

COLLEGE CODE : 9222

**COLLEGE NAME : THENI KAMMAVAR SANGAM COLLEGE OF
TECHNOLOGY**

DEPARTMENT : B.TECH(IT)

STUDENT NM-ID : FEEFB73EB0DDFF6AEB749DEF14E540EA

ROLL NO : 922223205043

DATE : 23/10/2025

Completed The Project Named As

PHASE 5

NAME : IBM-NJ-STUDENT GRADING SYSTEM

SUBMITTED BY,

NAME : SARAN S

MOBILE NO : 6385375606

Project Demonstration & Documentation

Title: Student Grading System

1. Final Demo Walkthrough

A complete walkthrough of the Student Grading System.

Show all key features: student registration, grade entry, grade calculation, report generation, etc.

Include a live demonstration or a video recording link (if applicable).

Mention technologies used (e.g., frontend, backend, database).

Highlight user roles (Admin, Teacher, Student)

2. Project Report

Introduction: Brief overview of the project and its purpose.

Objective: What the system aims to solve (automated grading, result management, etc.).

Technology Stack: Tools and frameworks used (e.g., React, Node.js, MySQL).

System Architecture: High-level design or architecture diagram.

Features: List and explanation of all major features.

Conclusion: Summary of outcomes and future improvements.

Program

```
<!DOCTYPE html>
```

```
<html lang="en">
```

```
<head>
```

```
<meta charset="UTF-8">
```

```
<title>Student Grading System</title>
```

```
<style>
```

```
body {

background-image:url("https://media.istockphoto.com/id/172413295/photo/an-up-close-picture-of-report-card?from_view=detail&from_opened_search=1&w=612&h=612&s=612x612&w=0&k=20&c=d95S74oUPLZA98yn6QKG0-6OEbgAqgroKzQWH5GxwKA=");

background-size: cover;

font-family: Arial, sans-serif;

padding: 20px;

background-color: #f2f2f2;

align-items: center;justify-content: center;

}

.container {

background-color: #fff;

padding:50px;

border-radius: 10px;

max-width: 500px;

margin: auto;

box-shadow: 0 0 10px rgba(0, 0, 0, 0.1);

}

h2 {

text-align: center;

color: #333;

}

label {

display: block;

margin: 10px 0 5px;

}

input {

width: 100%;
```

```
padding: 8px;

margin-bottom: 15px;

border: 1px solid #ccc;border-radius: 5px;
}

button {

width: 100%;

padding: 10px;

background-color: #4CAF50;

color: white;

border: none;

border-radius: 5px;

cursor: pointer;

}

button:hover {

background-color:green;

}

.result {

margin-top: 20px;

font-weight: normal;

}

</style>

</head>

<body>

<div class="container">

<h2>Student Grading System</h2><label for="name">Student Name:</label>

<input type="text" id="name" placeholder="Enter student name">
```

```
<label for="subject1">Subject 1 Marks:</label>

<input type="number" id="subject1" placeholder="Enter marks out of 100">

<label for="subject2">Subject 2 Marks:</label>

<input type="number" id="subject2" placeholder="Enter marks out of 100">

<label for="subject3">Subject 3 Marks:</label>

<input type="number" id="subject3" placeholder="Enter marks out of 100">

<label for="subject4">Subject 4 Marks:</label>

<input type="number" id="subject4" placeholder="Enter marks out of 100">

<label for="subject5">Subject 5 Marks:</label>

<input type="number" id="subject5" placeholder="Enter marks out of 100">

<button onclick="calculateGrade()">Calculate Grade</button>

<div class="result" id="result"></div>

</div>

<script>

function calculateGrade() {

const name = document.getElementById('name').value.trim();const subjects = [

parseFloat(document.getElementById('subject1').value),

parseFloat(document.getElementById('subject2').value),

parseFloat(document.getElementById('subject3').value),

parseFloat(document.getElementById('subject4').value),

parseFloat(document.getElementById('subject5').value)

];

const resultDiv = document.getElementById('result');

// Validation

if (!name || subjects.some(mark => isNaN(mark) || mark < 0 || mark > 100)) {

resultDiv.innerHTML = "⚠ Please enter a valid name and marks (0-100) for all subjects.";
```

```
resultDiv.style.color = 'red';

return;

}

const total = subjects.reduce((sum, mark) => sum + mark, 0);

const average = total / subjects.length;

let grade;

if (average >= 90) grade = 'A+';

else if (average >= 80) grade = 'A';

else if (average >= 70) grade = 'B';

else if (average >= 60) grade = 'C';

else if (average >= 50) grade = 'D';

else grade = 'F';resultDiv.style.color = 'black';

resultDiv.innerHTML = `

<strong>${name}</strong><br>

Total Marks: ${total} / 500<br>

Average: ${average.toFixed(2)}<br>

Grade: <strong>${grade}</strong>

`;

}

</script>

</body>

</html>
```

