Data Transfer Objects

The following important concept is data transfer object, or DTO for short. This is also a simple concept: it's a class that holds data. This data is then transferred between components. What are these components?

- Your application as a whole
- Classes inside your application

Let's take a look at a straightforward example:

```php
class CourseController extends Controller
{
  public function store(Request $request): Course
  {
    $course = Course::create($request->course);

    foreach ($request->lessons as $lessson) {
      // $lesson is an array
      $course->lessons()->create($lesson);
    }

    foreach ($request->student_ids as $studentId) {
      $course->students()->attach($studentId);
    }

    return $course;
  }
}
```

This is an oversimplified example, of course. I'm working on an e-learning system, and you can believe me, the request for creating a new course is overwhelming.