MXB2026-Sylhet-Fakibazz-Master-Moshai

Final Submission

1. Basic Project Information

Field	Entry
Project Name	Master-Moshai
Team Name	Fakibazz
Submission ID	MXB2026-Sylhet-Fakibazz-Master-Moshai
Domain	EdTech
Challenge Selected	Adaptive AI Tutor
Location	Sylhet
Submission Type	Final

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2. Team Information

Team Leader
Nahid Hasan
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Team Members

- Nahid Hasan — Full-Stack Developer & Team Lead
- Rayed Bin Razzak — UI Architect & API Developer
- Saleh Sabit — Education Domain Expert
- Fatiha Tasnim Upoma — Script Writer
- Ankit Chowdhury — Video Editor

Institution(s)
Shahjalal University of Science and Technology (SUST)
Department of Software Engineering (SWE)

Links

- GitHub: https://github.com/nahid383/master-moshai
- LinkedIn: https://www.linkedin.com/in/nahid-hasan-swe-23-sust/

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3. One-Line Pitch

Master-Moshai is a free AI teacher that personalizes learning for Bangladeshi students, overcoming inequality in access to quality education.

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4. Problem Statement (Design Thinking)

Problem

Bangladesh has millions of students, yet access to quality secondary education remains deeply unequal due to financial hardship and a shortage of effective teachers, especially outside urban areas. Many students fail not because of lack of talent, but because they lack guidance, practice resources, and personalized support. This leads to poor academic outcomes, loss of confidence, and severe mental stress.

Why Existing Solutions Fall Short

Existing solutions such as coaching centers and online video platforms focus on content delivery rather than understanding. They are often expensive, one-size-fits-all, and fail to help students identify weaknesses, track progress, or receive emotional and motivational support—making them ineffective for long-term learning.

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5. Solution Overview

What We Built

Master-Moshai is an AI-based smart teacher that adapts to each student's learning style and academic needs. The system analyzes study behavior, identifies weak and strong areas, and generates a personalized learning path. It includes a smart exam system with multiple online and offline exam modes that simulate real test conditions and guide students on what to improve next. An interactive dashboard tracks progress, while an AI tutor provides instant explanations and guidance.

Beyond academics, Master-Moshai also supports students' mental well-being by offering motivation and emotional reassurance, helping learners regain confidence and purpose.

Key Features

- Personalized AI study routine
- Weak-topic detection and strength analysis
- Targeted question generation
- AI tutor for instant explanations
- Progress tracking dashboard
- Multiple exam modes (online & offline)
- Motivation and mental well-being support

6. AI & System Architecture

System Overview

Input: Student performance data, study behavior, curriculum topics
AI Logic: Adaptive learning analysis, question generation, AI tutoring
Output: Personalized study plan, practice questions, explanations, progress insights

AI Components Used

- ☑ LLMs
- ☑ ML-based adaptive logic
- ☑ Automation

Tech Stack

Layer	Tools
Frontend	TypeScript, Tailwind CSS
Backend	Lovable AI backend services
AI / ML	Lovable AI, Gemini, OpenAI (ChatGPT)
Data	MongoDB, Lovable Cloud
Automation	Built-in Lovable workflows

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7. Data Strategy

Data Sources

- Public academic curriculum
- NCTB curriculum
- Different Board question from 2015
- Previous year admission test question
- Student interaction and performance data
- AI-generated practice questions

Ethics & Privacy

Student data is securely stored, never sold, and used only to improve learning outcomes. The platform follows responsible AI practices, prioritizing privacy, transparency, and student safety.

