Terms of Reference

Monchitro project documentation | English PDF edition. The web guide is available in Bangla and English.

1. Project background

Monchitro is proposed as a Bangla-first digital book and learning platform for secondary-school learners in Bangladesh. It aims to connect original or properly licensed curriculum-aligned content with accessible reading, practice, and responsible support for families and teachers.

2. Project objectives

- Reduce fragmented study workflows with one structured, low-data reading and practice experience.
- Provide a real book-style reader with selectable text, notes, highlights, and audio controls.
- Offer guided tutoring and chapter assessment while preserving student agency.
- Enable consent-based guardian insight and moderated teacher/peer workflows.
- Validate adoption, retention, content economics, and willingness to pay through a limited pilot.

3. Scope of work

Public website | Bilingual product, curriculum, safety, pricing hypotheses, and contact content | No false claims or fabricated traction

Student app | Onboarding, dashboard, library, reader, notes, bookmarks, quizzes, results | Test student journey at mobile and desktop widths

Learning content | Chapter CMS, bilingual text nodes, licensed assets, review history | Content rights and subject-editor approval

Family and teaching | Consent-based guardian view, teacher classes, assignments, and reports | Role and relationship authorization verified

Platform operations | Admin content workflow, payment states, moderation, monitoring | Privileged paths remain server-authorized

PWA | Installable web app and user-triggered offline chapter cache | No app-store publication claim without listing

4. Curriculum scope and content policy

- Initial pilot: Class 10 Physics, NCTB Bangla Medium; add English Version after editorial review.
- Expansion target: Classes 6-12, subject by subject and only when content and support capacity exist.
- Use original explanations, public-domain works, or content with documented licenses; never scan commercial guidebooks.
- Qualified subject and language editors must verify science, Bangla, English, and curriculum alignment.

5. Target users and roles

Student | Read, annotate, practise, review progress | Own profile and records; age-aware defaults

Guardian | Approve link and view consented progress | Only verified linked students; no private notes by default

Teacher / tutor | Create classes, assignments, feedback | Only assigned cohorts and authorized content

Editor | Draft and review localized learning content | Publish requires approval and audit trail

Administrator | Manage approved operations and reports | Server-granted role, least privilege, audited actions

6. Functional requirements

[ ] Bilingual student onboarding with class, medium/version, board, subjects, nickname, and guardian consent when applicable.

[ ] Filtered book catalog, chapter navigation, real HTMLFlipBook, selectable text, bookmarks, highlights, notes, and audio.

[ ] Tutor responses are clearly identified as demo or live and include a report path.

[ ] Chapter quiz supports answer selection, scoring, explanation, history, and restart.

[ ] Guardian, teacher, and admin actions enforce their relationship/role on the server.

[ ] Subscriptions and payment methods remain proposed/demo until a merchant integration is verified.

7. Non-functional requirements

- Responsive from 360px mobile through desktop; no horizontal overflow.
- Readable Bangla Unicode, comfortable line-height, keyboard focus, reduced motion, and screen-reader labels.
- Text-first pages and compact assets for lower-cost Android devices and limited data.
- Define measured performance profiles before publishing a speed or concurrency claim.
- Protect minors with data minimization, guardian consent, moderation, and clear deletion procedures.

8. Deliverables

- Bilingual public site and working student PWA prototype.
- Class 10 Physics demo reader, original sample chapter, highlights/notes, audio, practice, and results.
- Guardian, teacher, and admin workflows with explicit demo/production status labels.
- Approved database migrations, typed API contracts, RLS policy test evidence, and environment inventory.
- Developer Guide, Terms of Reference, deployment guide, acceptance test record, and handover notes.

9. Project team and responsibilities

Founder / Product owner | Scope, priorities, acceptance, and funding decisions
Project manager | Milestones, issue log, risks, and weekly reporting
Design / frontend | Accessible bilingual flows, responsive UI, and interaction tests
Backend / security | Auth, data model, RLS, API validation, and threat review
Editors / subject experts | Rights, accuracy, translation, and curriculum alignment
QA / release | Acceptance evidence, device matrix, regression, and rollback

10. Proposed project timeline

1. Prototype | 2 weeks (estimate) | Approved UX, public site, and real reader interaction
2. Student core | 3 weeks (estimate) | Content model, dashboard, and bilingual reading
3. Tutor and assessment | 3 weeks (estimate) | Secure tutor route, quiz scoring, annotation persistence
4. Pilot readiness | 4 weeks (estimate) | Guardian/teacher workflows, moderation, QA, and pilot review

These are planning assumptions, not a delivery commitment. Team size, content rights, integration setup, and review capacity can change the schedule.

11. Acceptance and quality assurance

[ ] Every published route renders and its navigation works in Bangla and English.

[ ] Reader uses react-pageflip and passes desktop mouse plus real mobile touch checks.

[ ] Highlights, notes, bookmarks, audio, quiz, results, and offline download have evidence of correct state changes.

[ ] Guardian and teacher access is scoped; student private content is not exposed.

[ ] AI, payment, realtime, and store-publishing states are truthful and verified where enabled.

[ ] No critical accessibility, security, privacy, or deployment blockers remain.

12. Budget and commercial terms

- Obtain engineering and content-production quotations; separate one-time build costs from recurring hosting and AI usage.
- Itemize content licensing, editorial review, translation, support, monitoring, and backups.
- Payment milestones should be linked to accepted deliverables and documented change requests.

- Prices in the investor section are assumptions for research, not validated offers.

13. Intellectual property

- Specify ownership and transfer terms for custom source code and original educational content.
- Record third-party libraries and comply with each open-source license.
- Maintain written licenses for any external image, book text, diagram, audio, or dataset.
- Review AI-generated material before publishing it as educational content.

14. Risk management

Copyright / curriculum errors | Document rights and use qualified editorial review
Student privacy / safety | Minimize data, guardian consent, moderation, and tested RLS
AI inaccuracies | Ground prompts in reviewed content, show uncertainty, report errors
Low-end device / weak network | Text-first UI, small assets, offline chapter cache, device QA
Acquisition and affordability | Pilot hypotheses, transparent pricing tests, measure retention

15. Governance and reporting

- Hold a weekly review of scope, progress, risks, and open decisions.
- Track issues and changes with owner, priority, evidence, and acceptance status.
- Require peer review for code, content, data policies, and production releases.
- At handover, transfer access securely, document backups, and name support owners.