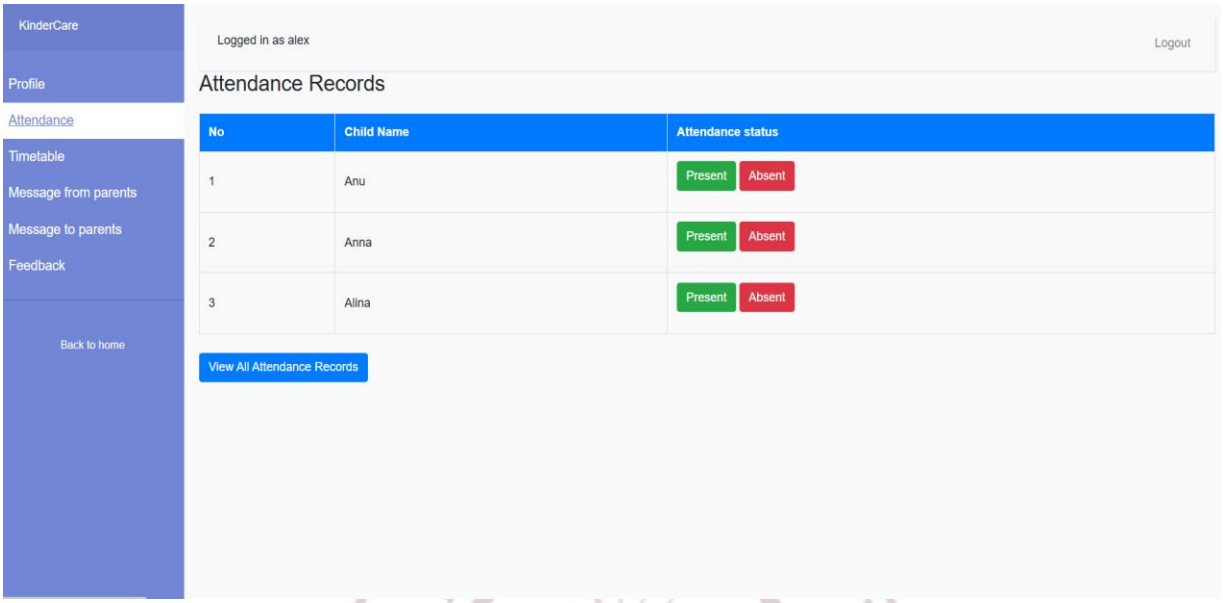


Tutor-side

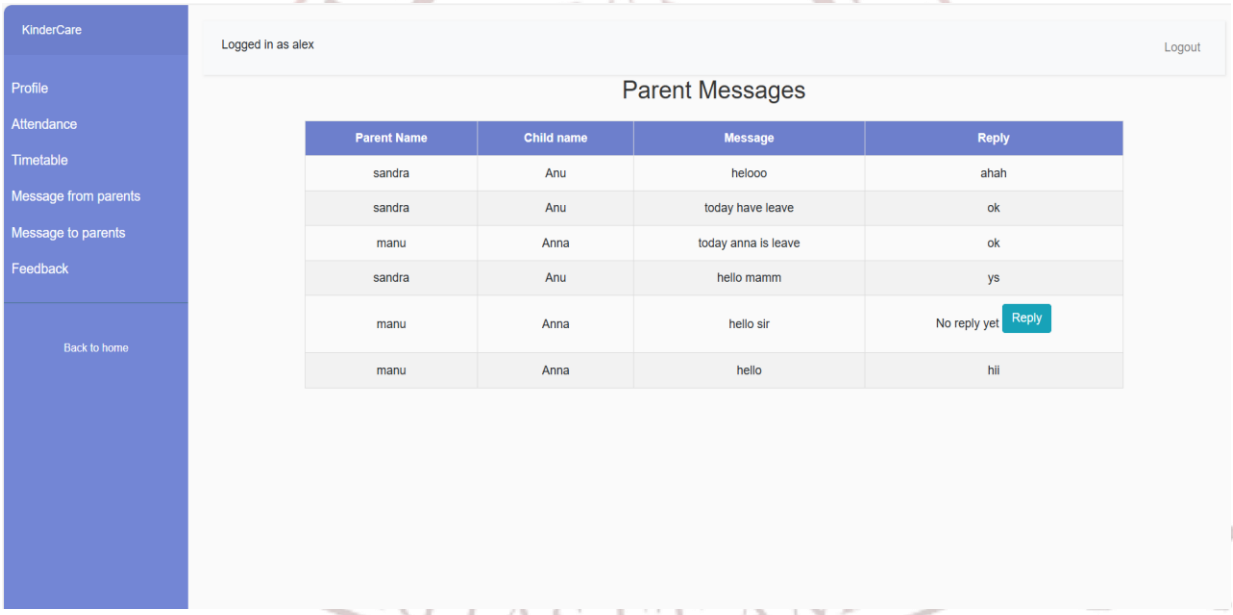
Tutor profile page



Attendnace adding page



Parent message page



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3. Django : https://www.djangoproject.com/download/
4. Bootstrap: https://getbootstrap.com/docs/4.0/getting-started/download/
5. https://www.w3schools.com/w3css/w3css_downloads.asp
6. https://www.free-css.com/free-css-templates/page291/elearning