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# SERVER-SIDE WEB DEVELOPMENT

## Lecture 8

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# TODAY'S TOPICS



- Databases in Laravel
- Laravel Models
- Laravel Controllers
- Laravel Eloquent

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# ANNOUNCEMENTS

- Sign-in Sheet

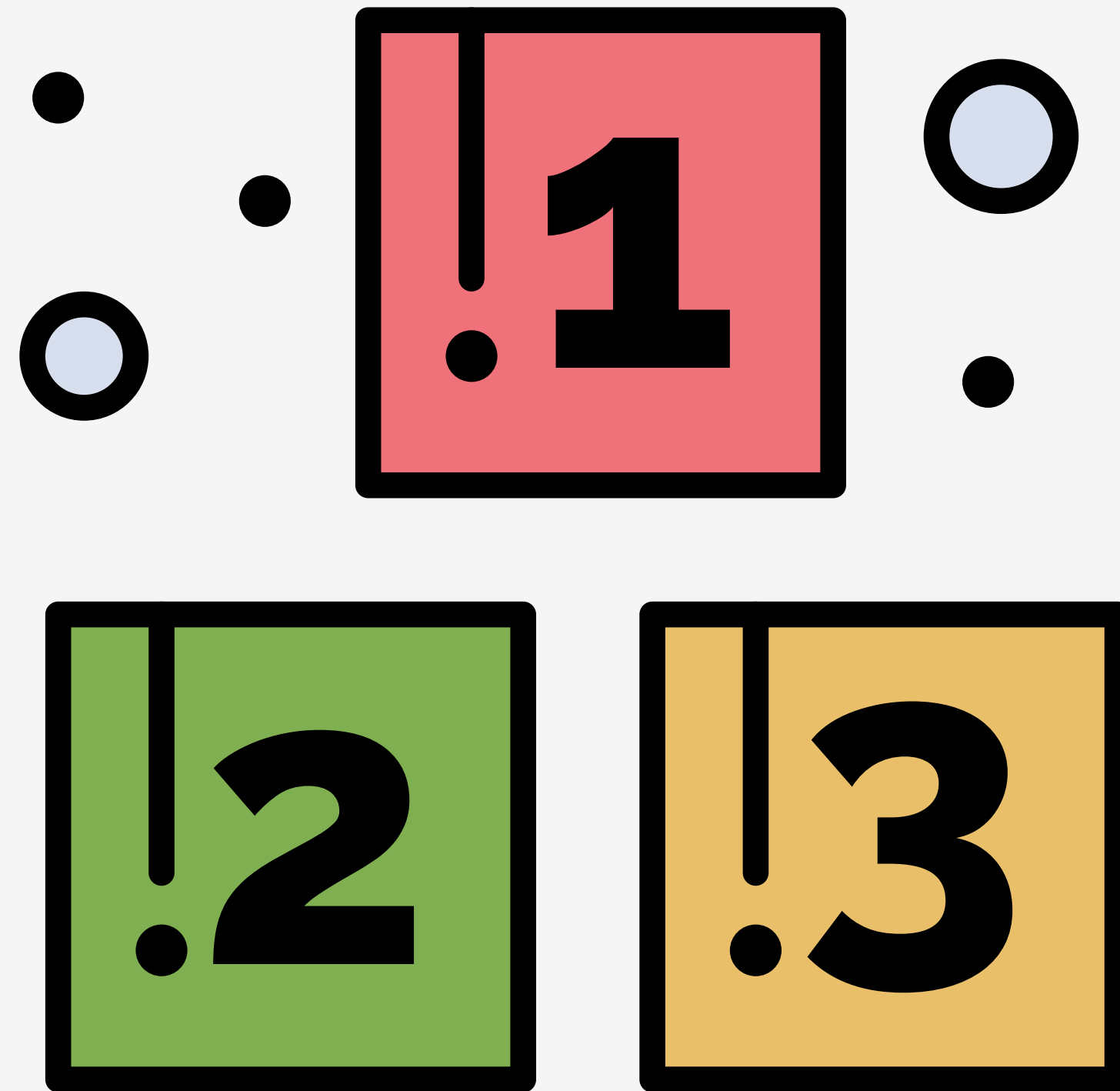


**QUESTIONS**

# **DATABASE IN LARAVEL**

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# DATABASES IN LARAVEL



- Laravel has greatly simplified the process of working with databases
- Laravel provides databases connections out of the box
- Configure database setting in the `.env` file

