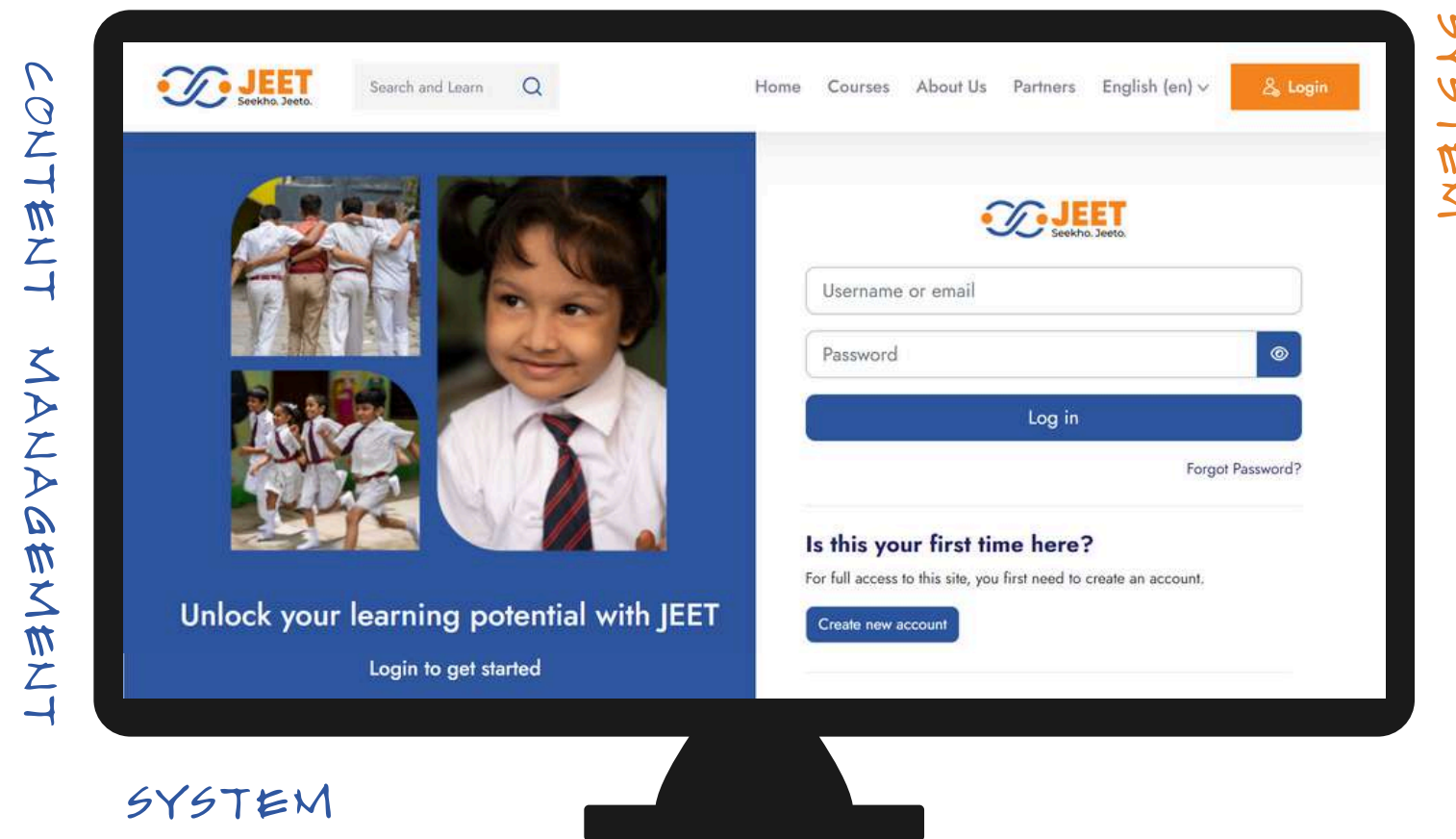


LEARNING MANAGEMENT



EdTech Case Study

Web Application
Development

iProgrammer **designed and developed** a tailored **Learning and Content Management System** designed **to provide cost-effective, user-friendly access** to quality education **for rural students, & teachers** supporting all state educational boards and government schools.



iProgrammer, in a nutshell



17 Years of Excellence

For 17 years, iProgrammer has excelled in bespoke product engineering and more.



