



Course Code & Title

CSE436 : Final Year Project

EduNest

A Full-Stack Learning Management System

Presented By

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Batch: CSE EVE 31

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ID: 222-112-017

Batch: CSE EVE 31

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Senior Lecturer, Dept. of CSE
Metropolitan University, Sylhet

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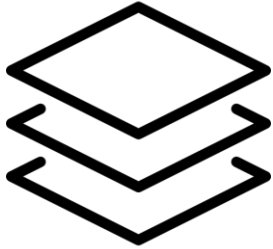
Impact & Conclusion

09

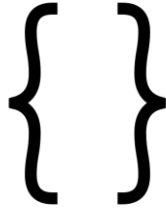
Question & Answer



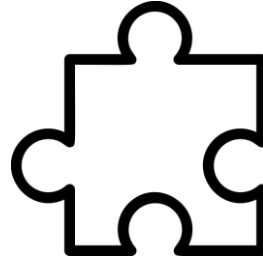
Why an LMS Project?



**Real-World
Complexity**



**Full-Stack Skill
Demonstration**



**Integration of
Key Services**



**High Market
Relevance**



Identifying the Gap: Market Insights



Global Opportunity

- \$490+ Billion
- Global E-Learning Market Size by 2029
- [researchandmarkets.com](https://www.researchandmarkets.com)



Local Market

- \$2.5+ Billion
- Projected Bangladesh Online Education Market by 2033
- IMARC Group



Growth Trajectory

- 24.4% CAGR
- Annual Growth Rate in Bangladesh
- IMARC Group

What is EduNest?



Why EduNest?



**Empower
Instructors**



**Seamless
Learning**



**Actionable
Analytics**

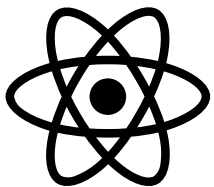


**Secure
Payments**





Tech Stack & Architecture



React



CSS3



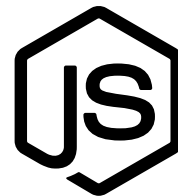
Vite



Tailwind



ShadCN



Node.js



Express.js



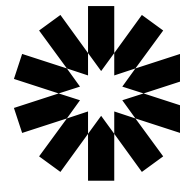
MongoDB



Stripe



Cloudinary



JWT



Nodemailer

User Roles & Features



Student

- Browse & Purchase Courses
- Track Learning Progress
- Take Quizzes & Get Certificates
- Ask Questions



Instructor

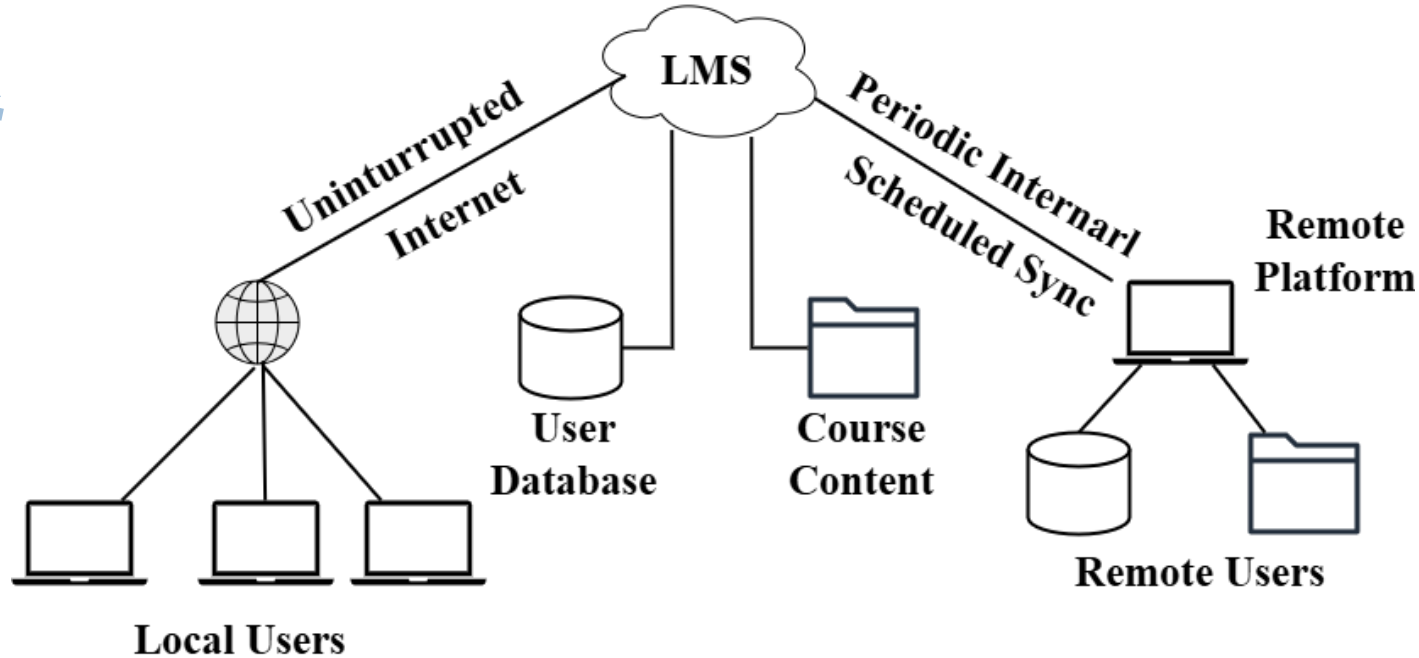
- Create & Manage Courses
- Upload Lectures & Videos
- View Sales Analytics
- Manage Payouts



