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(AUTONOMOUS)

EDUTECH

23MCA245 - Mini Project

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**DEPARTMENT OF
COMPUTER APPLICATIONS**



ABSTRACT

EduTech

In today's dynamic educational environment, the need for personalized support to help students achieve their full potential is greater than ever. This paper presents the design and development of a multifaceted digital platform aimed at aiding students, particularly those who struggle academically, in their journey from basic proficiency to advanced levels of achievement. The platform leverages technology to provide an approach to student development, encompassing both academic excellence and extracurricular talent enhancement, including activities such as dance, music, and more.

MINI-PROJECT

STUDENTS:

1. LOGIN AND SIGN-UP.

2. Student Profile: Displays student's name, profile picture, and basic info. **3. Notifications:** Alerts for upcoming deadlines, new messages, and important updates.

4. Academics: Grades, assignments, and course materials, quiz and other. **5. Study Tools:** Interactive learning aids and resources.

6. Skill-Based Competitions and Challenges: Regular challenges or competitions related to different skills, such as coding, writing, or artistic performances.

7. Resource Links: Embed widgets that link to relevant educational resources, such as online tutorials, articles, or videos.

8. Personalized Tutoring and Support: Pair the student with a peer tutor who can provide support and explain concepts in an online and offline way.

10. Teach-Back Sessions: Implement teach-back sessions where students explain concepts to their peers, reinforcing their understanding and building confidence.

11. Study Groups: Find and join study groups based on subjects and interests. **12. To-Do List:** List of pending assignments and tests with deadlines.

13. Resource Library: Access a repository of materials, including worksheets, and multimedia resources.

14. Textbook Exchange: Implement a platform for students to buy, sell, or exchange textbooks and academic resources.



15. Student-Generated Content: Encourage students to create and share their own learning materials, such as study guides, summaries, and video tutorials.

16. Skill Swap Platforms:

- **Peer-to-Peer Learning:** Develop platforms where students can trade skills and teach each other various subjects, from

academic topics to practical skills.

- **Time Bank System:** Implement a time bank system where students earn credits for teaching others and can use those credits to learn new skills themselves.

TEACHERS:

- **Profile Information:** Displays teacher's name, profile picture, and basic info (e.g., subject taught, classes).

- **Notifications:** Alerts for student submissions, upcoming meetings, and important updates.

- **Quick Access:** Links to essential tools like email, calendar, and settings. ● **Students:** Track student performance, communication, assignment and support.

- **Grades:** Manage grading, feedback, and reports.

- **Alerts:** Notifications about students needing attention or support. ● **Weekly Schedule:** View and manage class tests, quiz, assignment including changes or cancellations.

- **Student List:** View profiles of all students in each class.

- **Message Center:** Communicate with students individually or in groups. ● **Parent Communication:** Tools for communicating with parents and guardians.

PARENTS:

- **Notifications:** Alerts for important updates, messages from teachers, and upcoming events.

- **Quick Access:** Links to frequently used features such as student profile. ● **Profile Information:** Displays parent's name and profile picture. ● **Communication:** Messages and updates from teachers and school administration.

- **Student Profile:** Basic information about the child including name, grade, and class.

- **Recent Grades:** Summary of recent grades or test scores.

HEAD OF DEPARTMENT:

- **Profile Information:** Displays HOD's name, profile picture, and role. ● **Notifications:** Alerts for important departmental updates, upcoming meetings, and deadlines.



- **Faculty Management:** Data on faculty performance, assignments, and professional development.
- **Student Performance:** Access to detailed student performance, attendance, and behavior data.
- **Critical Notifications:** Alerts about urgent issues or areas needing attention within the department.

MAIN PROJECT

Placement Officers:

- **Overview:** Quick summary of placement activities, upcoming events, and recent updates.
- **Notifications:** Alerts for new job postings, upcoming interviews, and important deadlines.
- **Student Profiles:** Access detailed student profiles, including resumes, academic records, and activity logs.
- **Skill Assessment:** View skill assessments and certifications
- **Job Board:** View and filter all available job postings by company, role, and deadline.
- **Audition Prep:** Offer resources and workshops on audition preparation, including mock auditions and feedback sessions.

Resume Building Tools and Resources:

A. Resume Templates:

- **Sports Templates:** Provide resume templates tailored for sports careers, focusing on relevant sections and formats.
- **Customizable Designs:** Offer templates that can be easily customized for different roles within the sports industry.

B. Resume Writing Guides

- **How-To Guides:** Provide step-by-step guides on writing and formatting resumes for sports careers.
- **Example Resumes:** Share sample resumes of professionals in the sports industry for reference and inspiration.

C. **Step-by-Step Wizard:** Implement a step-by-step wizard for creating resumes that guides users through each section.

A. Sports Career:

Showcase Opportunities:



- **Talent Showcases:** Organize events where students can perform or compete in front of sports professionals and recruiters.
- **Demo Days:** Host demo days where students can demonstrate their skills to potential employers or coaches.

Job Board:

- **Sports Job Listings:** Feature a job board with various roles such as coaching positions, sports management roles, and sports marketing jobs.
- **Internships and Freelance Opportunities:** Include listings for internships, part-time positions, and freelance opportunities in the sports industry.

Customized Job Alerts:

- **Job Notifications:** Send personalized job alerts based on students' profiles, skills, and interests.
- **Application Reminders:** Provide reminders for application deadlines and interview schedules.

Networking and Connection Features:

- **Professional Contacts:** Maintain a list of contacts in the sports industry, including coaches, agents, team managers, and sports organizations.

Super Admin:

- **Overview:** Summary of pending requests, recent approvals, and overall status.
- **Notifications:** Alerts for new requests and important updates.
- A. **Request Management:**
- **Pending Requests:** List of requests for accessing student details.
- **Approved Requests:** History of approved requests.
- **Denied Requests:** History of denied requests.

B. Student Details:

- **Student Profiles:** Access to detailed student profiles (with approval).
- **Request Details:** Information about the requestor and purpose.
- C. **Student Initiated Request:**
- **Request Form:** Students fill out a form requesting access to their details for higher studies or job applications.
- **Purpose Selection:** Specify the purpose (e.g., college application, job application).
- **Create and Manage Users:** Add, edit, and delete user accounts including students, faculty, staff, and other administrators.



- **Create and Update Courses:** Add new courses, edit existing ones, and remove outdated courses.
- **Upload and Manage Resources:** Add, edit, and delete educational content such as lecture notes, videos, assignments, and other learning materials.

Skill Gap Analysis Tool:

- Use classification algorithms to detect skill gaps based on performance data.
- Implement recommendation systems to suggest targeted learning resources and exercises means

Predictive Analytics for Academic Performance

- **Grade Prediction:** Implement models that predict students' future grades based on their current performance, attendance, and participation.
- **Early Warning System:** Identify students at risk of falling behind and send alerts to teachers and parents so they can provide timely support

Personalized Study Schedules

- **Schedule Optimization:** Use machine learning to create personalized study schedules that optimize learning efficiency and balance workload.
- **Reminders and Alerts:** Send reminders and alerts for upcoming assignments, tests, and study sessions.

Assignment Difficulty Assessment

- **Data Collection:** Gather data on assignment scores and difficulty ratings (if available).
- **Model Training:** Use classification models to categorize assignments by difficulty level.

Study Material Effectiveness:

- **Data Collection:** Collect data on marks and study materials used (e.g., textbooks, online resources).
- **Model Training:** Use regression analysis to assess the effectiveness of different study materials.

TOOLS:

- **Angular | Python | Node**
- **DataBase: MySQL**





