

COLLEGE CODE:[8223]

COLLEGE NAME:[vandayar engineering college]

DEPARTMENT:[Computer Science And Engineering]

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Completed the project named as

Phase-1

TECHNOLOGY PROJECT NAME: STUDENT GRADING SYSTEM

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1. **PROBLEM STATEMENT**

In most educational institutions, student performance evaluation is still carried out using manual registers, spreadsheets, or outdated software. These methods are inefficient, prone to human error, and lack transparency. Teachers spend a significant amount of time calculating grades, while students receive delayed or sometimes incorrect results.

There is also a lack of centralized platforms where all stakeholders (students, teachers, parents, and administrators) can track academic performance in real time. Mismanagement of marks leads to disputes, reduced trust in the system, and difficulty in maintaining historical records.

A STUDENTS GRADING SYSTEM AIMS

TO SOLVE THESE PROBLEMS BY:

Providing a centralized and secure platform for grade management.

Automating grade calculations based on predefined grading rules.

Ensuring transparency and accessibility for students, teachers, and parents.

Reducing administrative workload by generating automated reports.

2.USERS & STAKEHOLDERS

Primary Users

- ❖ **Students → View their subject-wise marks, grades, GPA/CGPA, and performance reports.**
- ❖ **Teachers → Upload marks, calculate grades, and monitor student performance.**

Secondary Users

- ❖ **Parents → Track their child's performance and monitor academic growth.**
- ❖ **Department Heads / Coordinators → Review reports to identify weak students and improve teaching strategies.**

Stakeholders

- ❖ **School/College Management → Ensure transparency and efficiency in result processing.**

- ❖ **Examination Cell → Oversee marks entry, grading policies, and publishing results.**
- ❖ **System Administrators → Maintain data security, user access, and backups.**

3. USER STORIES

As a student, I want to check my grades instantly so that I know where I stand academically.

As a student, I want to download my mark sheets so that I can use them for future applications.

As a teacher, I want to upload marks online so that the system can calculate grades automatically.

As a teacher, I want to analyze student performance so that I can give feedback and guidance.

As a parent, I want to check my child's grades so that I can monitor progress and provide support.

As a department head, I want to generate class-wise reports so that I can compare performance across subjects.

As an admin, I want to manage roles, subjects, and grading policies so that the system remains flexible.

4. MVP FEATURES (MINIMUM VIABLE PRODUCT)

- I. User Authentication (Students, Teachers, Parents, Admin)**
- II. Marks Entry Module – Teachers can add subject-wise marks.**
- III. Automated Grade Calculation – System calculates grades (A, B, C, etc.) based on rules.**
- IV. Student Dashboard – Personalized view of marks, GPA, and performance charts.**
- V. Report Generation – Class-wise, subject-wise, and student-wise downloadable reports.**
- VI. Admin Module – User management, grading policy configuration, academic year setup.**
- VII. Parent Portal – Access to student performance and attendance data.**
- VIII. Notification System – Email/SMS alerts for published results.**

5. WIREFRAMES / API ENDPOINT LIST

Wireframes (Screen Mockups)

- 1. Login Page → Role-based login (Student/Teacher/Admin/Parent).**
- 2. Student Dashboard → Shows subject marks, grades, GPA, attendance, and downloadable reports.**
- 3. Teacher Dashboard → Add marks, view student progress, generate reports.**
- 4. Admin Dashboard → Manage users, subjects, grading rules, and system settings.**
- 5. Parent Dashboard → View child's results and academic reports.**

6. **ACCEPTANCE CRITERIA**

- ❖ **Students should be able to securely login and view their results.**
- ❖ **Teachers should be able to upload marks quickly and accurately.**
- ❖ **The system should automatically calculate grades using predefined formulas.**
- ❖ **Admin should be able to define grading rules (percentage → grade mapping).**
- ❖ **Parents should have read-only access to their child's results.**
- ❖ **Reports must be downloadable in PDF/Excel format.**
- ❖ **System must handle multiple academic years and maintain history of grades.**

❖ **Data security should be ensured with role-based access control.**

❖ **Notifications must be sent to students once grades are published**