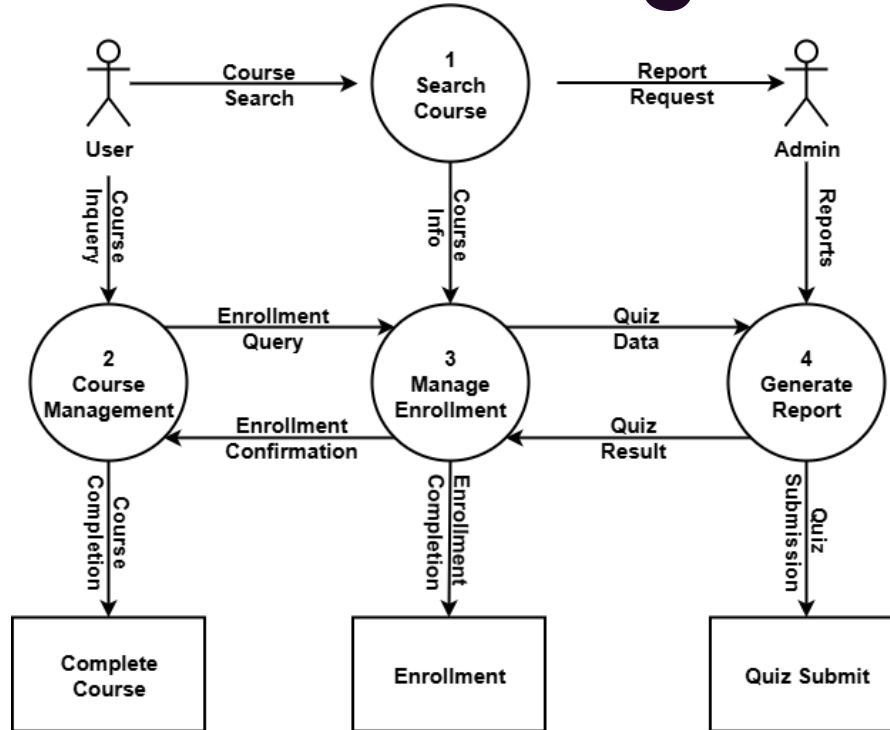
Admin

- Manage All Users & Courses
- Approve Instructor Applications
- Oversee Platform Financials
- Manage Site Categories

