

Backend Data Models & Relationships

Core Entities

Language

Represents a language offered on the platform (e.g., English, Kalabari).

LanguageCourse

A structured learning path for a language.

One Language can have multiple Courses (future-proofing).

Module

Belongs to a LanguageCourse.

Contains a sequence of Exercises.

Exercise

Belongs to a Module.

Defined by a type and JSON-configured content.

UserLanguageCourse

Represents a language course a user is actively taking.

Tracks progress, current module, and completion state.

Relationships

Language 1 → N LanguageCourses

LanguageCourse 1 → N Modules

Module 1 → N Exercises

User 1 → N UserLanguageCourses

Important Distinction

- Available Language Courses: what the platform offers
- Active Language Courses: what a user has enrolled in

Progress Tracking

Progress is stored per UserLanguageCourse, not globally per user.