3. Screenshots / API Documentation

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <title>Student Grading System</title>
  <style>
    <body>
      {
        background-image: url("https://media.istockphoto.com/id/172413295/ph
        background-size: cover;
        font-family: Arial, sans-serif;
        padding: 20px;
        background-color: #f2f2f2;
        align-items: center;
        justify-content: center;
      }

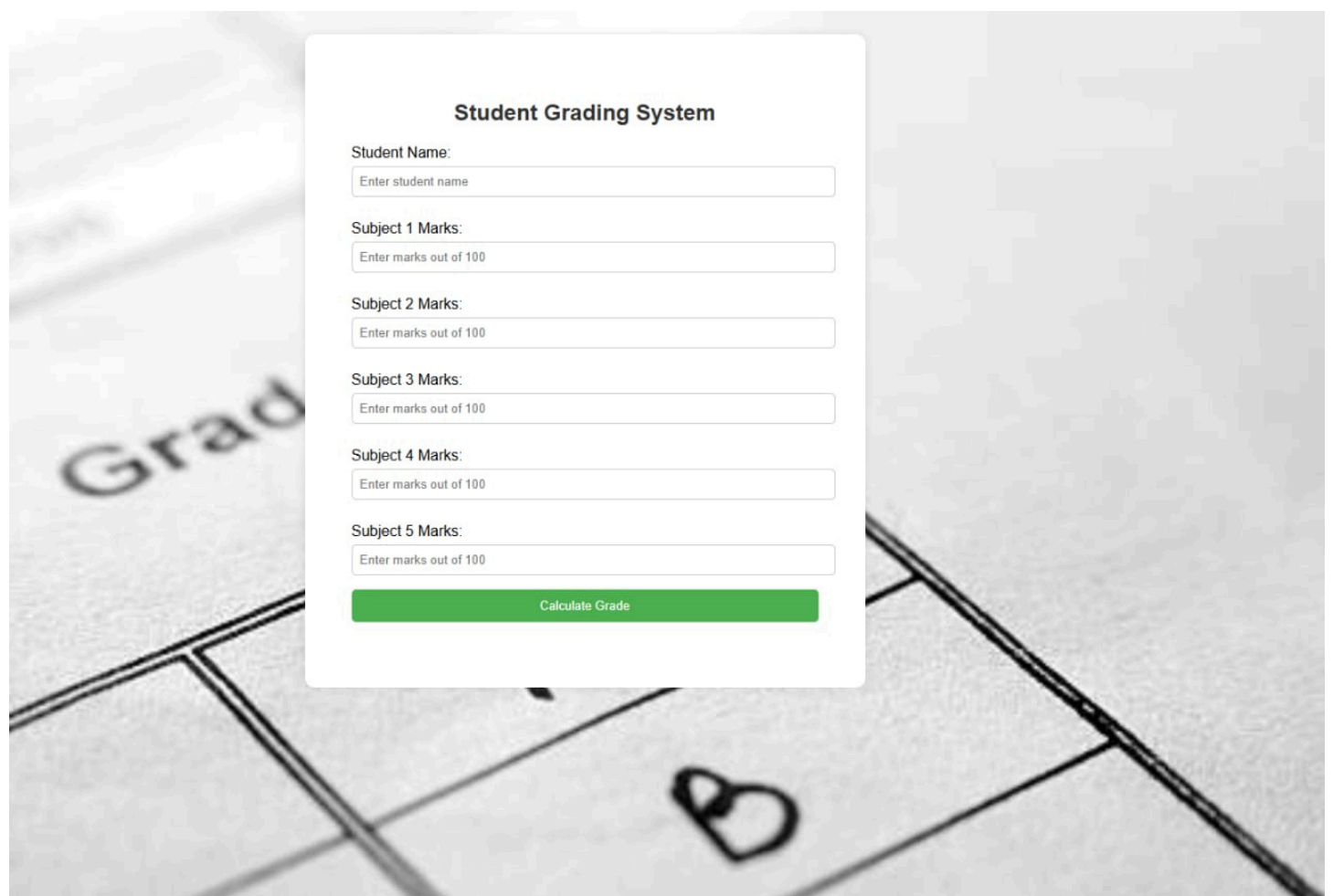
      .container {
        background-color: #fff;
        padding: 50px;
        border-radius: 10px;
        max-width: 500px;
        margin: auto;
        box-shadow: 0 0 10px rgba(0, 0, 0, 0.1);
      }

      h2 {
        text-align: center;
        color: #333;
      }

      label {
        display: block;
        margin: 10px 0 5px;
      }

      input {
        width: 100%;
        padding: 8px;
        margin-bottom: 15px;
        border: 1px solid #ccc;
        border-radius: 5px;
      }