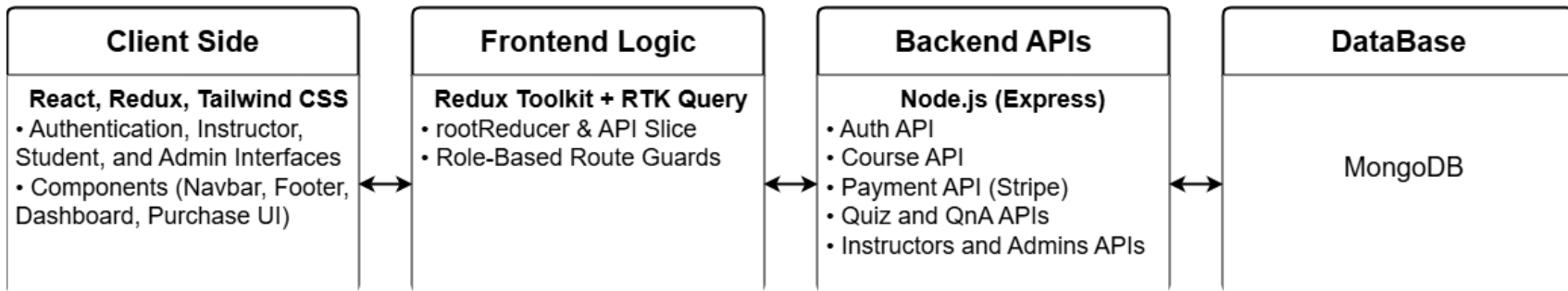
How it Works in Real Event



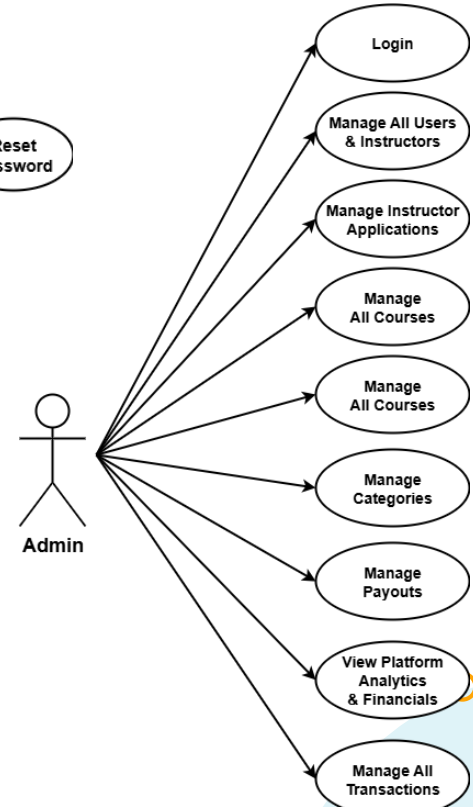
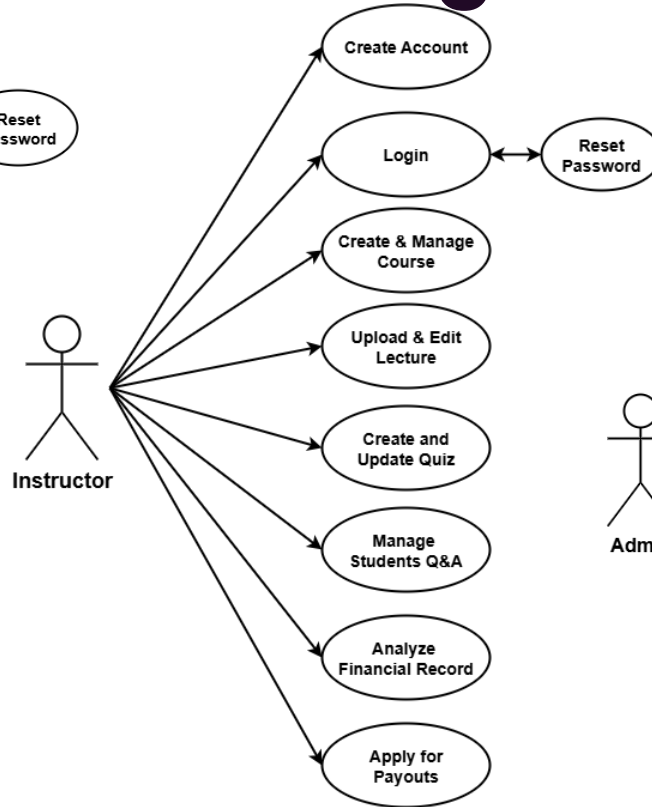
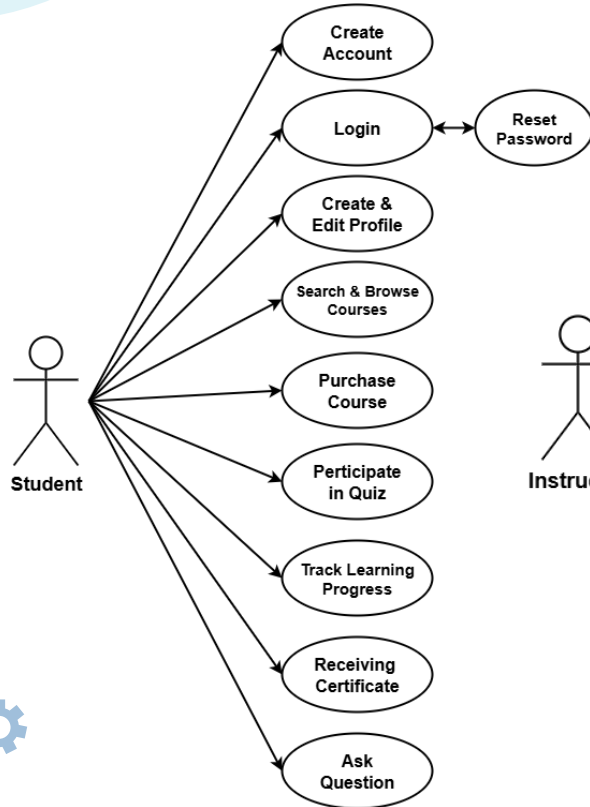
Data Flow Diagram