300+ Products Live

Successfully delivered premier products across both web and mobile platforms to date.



Fortune India 500

iProgrammer has been the technology partner to Fortune India 500 - Hero Corp, Tata Communications and HDFC.



350+ Tech Team

We are more than 350 tech experts with a strong background in various leading technologies.



4 Million DAUs

Our B2C mobile application developed for Vodafone-Idea currently has 4 million daily active users (DAUs).



128 Million End Users

Our applications have been utilized by around 128 million end users globally.

Pain Points

JEET identified key challenges in the Indian education system, particularly **the inequality and lack of access to quality resources for disadvantaged students**. Rural children face limited access to digital learning, sports education, and vocational training. **Inadequate infrastructure and fragmented state curricula** worsen the gap, **highlighting the need for inclusive, scalable solutions**. There's also a **critical demand for cost-effective educational content for students up to standard XII, especially in underserved areas**.



Business Requirement

- Develop a **Learning Management System (LMS) and Content Management System (CMS)** specifically designed for rural children.
- The platform should be **freely accessible to students from government schools** only, ensuring that all state educational boards are represented within the application.
- Design a **cost-effective, user-friendly, and scalable solution** that would serve students and teachers in rural areas.
- **Optimize the platform for mobile devices**, as many rural students primarily use smartphones for learning.
- **Incorporate local languages (Hindi and English)** to cater to diverse linguistic regions across India.



Solutions

We offered the client a comprehensive web application platform, **integrating both the LMS and CMS** to meet their educational needs. The core requirement was to create an integrated LMS and CMS system that would be used by students and teachers in a **cost-effective manner, with a focus on rural accessibility.**



Moodle based Learning Management System

We restructured the **theme's architecture** to offer **modular support** for future upgrades, ensuring **seamless scalability**. Our development efforts focused on **improving security protocols**, implementing **multi-tenancy for diverse user groups**, and **refining mobile responsiveness**.



Improved User Experience

UI/UX adjustments specifically tailored to ensure **ease of use** for **rural children and government school teachers**, focusing on **simplicity, accessibility, and intuitive navigation**.



Cost-Effectiveness

iProgrammer recommended optimizing the platform's backend processes **to lower long-term operational costs** by **leveraging open-source technologies** and **utilizing efficient cloud services**.



Scalability

By utilizing **AWS services**, we ensured the platform **could scale seamlessly** to **accommodate a growing user base** while maintaining high performance.



Multi-Lingual System

The LMS is available in both **English and Hindi**, making it easier for rural students and government school teachers to use. This bilingual setup enhances **accessibility and ensures users can engage with the platform in their preferred language**.

TEAM INVOLVED

Key roles and expertise driving the development and customization of JEET LMS Platform.