**.ENV**

*DB\_CONNECTION=mysql*

*DB\_HOST=127.0.0.1*

*DB\_PORT=3306*

*DB\_DATABASE=laravel*

*DB\_USERNAME=root*

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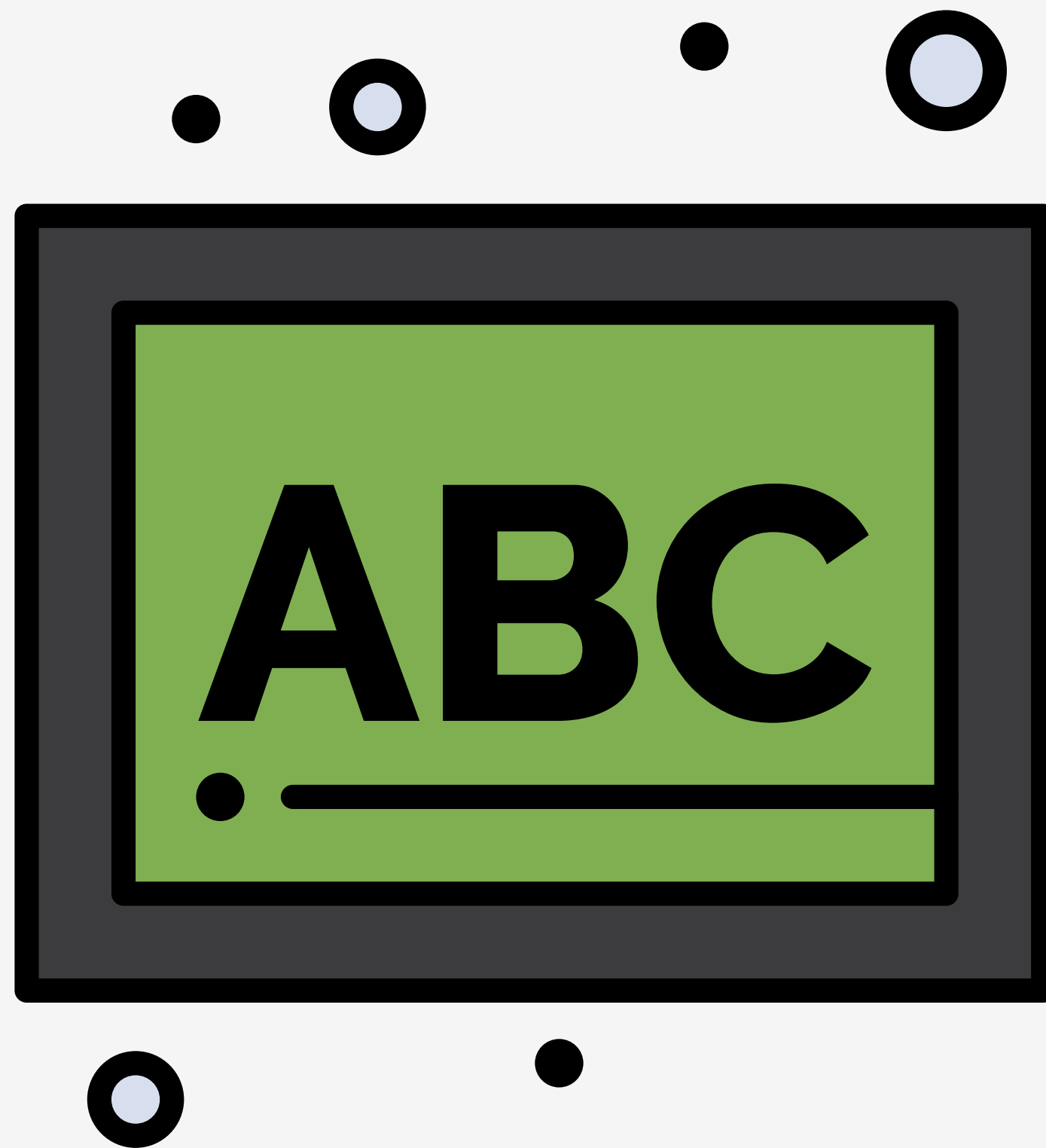
*DB\_PASSWORD=*

# LARAVEL MODELS



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# LARAVEL MODELS



- In MVC, the **Model** represent the data
- In Laravel, a **Model** is a class that is used to interact with a database table
- The easiest way to create a **Model** is to use **artisan**