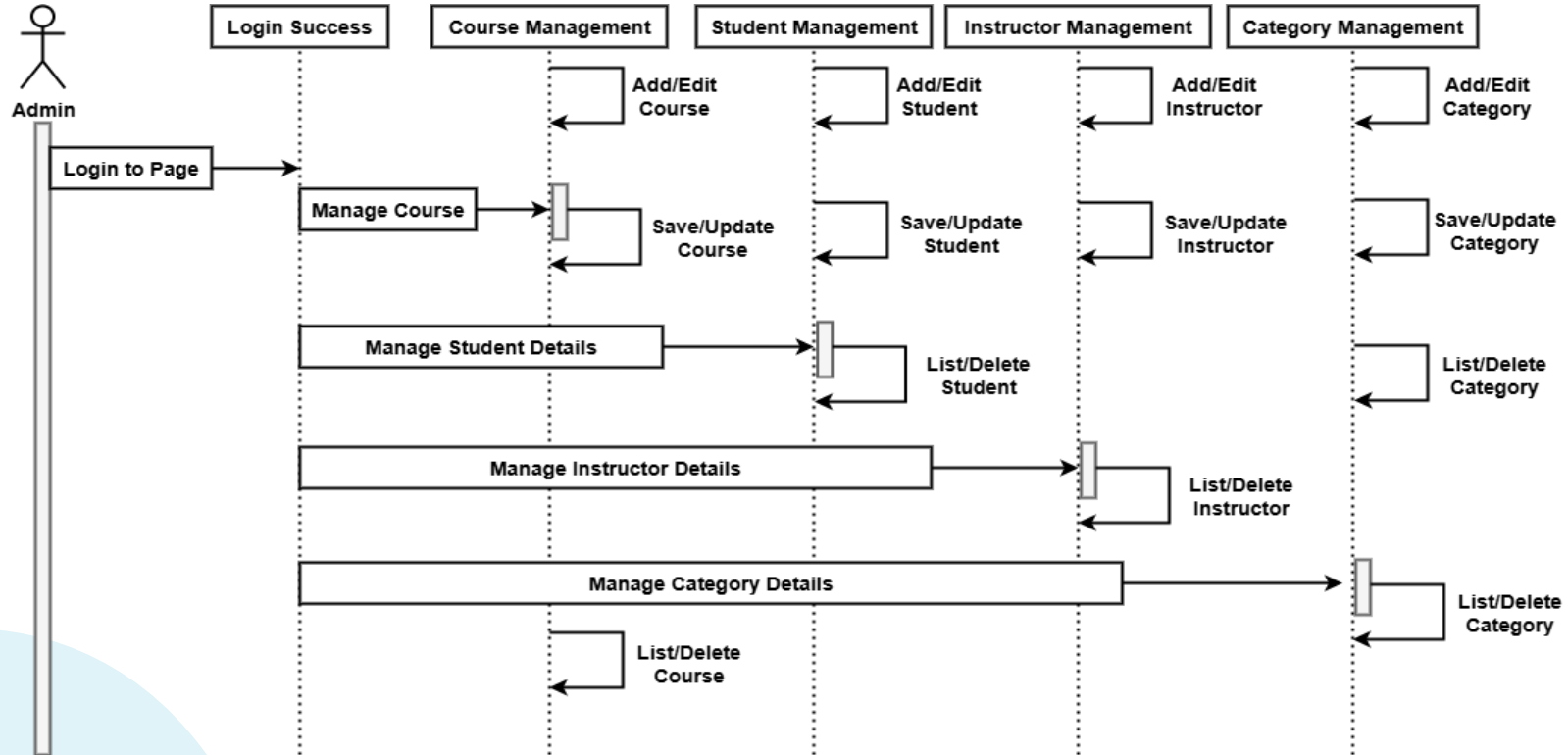
System Architecture Diagram



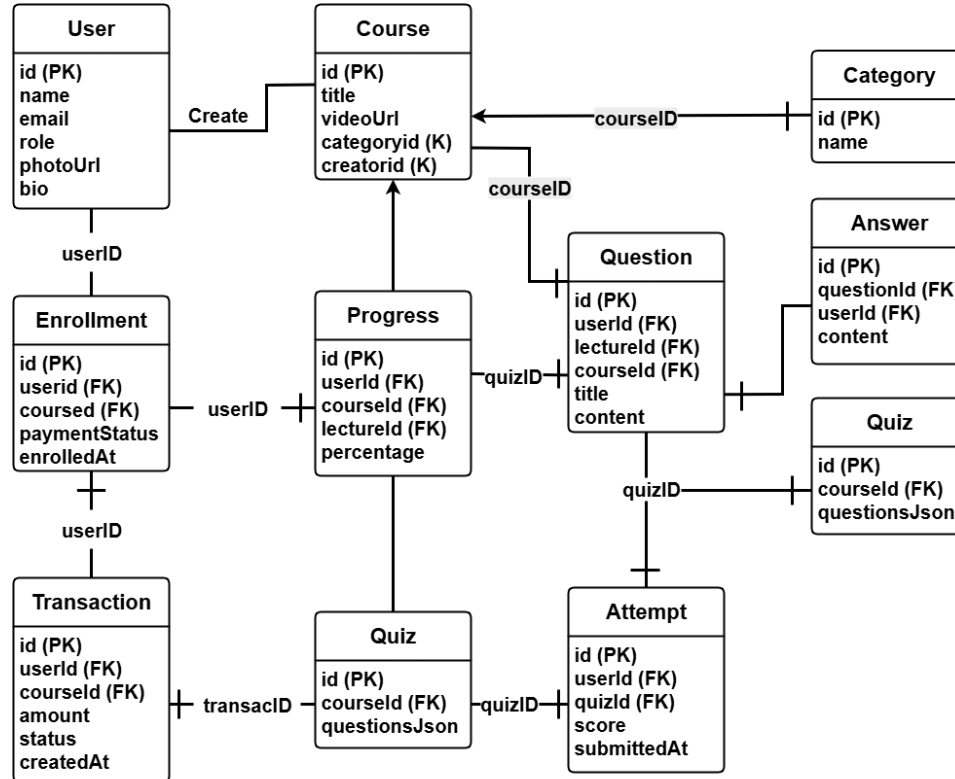
Use Case Diagrams



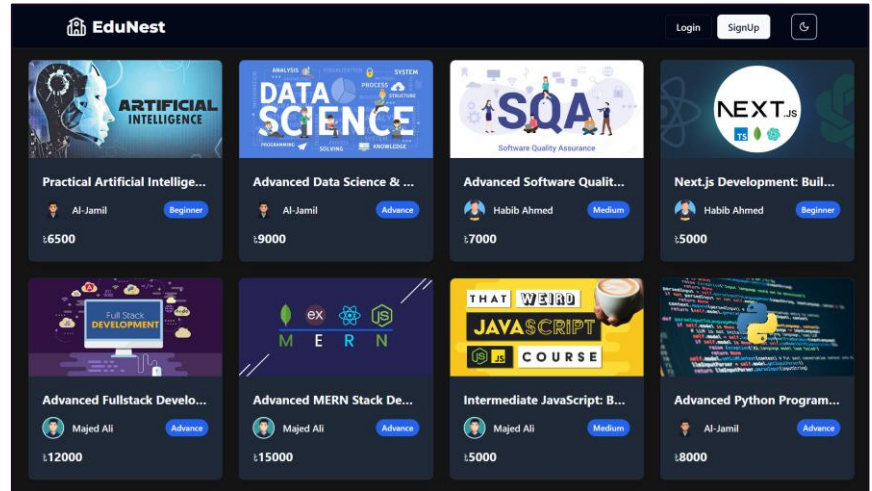
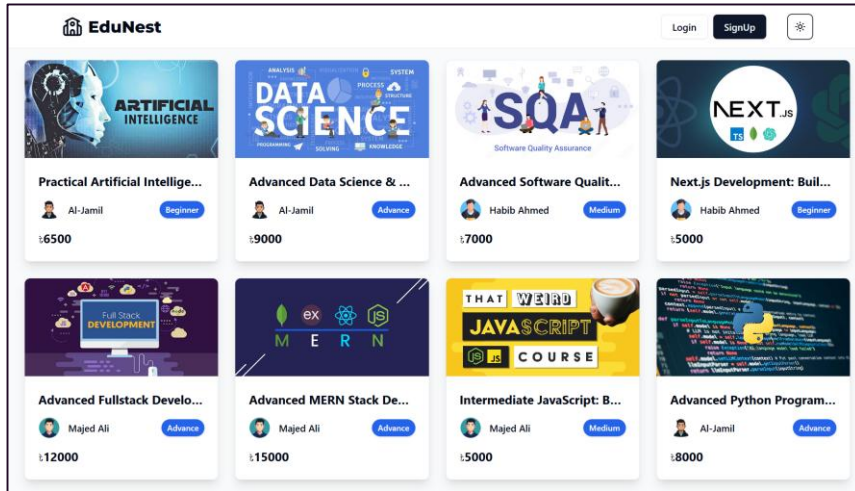
Sequence Diagram




Entity Relationship Diagram




Home Page



Signup & Login Page



Login **SignUp** 

Signup

Login

Signup

Create a new account. A verification link will be sent to your email.

Name

Email

Password

Signup



EduNest is Bangladesh's leading Upskilling & Job Placement Platform.



Quick Links

[Courses](#)
[My Learning](#)
[Become an Instructor](#)


Contact Us


 Rasos-52/A, Raynagar, Sylhet-3100
 operations@edunest.com
 +8801396641126

GUARANTEED SECURE PAYMENT

We Accept

Stripe **Master Card** **VISA**



Login **SignUp** 

Signup

Login

Login

Enter your credentials to access your account.

Email

Password

[Forgot Password?](#)

Login



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
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 operations@edunest.com
 +8801396641126



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We Accept

Stripe **Master Card** **VISA**

Student Profile Section








Haider Ali
