

COLLEGE CODE: 9222

COLLEGE NAME: THENI KAMMAVAR SANGAM COLLEGE

OF

TECHNOLOGY

DEPARTMENT: B.TECH(IT)

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DATE: 23/10/2025

Completed The Project Named As

PHASE 5

NAME: IBM-NJ-STUDENT GRADING SYSTEM

SUBMITTED BY,

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Project Demonstration & Documentation

Title:Student Greading 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?
grades.jpg?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;
```

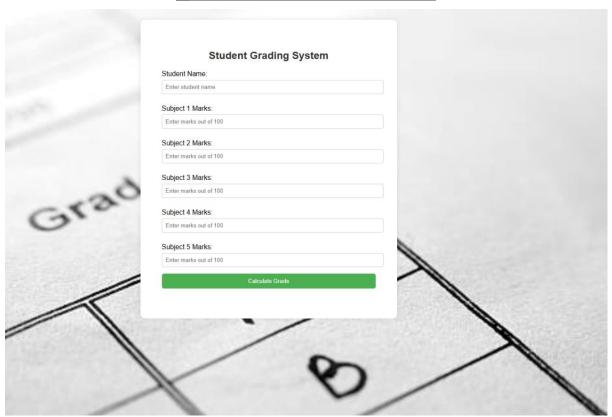
```
margin: auto;
box-shadow: 0 0 10px rgba(0, 0, 0, 0.1);
}
h2 {
text-align: center;
color: #333;
}
label {
display: block;
margin: 10px 0 5px;
}
input {
width: 100%;
padding: 8px;
margin-bottom: 15px;
border: 1px solid #ccc;border-radius: 5px;
}
button {
width: 100%;
padding: 10px;
background-color: #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 = "A 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



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

https://github.com/kalanrithik/Project-.git

6.Final Submission

https://github.com/kalanrithik/Project-.git