

IIXL Next.js App - One-Page Summary

What it is

A Next.js educational web app modeled after IXL-style learning flows for school students. It lets users pick a grade, browse subject skills, and practice question types with live feedback.

Who it's for

Primary persona: school students (Class 1 to Class 9) practicing Math/English/Science microskills.
Secondary audience shown in copy/metadata: educators and parents. (Auth roles: Not found in repo.)

What it does

- Shows a landing page with grade cards and subject entry points.
- Computes per-subject skill counts from in-repo curriculum data.
- Renders a skills catalog by grade + subject with unit grouping in 3 columns.
- Opens a practice experience per microskill route with mixed question types.
- Tracks SmartScore, streak, tokens, challenge stages, and elapsed time in client state.
- Validates answers and shows immediate correctness + solution feedback.

How it works (repo evidence only)

- Routing/UI components: App Router pages at /, /skills/[gradeId]/[subjectSlug], /practice/[microskillId].
- Data layer: src/data/curriculum.js exports grade/subject/unit/microskill arrays + helper selectors.
- Practice engine: page-level state + validateAnswer logic + QuestionRenderer type dispatch map.
- Service/backend boundary: API routes, DB integration, auth, and persistence are Not found in repo.

How to run (minimal)

1. From repo root, install dependencies: npm install
 2. Start dev server: npm run dev
 3. Open <http://localhost:3000>
 4. Optional production check: npm run build && npm run start
- Node.js version requirement: Not found in repo.
Environment variables/config secrets: Not found in repo.

Evidence files: src/app/page.js, src/app/skills/[gradeId]/[subjectSlug]/page.js, src/app/practice/[microskillId]/page.js, src/components/practice/QuestionRenderer.js, src/data/curriculum.js, package.json, README.md