      button {
        width: 100%;
        padding: 10px;
        background-color: #4CAF50;
        color: white;
      }
    </body>
  </style>
</head>
<body>
  <div class="container">
    <h2>Student Grading System</h2>
    <div>
      <label>Student Name:</label>
      <input type="text" value="Enter student name">
    </div>
    <div>
      <label>Subject 1 Marks:</label>
      <input type="text" value="Enter marks out of 100">
    </div>
    <div>
      <label>Subject 2 Marks:</label>
      <input type="text" value="Enter marks out of 100">
    </div>
    <div>
      <label>Subject 3 Marks:</label>
      <input type="text" value="Enter marks out of 100">
    </div>
    <div>
      <label>Subject 4 Marks:</label>
      <input type="text" value="Enter marks out of 100">
    </div>
    <div>
      <label>Subject 5 Marks:</label>
      <input type="text" value="Enter marks out of 100">
    </div>
    <button type="button" value="Calculate Grade">
  </div>
</body>
</html>
```

The screenshot shows a web browser displaying a "Student Grading System" form. The form is centered on a white background with a subtle grid pattern. It features a title "Student Grading System" in bold black text. Below the title, there are five input fields, each preceded by a label: "Student Name:", "Subject 1 Marks:", "Subject 2 Marks:", "Subject 3 Marks:", and "Subject 4 Marks:". Each input field contains a placeholder text "Enter student name" or "Enter marks out of 100". At the bottom of the form, there is a green button with the text "Calculate Grade". The background of the browser window shows a blurred image of a document with the word "Grade" and a large letter "B".

4. Challenges & Solutions

Challenge 1: Handling dynamic grading scales

Solution: Created a flexible grading logic with configurable rules.

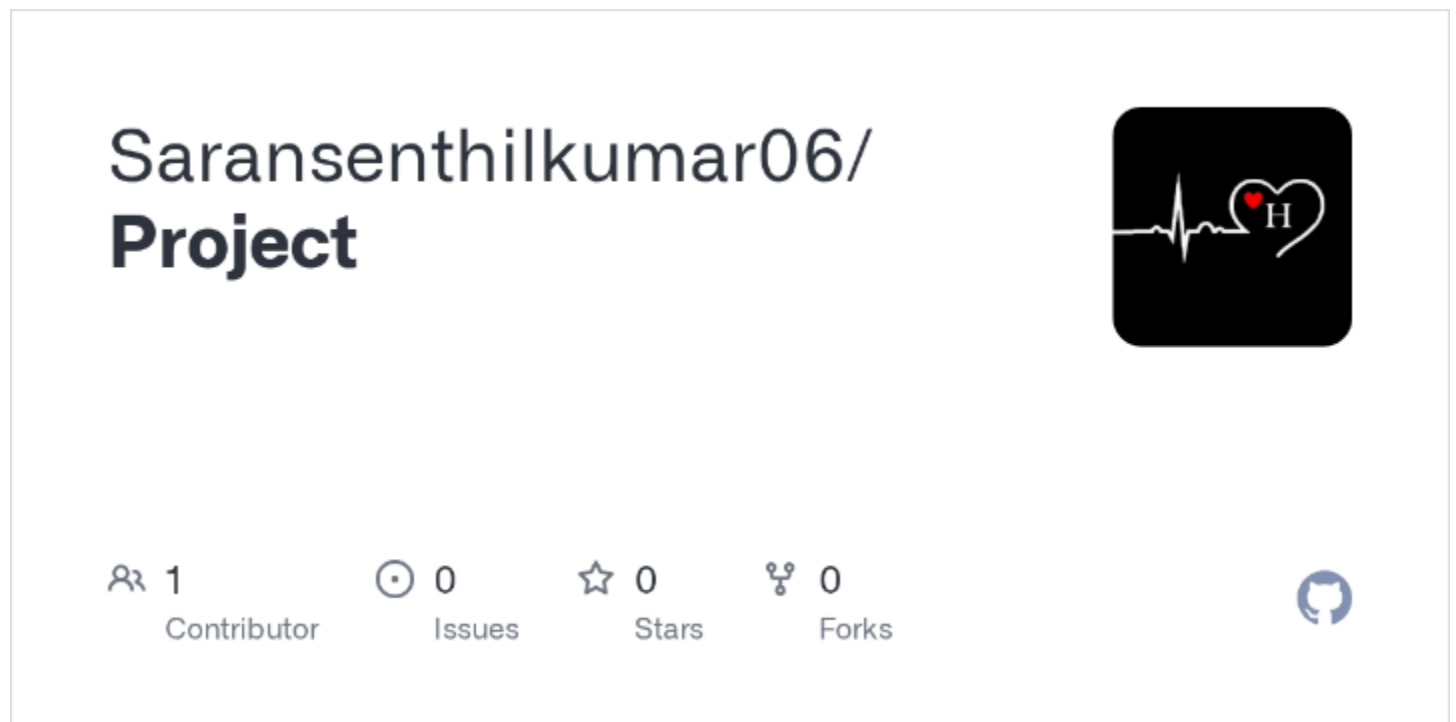
Challenge 2: Securing student data

Solution: Implemented JWT authentication and hashed passwords.

Challenge 3: Deploying with database connectivity

Solution: Used environment variables and cloud database (e.g., MongoDB Atlas / Firebase / Railway).

5. Hithub README



6.Final Submission

Saransenthilkumar06/ **Project**



1

Contributor



0

Issues



0

Stars



0

Forks