Senior Moodle Developers

Senior QA Engineer

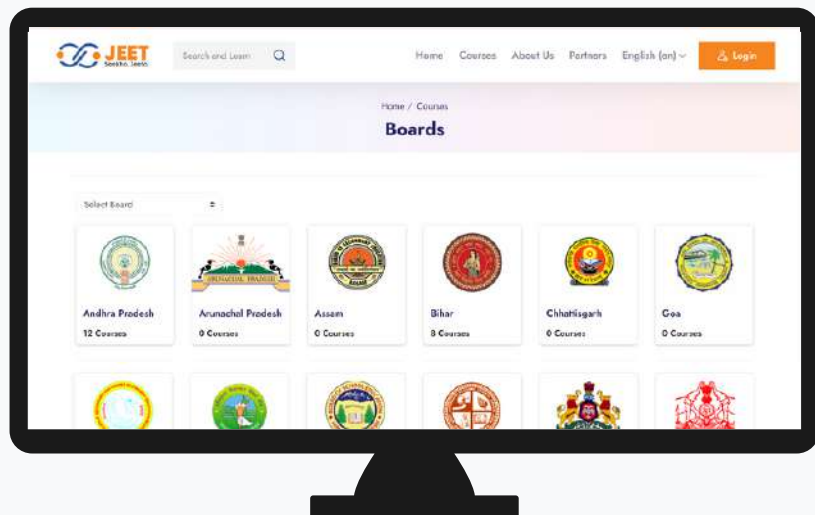
Senior Project Manager

Senior UI/UX Designer

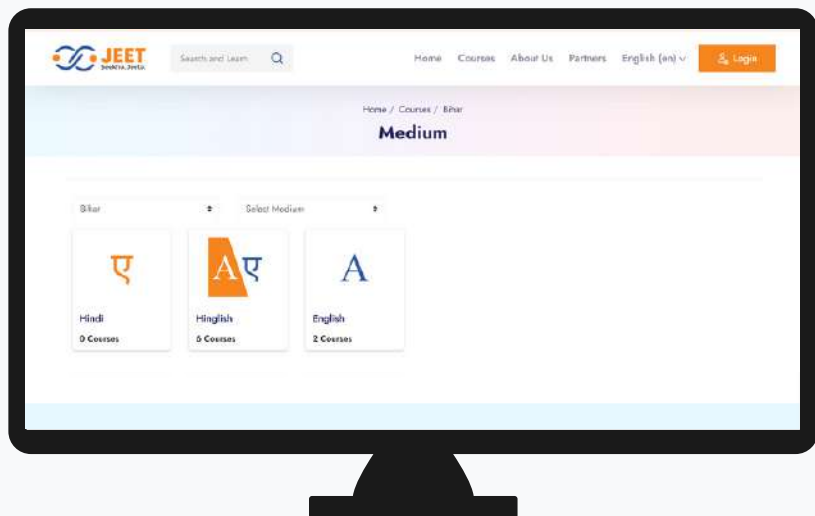
Senior UI/UX Developer

Glimpse of JEET - Learning Management System

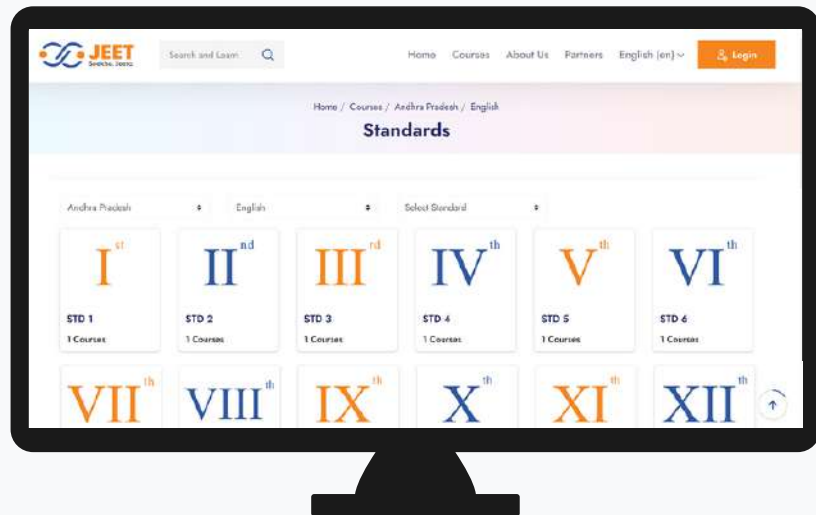
2. SELECT MEDIUM OF
EDUCATION AND
CHANGE THE BOARD
IF NEEDED



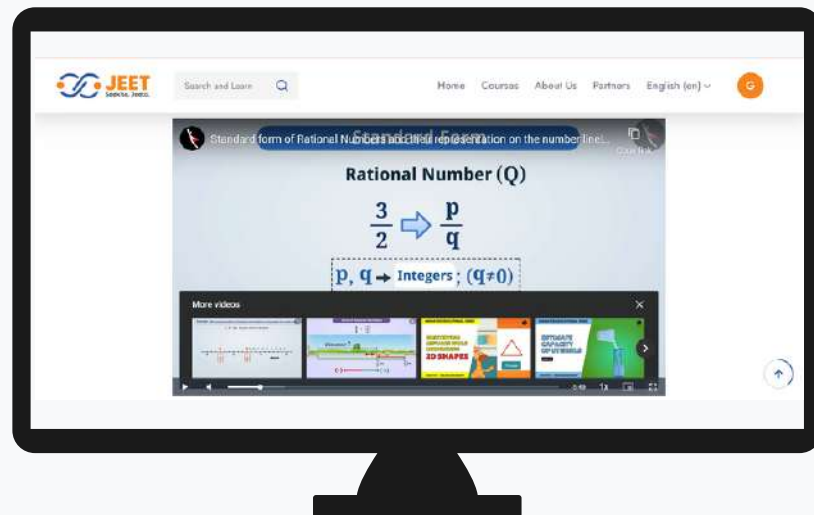
1. ALL STATE
EDUCATIONAL
BOARD SCREEN



4. LEARN SIMPLIFIED
ACADEMIC CONCEPTS
IN INTERACTIVE VIDEO
FORMATS.



3. SELECT STANDARD/
GRADE AS PER
LITERACY LEVEL



Technology Stack

FRONTEND

- **PHP:** Leveraged for a customizable, dynamic frontend.
- **Moodle Themes:** Customization of a paid Moodle LMS theme to match the brand guidelines.

BACKEND

- **PHP:** Used for handling the server-side logic and content delivery.
- **Moodle Framework:** As the core system, supporting LMS functionalities.

DATABASE LAYER

- **MySQL:** For storing user data, course content, and LMS configurations.

INTEGRATIONS & API

- **YouTube Integration:** Seamless integration for video-based learning.
- **Email Integration:** For notifications, account management, and student-teacher communication.
- **CMS Integration:** Additional tools for managing static and dynamic content for students and teachers.

DEVOPS/INFRASTRUCTURE

- **AWS (Amazon Web Services):** Used for hosting, with services like EC2, RDS (for databases), S3 (for file storage), and CloudFront for content delivery.
- **Moodle Hosting Solutions:** Configured for optimal performance on AWS.

SECURITY LAYER

- **Moodle Security:** Leveraged the built-in Moodle security features, including role-based access control, SSL/TLS encryption, and secure authentication.
- **AWS Security:** Includes firewalls, DDoS protection, and IAM (Identity Access Management) for enhanced security.

TESTING & QUALITY ASSURANCE