grahoussitoita-8305@yopmail.com
Student

Account Details

Transactions

Account Information
Update your personal and educational details here.



Change Photo

Full Name
Haider Ali


Phone Number
01918286790



Gender
Male


Age
26

Current Occupation
Student

Address
18/B Payera, Sylhet Sadar








Haider Ali
grahoussitoita-8305@yopmail.com
Student

Account Details


Transactions

Transactions
Your history of all course purchases.




Course	Date & Time	Amount	Invoice
Advanced Data Science & Machine Learning	7/16/2025, 1:23:00 AM	9900	Download



EduNest
EduNest is Bangladesh's leading Upskilling & Job Placement Platform.




Quick Links
[Courses](#)
[My Learning](#)
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GUARANTEED SECURE PAYMENT


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Learning Section






MY LEARNING



Next.js Development: Building Scalable Web Applications

Habib Ahmed Beginner


₹5000




Practical Artificial Intelligence

Al-Jamil Beginner

₹6500






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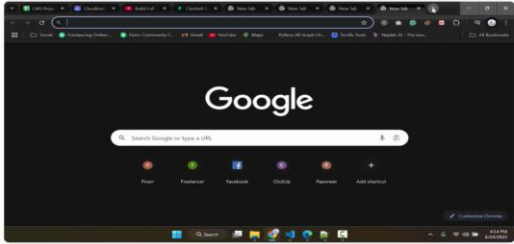
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Next.js Development: Building Scalable Web Applications

