

## Connection of Controller with View: Part-2

**Objective:** Understand how controllers work and how to route requests to them.

### Example 1: Using If-Else in Controller

#### ExampleController.php

```
namespace App\Http\Controllers;

use Illuminate\Http\Request;

class ExampleController extends Controller
{
    public function checkCondition()
    {
        $value = 15; // Static value for demonstration

        if ($value > 10) {
            $message = "The value is greater than 10.";
        } else {
            $message = "The value is 10 or less.";
        }

        return view('condition', ['message' => $message]);
    }
}
```

#### View: resources/views/condition.blade.php

```
<!DOCTYPE html>
<html>
<head>
    <title>Condition Example</title>
</head>
<body>
    <h1>{{ $message }}</h1>
</body>
</html>
```

#### Route in web.php

```
use App\Http\Controllers\ExampleController;

Route::get('/check-condition', [ExampleController::class, 'checkCondition']);
```

## Example 2: Using For Loop in Controller

```
namespace App\Http\Controllers;

use Illuminate\Http\Request;

class ExampleController extends Controller
{
    public function generateNumbers()
    {
        $numbers = [];

        for ($i = 1; $i <= 10; $i++) {
            $numbers[] = $i;
        }

        return view('numbers', ['numbers' => $numbers]);
    }
}
```

### View: resources/views/numbers.blade.php

```
<!DOCTYPE html>
<html>
<head>
    <title>Numbers Example</title>
</head>
<body>
    <h1>Generated Numbers</h1>
    <ul>
        @foreach ($numbers as $number)
            <li>{{ $number }}</li>
        @endforeach
    </ul>
</body>
</html>
}
```

### Route in web.php

```
use App\Http\Controllers\ExampleController;

Route::get('/numbers', [ExampleController::class, 'generateNumbers']);
```

## Example 3: Using a Switch in Controller

### ExampleController.php

```
namespace App\Http\Controllers;

use Illuminate\Http\Request;

class ExampleController extends Controller
{
    public function chooseColor($color)
    {
        switch ($color) {
            case 'red':
                $message = "You chose Red.";
                break;
            case 'blue':
                $message = "You chose Blue.";
                break;
            case 'green':
                $message = "You chose Green.";
                break;
            default:
                $message = "Invalid color.";
        }

        return view('color', ['message' => $message]);
    }
}
```

### View: resources/views/color.blade.php

```
<!DOCTYPE html>
<html>
<head>
    <title>Color Choice</title>
</head>
<body>
    <h1>{{ $message }}</h1>
</body>
</html>
```

### Route in web.php

```
use App\Http\Controllers\ExampleController;

Route::get('/choose-color/{color}', [ExampleController::class, 'chooseColor']);
```

## Example 4: Random Number Generator

### ExampleController.php

```
namespace App\Http\Controllers;

use Illuminate\Http\Request;

class ExampleController extends Controller
{
    public function randomNumbers()
    {
        $numbers = [];

        for ($i = 0; $i < 5; $i++) {
            $numbers[] = rand(1, 100); // Generate random numbers between 1 and 100
        }

        return view('random', ['numbers' => $numbers]);
    }
}
```

### View: resources/views/random.blade.php

```
<!DOCTYPE html>
<html>
<head>
    <title>Random Numbers</title>
</head>
<body>
    <h1>Generated Random Numbers:</h1>
    <ul>
        @foreach ($numbers as $number)
            <li>{{ $number }}</li>
        @endforeach
    </ul>
</body>
</html>
```

### Route in web.php

```
use App\Http\Controllers\ExampleController;

Route::get('/random', [ExampleController::class, 'randomNumbers']);
```

## Example 5: Simulate Conditional Rendering

### ExampleController.php

```
namespace App\Http\Controllers;

use Illuminate\Http\Request;

class ExampleController extends Controller
{
    public function checkAccess($age)
    {
        if ($age >= 18) {
            return view('adult', ['age' => $age]);
        } else {
            return view('minor', ['age' => $age]);
        }
    }
}
```

### View: resources/views/adult.blade.php

```
<!DOCTYPE html>
<html>
<head>
    <title>Access Granted</title>
</head>
<body>
    <h1>Welcome, you are {{ $age }} years old. Access granted!</h1>
</body>
</html>
```

### View: resources/views/minor.blade.php

```
<!DOCTYPE html>
<html>
<head>
    <title>Access Denied</title>
</head>
<body>
    <h1>Sorry, you are {{ $age }} years old. Access denied!</h1>
</body>
</html>
```

