

----*Digital Classroom*---

Focus → Teaching, learning, and interaction.

Main Features (as you listed):

Student dashboard (attendance %, grade %).

Notice board for updates.

Time table & curriculum view.

Important exam/mid dates.

Subject-wise learning materials (PDFs, notes, videos, links).

Assignments with deadlines.

Quizzes/tests after each class (for progress tracking).

Mentor uploads lectures & resources.

Teachers manage attendance, upload resources, create polls.

Admin = manage timetable, notices, curriculum, oversee everything.

Basically, Digital Classroom = Learning + Content + Student–Teacher interaction.
It's closer to Google Classroom, Microsoft Teams for Education, or Moodle.

designing a webpage for student where he can view his attendance percentage, grade percentage in studies, clg notice board for updates, time table of classes, Curriculum of that particular sem, important dates of mids, sem exams, subjects wise view of uploaded documents, video links, notes sent by subject mentor. assignments that need to do. test to take etc.

for teacher interface..for each subject he should be able to manage to upload files, videos & delete files, videos. create a small test after every class to calculate their student progress in that subject. should access a interface where he can create the test for students. create a assignment with dead line. have an access to give Attendance (should be capable of creating/conducting polls)->this can be taken as optional.

now their will a admin where he keeps uploading notices, decides the time table, create the curriculum for students. creating the courses and appointing(appointing in the sense register the teacher for that particular course and creating user&password for login of teacher(in shot registration of teacher))the teacher. Admin has the access to update, change, add course/teacher.

NOTE: whole design of the system is done based on assumption of having only one sem, one class like E3-s1.

feature updates:

- 1.) creating the discussion column for each subjects to discuss the doubts.
- 2.) creating of live classes.
- 3.) create a section for student for writing up notes for each subject.
- 4.) updating it to for all p1 to p2 and E1-E2.

important details about project:

- 1.) mern stack is mandatory.
- 2.) project is database heavy clean creating of API is required of smooth functioning.
- 3.) since the teacher post documents they can be directing store in mongoDB meta data if users are very few. if more than need to move to cloud services to store. (cloud services are recommended).

references:

- 1.) <https://github.com/kimlimjustin/Classroom>
- 2.) <https://github.com/shamahoque/mern-classroom>