- **Manual & Automation Testing:** A combination of manual and automated tests were carried out to ensure functionality, usability, and scalability of the platform.
- **Cross-browser Testing:** Ensuring compatibility across various browsers and mobile devices.





What do we offer?

Our Services



Product Engineering

- UI/UX Engineering
- Web Application Development
- Mobile App Development
- Backend/Middleware Development
- Frontend Development
- Data Analytics
- Legacy System Modernization



Cloud & DevOps

- Cloud Consulting
- DevOps Consulting
- DevSecOps Consulting
- CI/CD & Infrastructure Automation
- Kubernetes Adoption



Internet of Things (IoT)

- Device Connectivity
- Data Analytics and Visualization
- Security Solution
- Cloud Integration and Management



Startup Consulting

- Product/MVP Development
- Statutory Compliance Consulting
- Technology Consulting
- Application Development
- UI/UX Design and Business Branding
- Customer Experience Strategy

What do we offer?

Our Services



Next-Gen Technologies

- AI/ML
- Cyber Security Assessment
- Generative AI
- Robotic Process Automation
- Blockchain



Odoo Services

- Odoo ERP Implementation
- Customization & Development
- Odoo Integration
- Odoo Migration
- Odoo Consultation
- Odoo Mobile App Development



AI Product Suite

- Crowd Management
- Detection Systems
- Vehicle Analysis
- Product Counting
- Workforce Management
- Security Analysis



Other Services

- SaaS Product Development
- MVP Development
- ERP Systems
- Product Migration
- Software Consulting
- Software Product Testing

LET'S BREW SOME COFFEE TOGETHER.



Email us for inquiries or feedback
sales@iprogrammer.co



Contact us on

India: +91 879 621 9605

USA: +1 678 999 2111

UK: +44 208 133 156

Australia: +61 430 808 102

Saudi Arabia: +971 581 078 987



Find more information

www.iprogrammer.com