# ARTISAN

*# Creates a connection to the movies table*  
`php artisan make:model Movie`

*# Creates a controller with the Model*  
`php artisan make:model Movie -c`

# MODEL

```
<?php
```

```
namespace App;
```

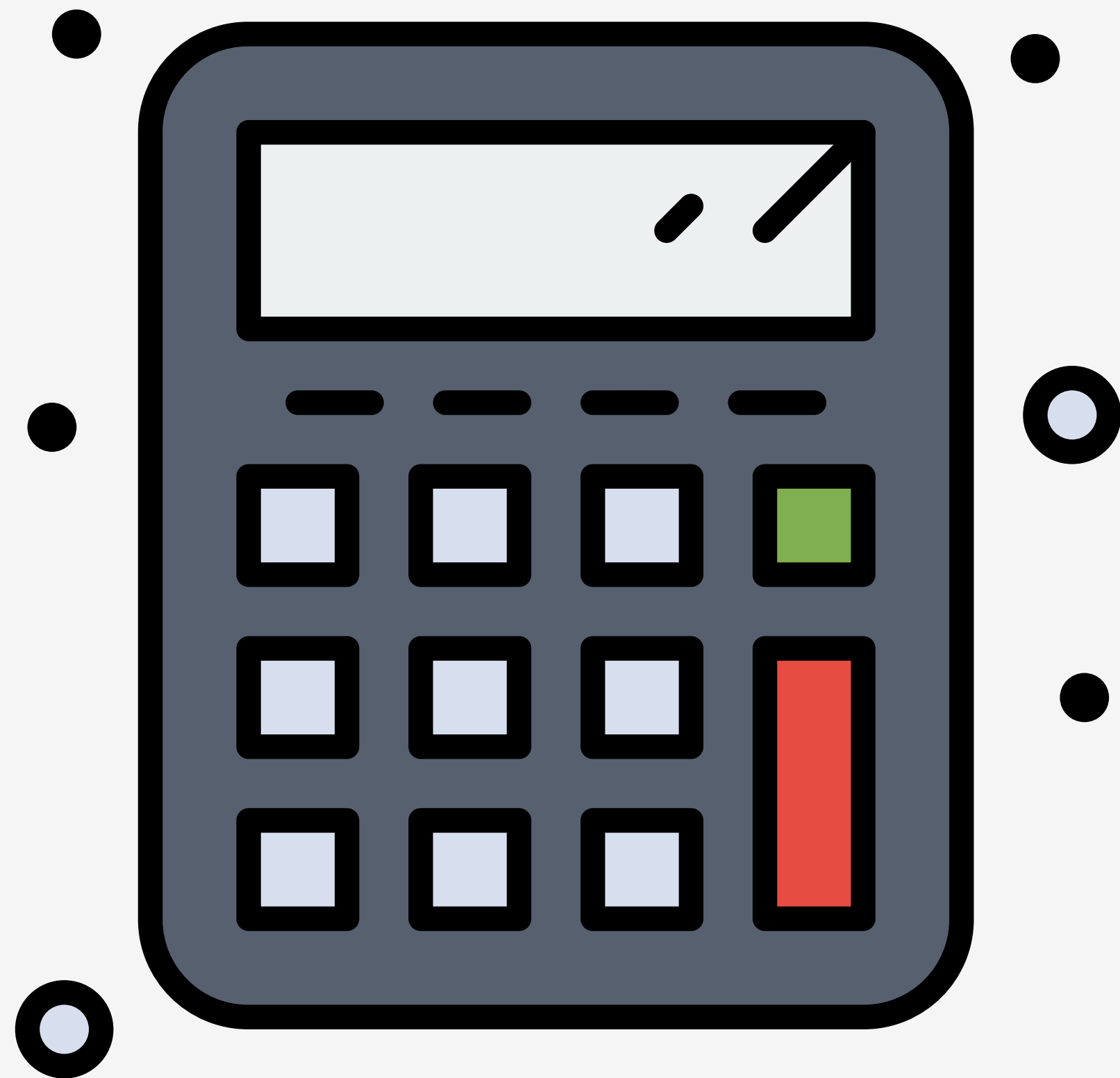
```
use Illuminate\Database\Eloquent\Model;
```

```
class Movie extends Model  
{  
    //  
}
```

# LARAVEL CONTROLLERS

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# LARAVEL CONTROLLERS



- In MVC, the **Controller** is the logic of the application and act as a bridge between the **View** and the **Model**
- In Laravel, a **Controller** is a class that contains methods that handle a page's logic and return what should be displayed
- **Routes** can directly point to the a Controller's method