 Completed



Course Lectures

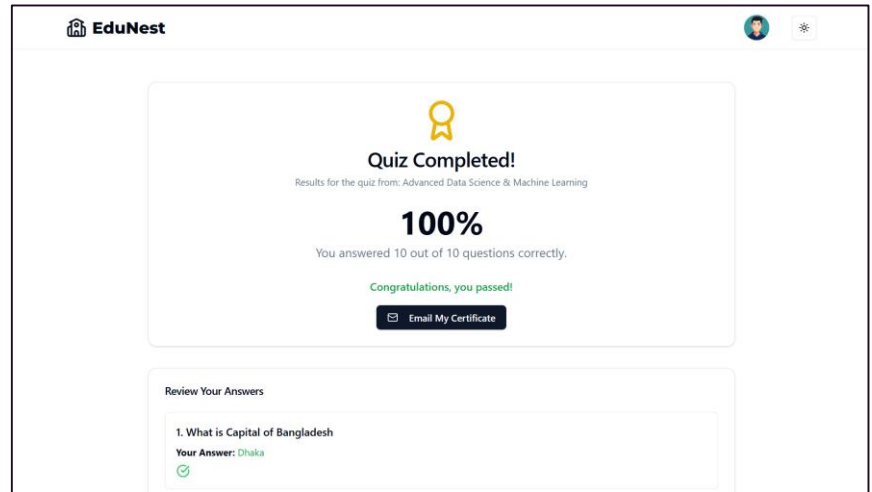
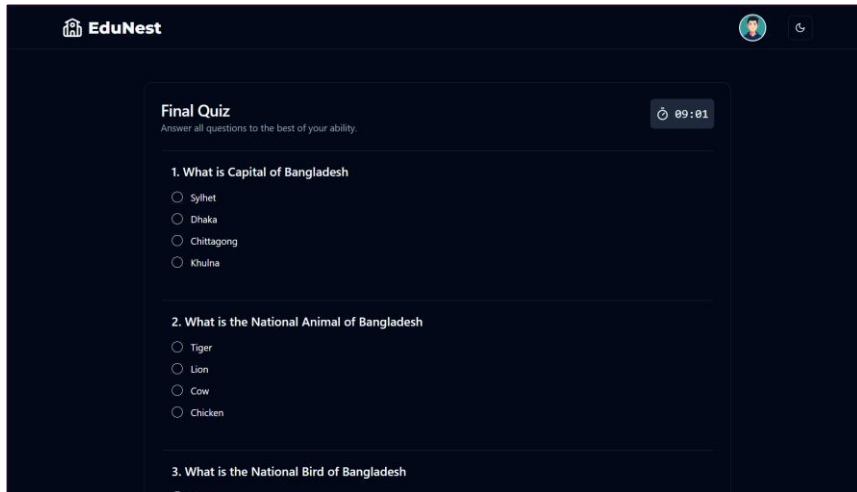
-  Next.js Fundamentals and Advanced Routing Completed
-  Data Fetching Strategies: SSR, SSG, ISR Completed
-  API Routes and Backend Integration Completed
-  Image Optimization and Performance Completed
-  Advanced Next.js Features and Patterns Completed
-  Deployment and Production Best Practices Completed

Lecture 1: Next.js Fundamentals and Advanced Routing

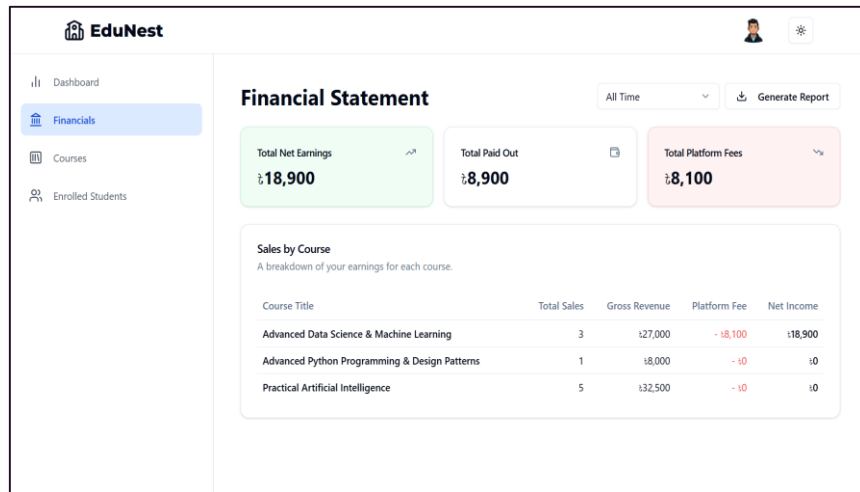
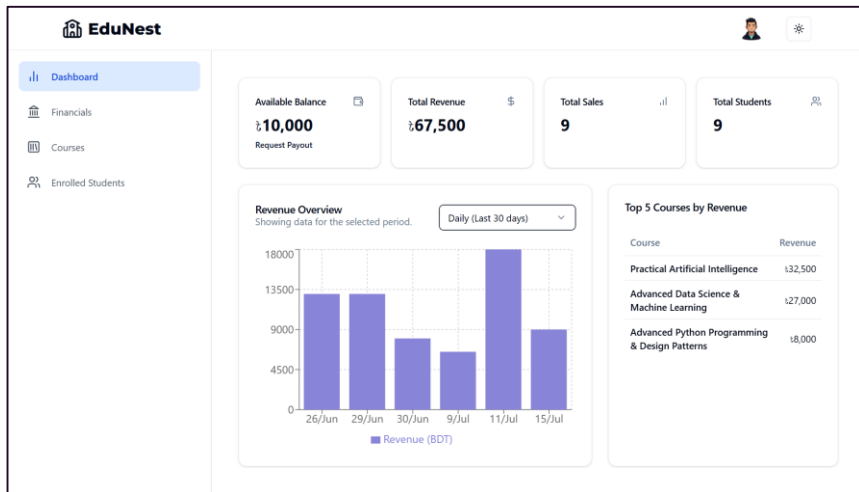
Questions & Answers

Ask Question


Quiz Section



Instructor Section



Course Management



Dashboard

Financials

Courses


Enrolled Students

Your Courses

Manage, edit, and view your created courses.


