

Database Structure

1. students

- id (Primary Key, Auto Increment)
- name (String)
- address (String)
- mobile (String)
- age (Integer, Nullable)
- parent_contact (String, Nullable)
- deleted (Boolean, Nullable)
- deleted_at (Timestamp, Nullable)
- created_at (Timestamp)
- updated_at (Timestamp)

2. teachers

- id (Primary Key, Auto Increment)
- name (String)
- address (String)
- mobile (String)
- age (Integer, Nullable)
- deleted (Boolean, Nullable)
- deleted_at (Timestamp, Nullable)
- created_at (Timestamp)
- updated_at (Timestamp)

3. courses

- id (Primary Key, Auto Increment)
- name (String)
- syllabus (String)
- duration (String)
- deleted (Boolean, Nullable)
- deleted_at (Timestamp, Nullable)
- created_at (Timestamp)
- updated_at (Timestamp)

4. batches

- id (Primary Key, Auto Increment)
- name (String)
- course_id (Foreign Key, References: courses.id, ON DELETE SET NULL)
- start_date (Date)
- deleted (Boolean, Nullable)
- deleted_at (Timestamp, Nullable)

- created_at (Timestamp)
- updated_at (Timestamp)

5. enrollments

- id (Primary Key, Auto Increment)
- enroll_no (String)
- batch_id (Foreign Key, References: batches.id, ON DELETE SET NULL)
- student_id (Foreign Key, References: students.id, ON DELETE SET NULL)
- join_date (Date)
- fee (Double)
- deleted (Boolean, Nullable)
- deleted_at (Timestamp, Nullable)
- created_at (Timestamp)
- updated_at (Timestamp)

6. payments

- id (Primary Key, Auto Increment)
- enrollment_id (Foreign Key, References: enrollments.id)
- paid_date (Date)
- amount (Double)
- deleted (Boolean, Nullable)
- deleted_at (Timestamp, Nullable)
- created_at (Timestamp)
- updated_at (Timestamp)

Relationships Summary:

- **course** (1) → **batches** (Many)
- **batch** (1) → **course** (1)
- **batch** (1) → **enrollments** (Many)
- **enrollment** (1) → **batch** (1)
- **student** (1) → **enrollments** (Many)
- **enrollment** (1) → **student** (1)
- **student** (1) → **batches** (Many)
- **enrollment** (1) → **payment** (1)

Notes:

1. All main entities have soft delete functionality (**deleted** and **deleted_at** fields)
2. Foreign key constraints use **SET NULL** on delete to maintain data integrity
3. The payments table is missing a foreign key constraint to enrollments (you might want to add this)

4. All tables include Laravel's standard timestamps (`created_at`, `updated_at`)