LMS Project Report

◆ Current Progress

- **Authentication system** working with student & teacher roles.

- **Student Dashboard**

    o View learning modules.

    o Attempt challenges and submit via **text and/or file**.

    o My Submissions table → shows text, status, remarks, points.

- **Teacher Dashboard**

    o Add/manage modules.

    o View student challenge submissions.

    o Approve/Reject submissions with remarks.

    o Award points and badges.

- **File Upload System**

    o Students can upload files (images, pdfs, docs).

    o Teachers can preview/download uploaded files.

- **Gamification**

    o Points awarded for challenges and quizzes.

    o Badges awarded by teachers.

Current DB Schema: -

1. users

Stores all registered users.

- id (PK)
- name
- email (unique)
- password (hashed)
- role → student / teacher
- points → total points earned (from quizzes + challenges)
- created_at

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2. modules

Main learning modules.

- id (PK)
- title
- description
- status → active/inactive
- sequence → order of unlocking
- created_at

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3. module_contents

Stores content parts of a module.

- id (PK)
- module_id (FK → modules.id)
- title
- content_type → text, video, file, etc.

- file_path → path to uploaded file (if applicable)
- created_at

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4. module_videos

Videos linked to a module.

- id (PK)
- module_id (FK → modules.id)
- title
- video_path → stored path of video file
- created_at

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5. module_progress

Tracks student progress in each module.

- id (PK)
- student_id (FK → users.id)
- module_id (FK → modules.id)
- status → locked/unlocked/completed
- quiz_passed (boolean)
- points_awarded
- score → last quiz score
- best_score → best attempt score
- completed_at → timestamp when completed
- current_steps → tracks ongoing progress steps

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6. challenges

Challenges created by teachers.

- id (PK)

- title

- description

- teacher_id (FK → users.id where role = teacher)

- created_at

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7. challenge_submissions

Student submissions for challenges.

- id (PK)

- challenge_id (FK → challenges.id)

- student_id (FK → users.id)

- text_submission

- file_submission → file path if uploaded

- status → pending / approved / rejected

- teacher_remark

- points_awarded

- submitted_at

- reviewed_at

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8. quizzes

Defines quizzes for modules.

- id (PK)
- module_id (FK → modules.id)
- title
- passing_score
- created_at

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9. quiz_questions

Questions inside quizzes.

- id (PK)
- quiz_id (FK → quizzes.id)
- question
- answer → correct answer
- created_at

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10. quiz_attempts

Stores attempts made by students.

- id (PK)
- student_id (FK → users.id)
- quiz_id (FK → quizzes.id)
- module_id (FK → modules.id)
- score
- passed (boolean)
- attempted_at

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11. badges

Catalog of badges.

- id (PK)
- title
- description
- icon_path
- points_required
- created_at

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12. user_badges

Badges earned by students.

- id (PK)
- user_id (FK → users.id)
- badge_id (FK → badges.id)
- awarded_at

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13. leaderboard

Tracks ranking of students.

- id (PK)
- user_id (FK → users.id)
- points → total accumulated points
- rank

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14. notifications

Announcements and alerts.

- id (PK)

- user_id (nullable → NULL = global, else specific student/teacher)

- title

- message

- created_at