All Statuses

Create New Course




Advanced Python Programming & Design Patterns

Published ₹8000




Advanced Data Science & Machine Learning

Published ₹9000



Practical Artificial Intelligence

Published ₹6500



Dashboard

Financials









Courses

Enrolled Students

Enrolled Students

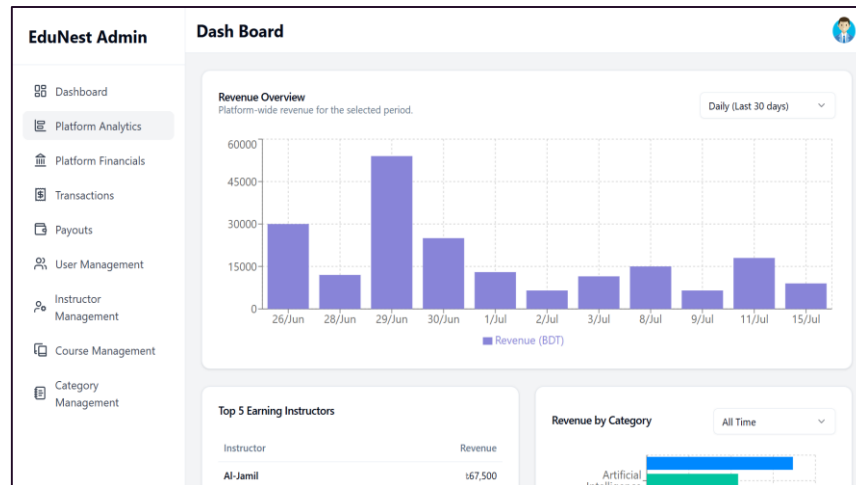
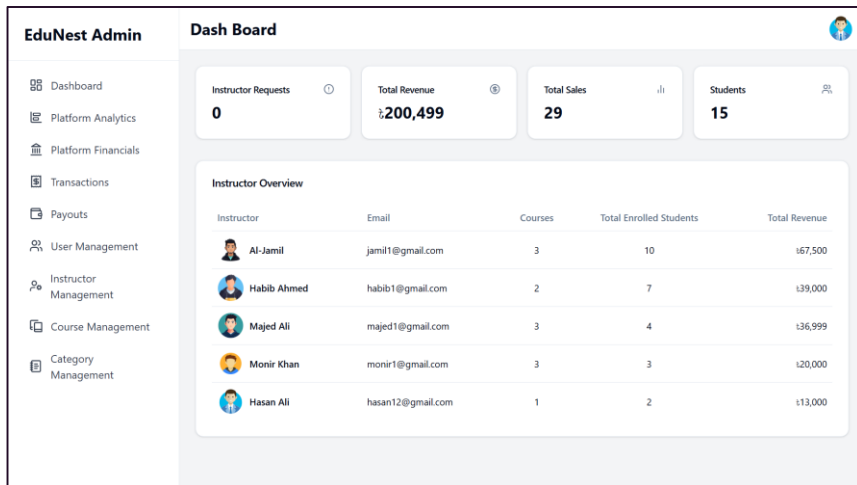
A list of all students enrolled in your courses.

All Courses

Student	Email	Enrolled Course	Progress	Enrolled
 Haider Ali	grahoussitoita-8305@yopmail.com	Advanced Data Science & Machine Learning	100%	7/16/2025
 Lalon Shah	trevecouhausei-7459@yopmail.com	Advanced Data Science & Machine Learning	100%	7/12/2025
 H Hasan Mia	zeyouppogreuddoi-9143@yopmail.com	Advanced Data Science & Machine Learning	100%	7/11/2025
 Ganguly Das	xiholydo@forexnews.bg	Practical Artificial Intelligence	100%	7/9/2025
 H Hasib Hossen	hasib32@gmail.com	Advanced Python Programming & Design Patterns	100%	6/30/2025
 Monir Khan	monir1@gmail.com	Practical Artificial Intelligence	100%	6/29/2025
 Hasan Ahmed	hasan1@gmail.com	Practical Artificial Intelligence	100%	6/29/2025
 Al-Jamil	jamil1@gmail.com	Practical Artificial Intelligence	100%	6/26/2025

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Admin Section



Transection Management

EduNest Admin

Dashboard

Platform Analytics

Platform Financials

Transactions

Payouts

User Management

Instructor Management

Course Management

Category Management

Dash Board

Platform Financials

All Time

Generate Report

Total Gross Revenue

₹200,499

Total amount paid by all students.

Net Platform Income

₹8,100

Total platform fees collected.

Total Instructor Earnings

₹192,399

Total amount earned by instructors.

Total Paid to Instructors

₹8,900

Total amount successfully paid out.

Pending Payouts

₹0

Amount waiting to be paid out.

EduNest Admin

Dashboard

Platform Analytics

Platform Financials

Transactions

Payouts

User Management

Instructor Management

Course Management

Category Management

Dash Board

Transaction Management

View and filter all transactions on the platform.

Search course, student, or instructor...