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8. Demo & Proof of Work

Item	Link
Google Drive Folder	https://drive.google.com/drive/folders/1rOvFjg4f8vu3duHmCwbyxXbLBkNKNp2v
Live Demo App	https://mastermoshai-millionxbangladesh-fakibazz.lovable.app
YouTube Channel	https://www.youtube.com/@teamfakibazzofsust
GitHub	https://github.com/nahid383/master-moshai
Figma Prototype	https://www.figma.com/design/l0Ko6lcFvI32KXOfkxzD8x/millionX

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9. Impact & Value

Who Benefits

Primary: School and college students (SSC & HSC), especially from rural and underprivileged backgrounds
Secondary: Teachers, parents, and educational institutions

Expected Impact

- Achieve a 60–70% reduction in unproductive study time, saving each student 12–15 hours per month.
- Reduce household dependence on paid coaching by 30–50%, saving families BDT 10,000–25,000 annually.
- Decrease the proportion of low-performing students by 15 percentage points while increasing the concept mastery rate from 50% to 80%.
- Scale nationwide access to 1.8–2.4 million students (15–20% of the secondary population) across all 64 districts.
- Lower self-reported high anxiety levels by 25% and reduce annual dropout rates by 5–10 percentage points in partner schools.

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10. Scalability & Feasibility

How This Scales

- **Technical:** Cloud-based AI infrastructure
- **Geographic:** School, college, nationwide—rural-first
- **Cost:** Free access ensures mass adoption

Phase 1 (Months 1-6):

- Launch the full user-friendly production version.
- Implement an improved UI/UX design.
- Integrate advanced personalization and analytics engines.
- Complete technical development for institution-level deployment.

Phase 2: Madrasa Board Inclusion - Integrated within Months 7-15:

- Systematically integrate specialized content and assessments for the ~2.5 million Alim (SSC/HSC-level) madrasa students.
- Localize the platform's approach to align with the Dakhil and Alim curricula, ensuring relevance and adoption.

Phase 3 (Months 15-24):

- Achieve nationwide deployment across all 64 districts of Bangladesh.
- Execute a targeted campaign to onboard schools in rural and underserved regions.
- Establish formal partnerships with educational institutions for embedded use.

Phase 4 (Months 24-30):

- Expand into the Nepali market by localizing the platform.
- Align the content and assessment model with Nepal's National Examination Board (NEB) standards.
- Establish pilot programs and initial partnerships with local educational institutions.

Phase 5 (Months 31-40):

- Enter the Pakistani market, beginning with the Sindh and Punjab boards.
- Deploy the platform in Urdu and key regional languages to ensure accessibility.
- Focus on addressing the critical shortage of qualified STEM teachers in the region.

Phase 6 (Months 41-50):

- Initiate a strategic, state-by-state expansion into India.
- Target initial high-demand regions with curricula tailored to specific state boards (e.g., WBBSE, CBSE).
- Build key partnerships with local educational institutions.

Phase 7 (Months 51-64):

- Launch in key African nations, starting with Nigeria, Kenya, and South Africa.
- Leverage partnerships with NGOs to overcome infrastructure barriers.
- Localize content for national curricula to drive adoption across the continent.

11. Sustainability Model

Area	Description
Value Proposition	Free, personalized AI education for all
Target Users	Students, institutions
Adoption Model	Freemium + institutional adoption
Sustainability	Premium features and partnerships

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12. Innovation Edge (10× Thinking)

Unlike platforms offering generic content libraries or simple Q&A, Master-Moshai is an adaptive AI ecosystem. It functions as a *personalized cognitive companion* that continuously maps a student's unique learning pathway—diagnosing gaps in real-time, generating dynamic problem sets tailored to weak areas, and evolving its teaching method based on individual engagement and psychology. By fusing *deep curriculum intelligence* (aligned with NCTB, Madrasa, and regional boards) with *context-aware emotional support*, it doesn’t just deliver information—it builds understanding and resilience, creating an exponential impact on learning outcomes and student well-being where traditional EdTech falls short.

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13. Ethics, Safety & Responsibility

- Bias-aware AI responses
- Mental health–sensitive communication
- Transparent explanations
- No exploitative monetization

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14. Roadmap

Now: Launch and pilot the core adaptive learning MVP for key subjects.
Next: Release the full-featured, inclusive platform with advanced personalization and analytics.
Future: Achieve nationwide deployment in Bangladesh, then expand regionally across South Asia and Africa.

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15. Open Source Declaration

Item	Response
Open Source?	Yes
License	MIT

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16. Final Checklist

☑ Naming convention correct
☑ Drive public
☑ Demo accessible
☑ AI logic explained