# CONTROLLER

```
<?php
```

```
namespace App\Http\Controllers;
```

```
use Illuminate\Http\Request;
```

```
class MovieController extends Controller  
{  
    public function index () {  
  
    }  
}
```

# ROUTES

```
Route::get( '/', 'MovieController@index' );
```

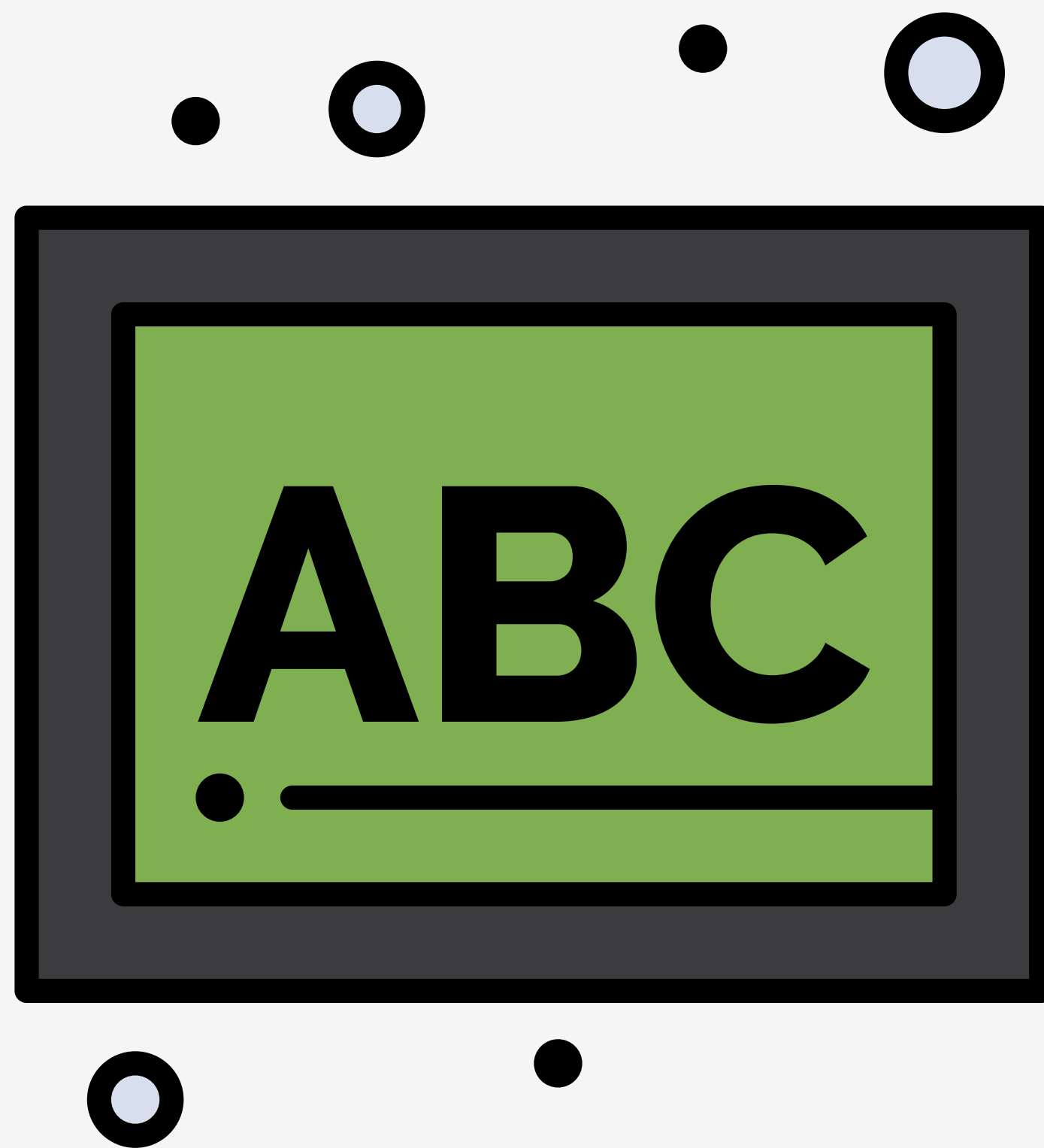
**HANDS-ON**



**LARAVEL ELOQUENT**

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# LARAVEL ELOQUENT



- **Eloquent** is the interface that is used to handle the interactions and is built on PDO.
- **Eloquent** has many conventions on how tables and columns should be named
- These conventions can be overridden by changing the values of the specific properties in the Model class