Filter by Month

Filter by Year

All Statuses

Clear Filters

Course Title	Student	Instructor	Amount	Status	Date
Advanced Data Science & Machine Learning	Haider Ali	Al-Jamil	₹9,000	Completed	7/16/2025
Advanced Data Science & Machine Learning	Lalon Shah	Al-Jamil	₹9,000	Pending	7/12/2025
Advanced Data Science & Machine Learning	Lalon Shah	Al-Jamil	₹9,000	Completed	7/12/2025
Advanced Data Science & Machine Learning	Hasan Mia	Al-Jamil	₹9,000	Completed	7/11/2025
Practical Artificial Intelligence	Ganguly Das	Al-Jamil	₹6,500	Pending	7/9/2025
Practical Artificial Intelligence	Ganguly Das	Al-Jamil	₹6,500	Completed	7/9/2025
Intermediate JavaScript: Beyond the Basics	Ganguly Das	Majed Ali	₹5,000	Completed	7/8/2025
Next.js Development: Building Scalable Web Applications	Ganguly Das	Habib Ahmed	₹5,000	Completed	7/8/2025

User Management

EduNest Admin

Dashboard

Platform Analytics

Platform Financials

Transactions

Payouts

User Management

Instructor Management

Course Management

Category Management

Dash Board

User Management

View all students and instructors and manage their status.









Create User

Search by name or email...

All Roles

All Statuses

All Applications

User	Role	Eligibility	Status	Actions
 Haider Ali grahousulota-8305@yopmail.com	Student	Eligible	Enabled	...
 Lalon Shah treveouhacuei-7459@yopmail.com	Student	Incomplete	Enabled	...
 Hasan Mia zeyouppogreuiddoi-9143@yopmail.com	Student	Incomplete	Enabled	...
 Ganguly Das shofyfyib@forenews.bg	Student	Eligible	Enabled	...
 Akbar Shah shahakbar1@yahoo.com	Student	Incomplete	Enabled	...
 Mahin Alam mahin21@gmail.com	Student	Incomplete	Enabled	...
 Ahmed Ali ahmedali31@gmail.com	Student	Incomplete	Enabled	...
 Hasan Ali hasan12@gmail.com	Instructor	N/A	Enabled	...

EduNest Admin

Dashboard

Platform Analytics

Platform Financials

Transactions

Payouts

User Management

Instructor Management

Course Management





















Category Management

Dash Board

Instructor Management

Manage instructor roles, view analytics, and delete accounts.

Search by name or email...

Instructor	Courses	Students	Status	Manage Role	Actions
 Al-Jamil	3	10	Enabled	Instructor	  
 Habib Ahmed	2	7	Enabled	Instructor	  
 Majed Ali	3	4	Enabled	Instructor	  
 Monir Khan	3	3	Enabled	Instructor	  
 Hasan Ali	1	2	Enabled	Instructor	  

Course Management (Admin Side)

EduNest Admin

Dashboard

Platform Analytics

Platform Financials

Transactions

Payouts

User Management

Instructor Management

Course Management

Category Management

Dash Board

Course Management

View and manage all courses on the platform.








Search by Title or Instruc

All Instructors

All Categories

All Statuses

All Deletion Statuses

Course	Instructor	Price	Status	Created At	Actions
 Mastering DevOps: From Fundamentals to Advanced Practices DevOps	Hasan Ali	₹6500	Published	7/2/2025	...
 Full Stack Web Development with ASP.NET Core ASP.NET Core	Monir Khan	₹7000	Published	7/1/2025	...
 App Development with Flutter App Development	Monir Khan	₹6000	Published	7/1/2025	...
 Docker for Beginners: Containerization Essentials Docker	Monir Khan	₹7000	Published	6/30/2025	...
 Advanced Python Programming & Design Patterns Python	Al-Jamil	₹8000	Published	6/30/2025	...
 Intermediate JavaScript: Beyond the Basics JavaScript	Majed Ali	₹5000	Published	6/30/2025	...
 Advanced MERN Stack Development & Deployment Web Development	Majed Ali	₹15000	Published	6/29/2025	...

EduNest Admin

Dashboard

Platform Analytics

Platform Financials

Transactions

Payouts

User Management

Instructor Management

Course Management

Category Management

















Dash Board

Category Management

Add, edit, or delete categories and view their performance.

Add New Category

Search by category name...

Category Name	Published Courses	Total Courses	Total Revenue	Date Created	Actions
Artificial Intelligence	1	1	₹32,500	7/1/2025	 
Software Quality Assurance	1	1	₹14,000	7/1/2025	 
Web Development	3	3	₹51,999	7/1/2025	 
JavaScript	1	1	₹10,000	7/1/2025	 
Python	1	1	₹8,000	7/1/2025	 
Docker	1	1	₹7,000	7/1/2025	 
App Development	1	1	₹6,000	7/1/2025	 
ASP.NET Core	1	1	₹7,000	7/1/2025	 

Future Implementation Scope



**Live
classes**



**Community
Forums**



**Leaderboards
Feature**



**Dedicated
Mobile Apps**



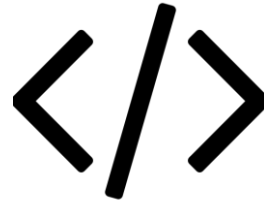
Impact & Significance



**Addresses
National
Needs**



**Empowers
Local
Talent**



**Demonstrates
Technical
Excellence**

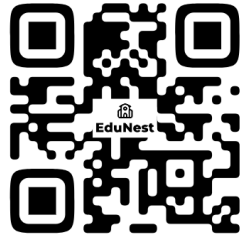


**Provides a
Foundation for
Growth**

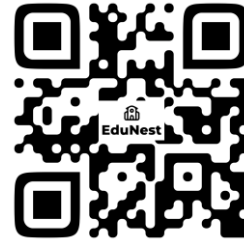


Thank You

Do you have any questions?



Scan to view a full video
demonstration of the project



Scan to access the
complete source code on GitHub