

EduConnect: A Smart Education Service Platform

Empowering Education Through Technology

Project Team Member:

Mobarak Hossain Zobaer
ID: 0432220005101029

Sadia Akter Tuly
ID: 0432220005101030

Supervisor:

AL Imtiaz, Department of Head
of Computer Science and Engineering,
University of Information Technology and Sciences (UITS)

50,000+

Active Students

100+

NCTB Verified

Free

Access Forever

Key Objectives for EduConnect

Online Admissions

Automatic and streamline the university application process online.

Result Management

Provide and management of academic results SSC and HSC.

Digital Library Access

Access and download to nationwide NCTB textbooks via a robust digital library.

AI Learning Assistant

Integrate an intelligent AI assistant to provide personalized learning support for students.

News Hub

Establish a platform for timely educational announcements.

Secure Platform

Ensure Every Student Dashboard and advanced role-based authentication sign up , sign In and administrator dashboard.



10GB Free Storage

Student Profile & Storage

Manage your academic profile and store documents securely in the cloud

[Explore Now →](#)

500+ Textbooks

Digital Textbook Library (NCTB)

Access all NCTB textbooks digitally from Class 1 to HSC level

[Explore Now →](#)

Instant Results

Results Checking (SSC/HSC)

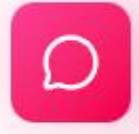
Check your SSC and HSC results quickly through integrated portal

[Explore Now →](#)

200+ Institutions

Online Admission Hub

Apply to universities and colleges with automated form filling

[Explore Now →](#)

24/7 Available

AI Learning Assistant

Get personalized help with homework, summaries, and practice questions

[Explore Now →](#)

Daily Updates

News & Deadlines

Stay updated with educational news, results, and admission deadlines

[Explore Now →](#)

Transforming Educational Challenges into Solutions



Inefficient Educational Ecosystems

- Inefficient, manual admissions processes.
- Dividing results and checking each section separately.
- Restricted access to essential learning resources.
- There is no single platform that provides all services together.



EduConnect's Innovative Solutions

- Seamless online application and tracking.
- Centralized system for instant academic updates.
- Access to 200+ NCTB digital textbooks.
- Comprehensive administrative dashboards for data-driven decisions.

Feasibility & Market Opportunity



Market Research: Bangladesh

- Bangladesh is experiencing rapid growth in digital education.
- Over 10 million students require accessible online educational services.
- Over 200 universities want an easier, automated admission system.
- Our solution helps the Digital Bangladesh vision for education site.



Technical Feasibility: MERN Stack

- **Reliability:** Uses the trusted MERN stack to make the system reliable.
- **Scalability:** Grows easily because it uses a cloud-based database (MongoDB Atlas).
- **Cost-Efficiency:** Optimized processes make the system cheaper to develop and run.
- **Content:** Integrates over 200 digitized NCTB textbooks, greatly expanding content accessibility.

Research & Development Methodology

01

Research Methodology

Our research started with **surveys, interviews, and requirement analysis**. We supported this with studies of existing platforms and academic sources.

02

SDLC Model: Agile

Our development followed the **Agile (Spiral) model**, using **iterations, regular feedback, flexible requirements, and strong risk control**.

03

Development Phases

- **Phase 1:** Foundation (Authentication, Database) – Established **core architectural components**.
- **Phase 2:** Core Features (Admissions, Student Profile) – Implemented essential **user functionalities**.
- **Phase 3:** Advanced (AI Assistant) – Creating powerful AI and data analytics tools..

System Architecture: Data Flow Diagram



It provides critical insight into system boundaries, core functionalities, and the dynamic movement of information.

EduConnect: Comprehensive Features Overview

Student Website

The screenshot shows the EduConnect Student website interface. At the top, there's a navigation bar with links for Home, Textbooks, Results, Admissions, and News. Below the navigation is a user profile section for Mobarok Hossain Zobaer, including his STUDENT ID (STD-2024-001), CLASS (Undergraduate), INSTITUTION (UIT), EMAIL (mobarokhzbair921...), and PHONE (01309234809). A 'Quick Access' sidebar on the left contains links for Digital Textbooks, Check Results, Apply to Universities, My Applications, AI Assistant, Education News, and Study Groups. The main area features a 'My Files' section with a '+ Add New File' button and a small AI icon.

- Online Admissions:** Users can apply and track their application status instantly.
- Efficient Result Retrieval:** Students can quickly check their results using their roll number.
- NCTB Digital Library:** Students can access all digital textbooks for grades 1 to 12.
- AI Assistant:** Provides a smart chatbot to help students learn better.

Admin Portal

The screenshot shows the EduConnect Admin Portal. At the top, there's a header with the EduConnect logo, Admin Panel, and a user icon for Admin admin. The main area is the Dashboard, which includes sections for User Management, Admissions, Results, Content, and Settings. Key statistics are displayed: Total Users (3), Total Admissions (2), Results Published (0), and Active Users (3). Below the dashboard are two charts: 'Growth Trend' (a line graph showing increasing values from Jan to Jun) and 'Admission Status' (a bar chart showing pending, approved, rejected, and under review counts).

- Dynamic Dashboard:** Provides instant information to help make smart decisions.
- User Management:** Provides Create, Read, Update, Delete functionalities.
- Optimized Admission Workflow:** Streamlines the approval and rejection processes for all applications.
- Content Management:** Makes it easy to create and share news and updates.

Socio-Economic Impact & Future Vision



Enhanced Operational Efficiency

Assume that we achieving a **70% reduction** in processing time for educational institutions, administrative tasks.



Optimized Cost Structures

Delivering **significant cost savings** for educational institutions through **digital transition**.



Resource Distribution

Provides all students with **fair access** to essential resources.

Strategic Future Initiatives

- Building a mobile app with React Native so more people can use it.
- Supports **hassle-free financial transactions** through bKash and Nagad.
- Allows users to choose Bangla or English for easier access

Our Vision Realized

Our three-tier platform transforms education services in Bangladesh, creating notable social and economic impact.

Thank You!