# MODEL

```
<?php
```

```
namespace App;
```

```
use Illuminate\Database\Eloquent\Model;
```

```
class Movie extends Model
```

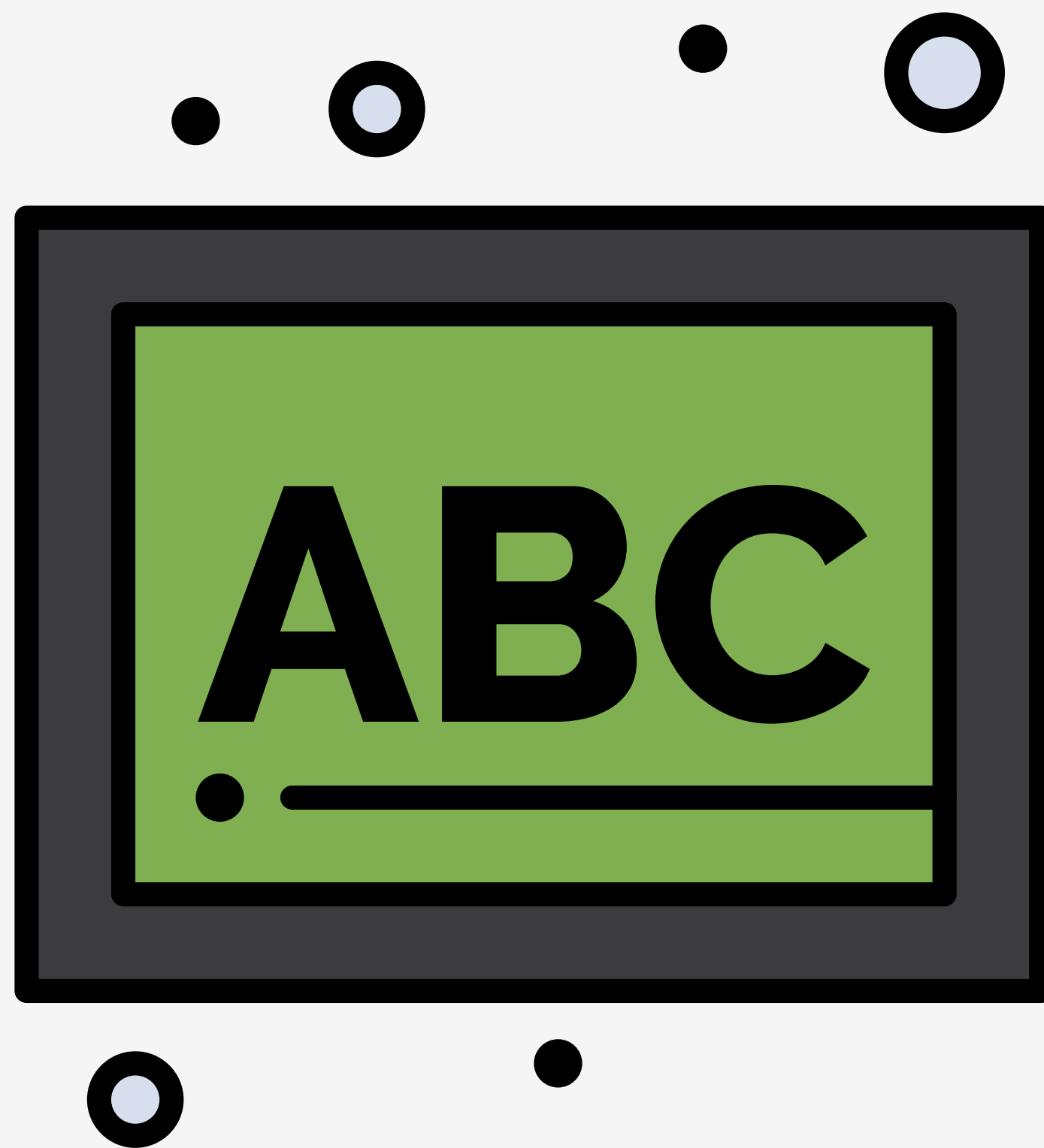
```
{
```

```
    protected $primaryKey = 'movie_id';
```

```
}
```

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# LARAVEL ELOQUENT



- **Eloquent** methods are used to retrieve and interact with database tables
- The **all** method is used to retrieve all rows from a table
- The **where** method is used to filter the rows
- The **get** or **first** method must be used with **where**

