

## Generate Course Materials for Primary School (Web, iOS & Android Platforms)

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### 1. Background

The Government of Bangladesh, under the Ministry of Education (MoE), is rapidly accelerating the adoption of digital tools in the education sector to meet the goals of **Vision 2041** and ensure that all students across the country, regardless of location, have access to essential learning materials.

As part of this initiative, the Ministry has identified the urgent need to develop an integrated digital platform to **distribute curriculum-based course materials** for primary school students. The project will require the development of a **web portal**, as well as **iOS and Android mobile applications** for nationwide use.

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### 2. Objective

To design, develop, test, and deploy a **web-based and mobile (iOS and Android) application suite** for course material distribution to primary school students and educators across Bangladesh — within an extremely **condensed project timeline**.

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### 3. Scope of Work

The vendor must deliver the following:

- **Web Portal**
  - Admin dashboard
  - Course material upload and organization
  - User authentication and management
  - Analytics and reporting
- **Mobile Applications**
  - Native iOS and Android apps

- Offline access to materials
- Bangla and English support
- Real-time updates and notifications

### Functional Requirements

- Grade-based material browsing
- Downloadable PDF/Video/Audio formats
- Password-protected teacher resources
- User feedback collection feature

### Non-Functional Requirements

- Mobile-friendly responsive UI
- Works on low-end devices and slow networks
- Role-based access control
- Local server fallback (for offline schools)

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## 4. Deliverables

#	Deliverable	Due Date
1	Inception Report	Day 2
2	UX/UI Mockups (Web + Mobile)	Day 5
3	Web Portal Beta	Day 7
4	Android App Beta	Day 8
5	iOS App Beta	Day 9
6	Final Deployment (All Platforms)	Day 10

7 Training + Documentation Day 11

8 Final Report & Handover Day 12

**Total Project Duration: 12 calendar days** (from contract signing to deployment)

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## 5. Team Composition and Expertise

To successfully execute the project within the specified timeline, the vendor must deploy a high-performance technical team with demonstrated experience in education-related platforms and mobile application development.

### Minimum Required Roles and Expertise:

- **Lead iOS Developer**
  - **Minimum 5 years of experience** in native iOS development
  - Proficient in **Swift, Xcode**, and **UIKit**
  - Demonstrated experience with **at least 3 published iOS apps**
  - Experience in **Bangla localization** and educational UX is preferred
- **Full Stack Developer (Spring Boot + React)**
  - **Minimum 5 years of experience** in full stack development
  - Expertise in **Spring Boot** for back-end services
  - Proficiency in **React** for responsive front-end development
  - Familiarity with RESTful API design, PostgreSQL, and JWT-based authentication
- **Android Developer**
  - **Minimum 3 years of experience**
  - Proficient in **Kotlin/Java** and Android SDK

- Experience with adaptive layouts, low-bandwidth optimization
- **UI/UX Designer**
  - Strong portfolio in **mobile-first and education sector** interfaces
  - Capable of delivering high-fidelity mockups in Figma/Adobe XD
  - Awareness of accessibility and child-friendly UI patterns
- **QA Tester (Manual & Automation)**
  - Proven experience in both **manual testing** and **automated test scripting**
  - Tools: **Selenium, Appium, JUnit, Postman**
  - Must cover cross-browser and cross-platform testing (iOS/Android/Web)
  - Familiar with writing test plans, bug tracking, and regression testing
- **Project Manager**
  - Minimum 5 years of experience in leading Agile/Scrum-based software projects
  - Strong coordination skills for high-pressure, short-deadline projects
  - Previous involvement in government or public-sector projects preferred

**Note:**

- CVs and supporting documents for all key personnel must be submitted at the time of proposal.
- No substitution of key personnel is allowed without prior written approval by the Ministry of Education.
- Team members must be available full-time throughout the duration of the project.

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## 6. Budget & Payment Terms

<b>Milestone</b>	<b>Payment %</b>
Inception & Mockups	20%
Beta Releases	40%
Final Deployment & Report	40%

Payment will be disbursed upon formal sign-off of each deliverable by the Ministry of Education's designated project officer.

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## 7. Evaluation Criteria

<b>Criteria</b>	<b>Weight</b>
Team Experience & Structure	30%
Technical Proposal	30%
Work Plan & Timeline Feasibility	20%
Financial Proposal	20%

**Note:** Vendors who fail to demonstrate a **Lead iOS Developer with at least 5 years of experience** will be disqualified.

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## 8. Risk Management

Due to the extremely short timeline, the vendor must submit a detailed risk mitigation plan, including:

- Daily sprint breakdown
  - 24/7 development cycle (shift-based if necessary)
  - Pre-prepared component libraries or reusable code
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## 9. Reporting and Oversight

- Daily progress reports to MoE technical team
  - Immediate escalation of blockers or delays
  - Final presentation on Day 12
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## 10. Ownership and Confidentiality

All source code, UI/UX assets, documentation, and related IP will be the exclusive property of the **Government of Bangladesh**. Confidentiality agreements must be signed by all team members. No third-party code may be used without clear licensing disclosures.