### Route in web.php

```
use App\Http\Controllers\ExampleController;

Route::get('/check-access/{age}', [ExampleController::class, 'checkAccess']);
```

## Example 6: Simulate an API Call

### ExampleController.php

```
namespace App\Http\Controllers;

use Illuminate\Http\Request;

class ExampleController extends Controller
{
    public function simulateApi()
    {
        $data = [
            'status' => 'success',
            'results' => [
                ['name' => 'Alice', 'score' => 85],
                ['name' => 'Bob', 'score' => 92],
                ['name' => 'Charlie', 'score' => 78]
            ]
        ];

        return view('api_simulation', ['data' => $data]);
    }
}
```

### View: resources/views/api\_simulation.blade.php

```
<!DOCTYPE html>
<html>
<head>
    <title>API Simulation</title>
</head>
<body>
    <h1>API Results:</h1>
    @if ($data['status'] === 'success')
        <ul>
            @foreach ($data['results'] as $result)
                <li>{{ $result['name'] }}: {{ $result['score'] }}</li>
            @endforeach
        </ul>
    @else
        <p>Failed to fetch data.</p>
    @endif
</body>
</html>
```

### Route in web.php

```
use App\Http\Controllers\ExampleController;
```

```
Route::get('/api-simulate', [ExampleController::class, 'simulateApi']);
```

## Example 7: Generate a Chessboard Grid

### ExampleController.php

```
namespace App\Http\Controllers;

use Illuminate\Http\Request;

class ExampleController extends Controller
{
    public function chessboard()
    {
        $rows = 8;
        $cols = 8;

        return view('chessboard', ['rows' => $rows, 'cols' => $cols]);
    }
}
```

### View: resources/views/chessboard.blade.php

```
<!DOCTYPE html>
<html>
<head>
    <title>Chessboard</title>
    <style>
        table { border-collapse: collapse; }
        td { width: 50px; height: 50px; text-align: center; }
        .black { background-color: black; color: white; }
        .white { background-color: white; }
    </style>
</head>
<body>
    <h1>Chessboard</h1>
    <table border="1">
        @for ($i = 0; $i < $rows; $i++)
            <tr>
                @for ($j = 0; $j < $cols; $j++)
                    @php
                        $isBlack = ($i + $j) % 2 === 0;
                    @endphp
                    <td class="{{ $isBlack ? 'black' : 'white' }}"></td>
                @endfor
            </tr>
```

```
        @endfor
    </table>
</body>
</html>
```

### Route in web.php

```
use App\Http\Controllers\ExampleController;

Route::get('/chessboard', [ExampleController::class, 'chessboard']);
```

## Example 8: Dynamic Form with Validation

### ExampleController.php

```
namespace App\Http\Controllers;

use Illuminate\Http\Request;

class ExampleController extends Controller
{
    public function showForm()
    {
        return view('form');
    }

    public function validateForm(Request $request)
    {
        $validated = $request->validate([
            'name' => 'required|max:50',
            'age' => 'required|integer|min:1|max:100'
        ]);

        return view('form_result', ['data' => $validated]);
    }
}
```

### View: resources/views/form.blade.php

```
<!DOCTYPE html>
<html>
<head>
    <title>Form Example</title>
</head>
<body>
    <h1>Enter Your Details</h1>
    <form action="/submit-form" method="POST">
        @csrf
        <label for="name">Name:</label>
```



```

        <input type="text" id="name" name="name">
        <br>
        <label for="age">Age:</label>
        <input type="number" id="age" name="age">
        <br>
        <button type="submit">Submit</button>
    </form>

    @if ($errors->any())
        <div>
            <h3>Errors:</h3>
            <ul>
                @foreach ($errors->all() as $error)
                    <li>{{ $error }}</li>
                @endforeach
            </ul>
        </div>
    @endif
</body>
</html>

```

### View: resources/views/form\_result.blade.php

```

<!DOCTYPE html>
<html>
<head>
    <title>Form Result</title>
</head>
<body>
    <h1>Form Submitted Successfully!</h1>
    <p>Name: {{ $data['name'] }}</p>
    <p>Age: {{ $data['age'] }}</p>
</body>
</html>

```

### Routes in web.php

```

use App\Http\Controllers\ExampleController;

Route::get('/form', [ExampleController::class, 'showForm']);
Route::post('/submit-form', [ExampleController::class, 'validateForm']);

```