# ELOQUENT

```
// Retrieve all movies  
$movies = App\Movie::all();
```

```
foreach ($movies as $movie) {  
    echo $movie->movie_title;  
}
```

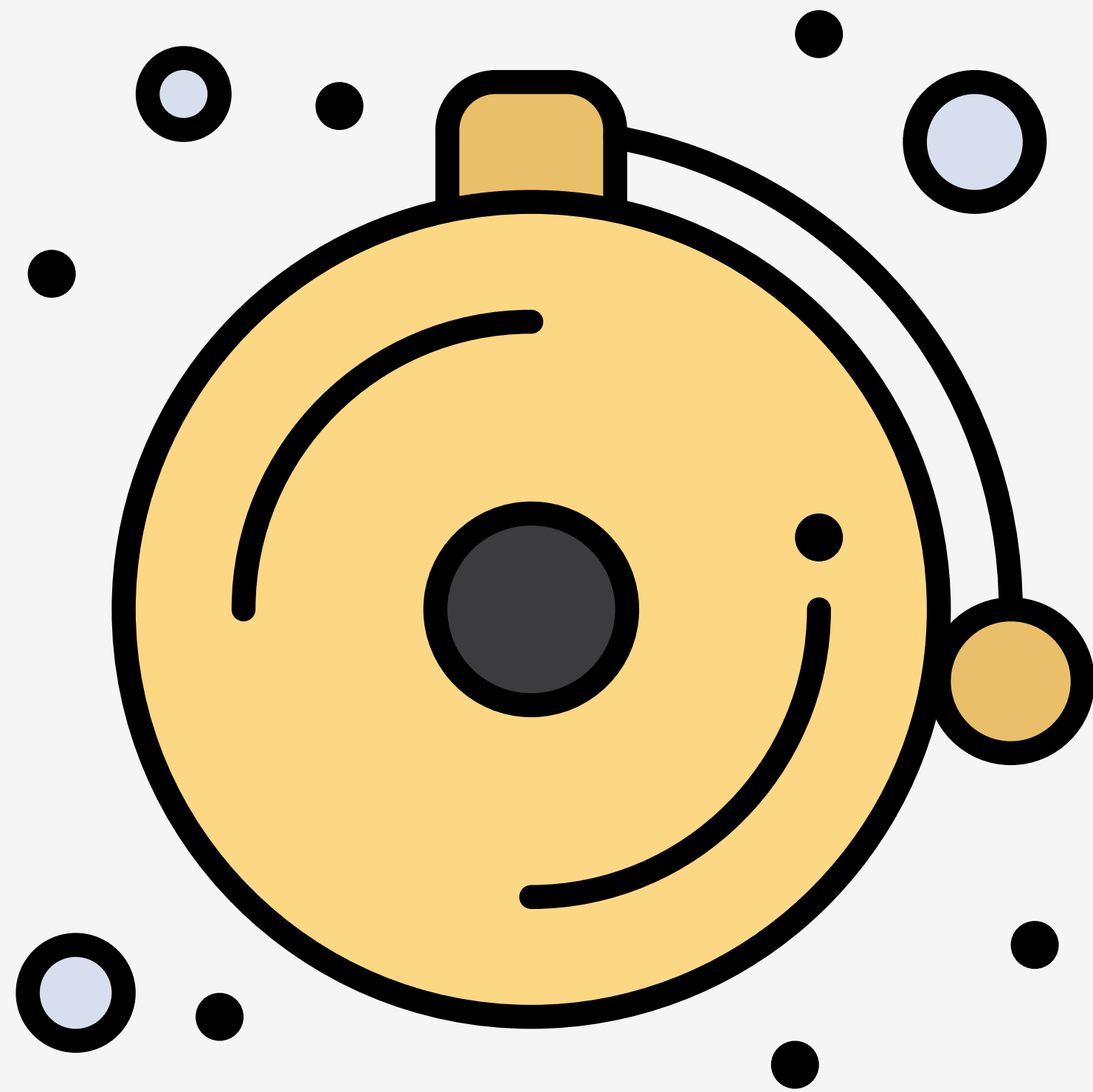
```
// Filter movies  
$movies = App\Movie::where('genre_id', 2)  
    ->get();
```

```
foreach ($movies as $movie) {  
    echo $movie->movie_title;  
}
```

**HANDS-ON**

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# NEXT TIME...



- Forms in Laravel
- Due: Midterm - *TONIGHT*
- Due: Midterm Reflection - *TONIGHT*