Preparation

- ⚠️ TEST: Do Examples work?
- 💧 Prepare some water
- 🧘🏼 Focus: Do not disturb
- 🕵🏼 Arc: Filament Talk Space
- 📈 Start presentation & *Screen Mirror Mode & Whole Window*
- 💻 Make both full screen (Toggle with F)
- 👨🏼‍💻 Open Demo Code in PhpStorm

What’s new in *Filament v4*

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Fila...what?

- Started as a classic admin panel
- Free and open source
- Based on Livewire
- Today: Full-blown app builder
- Server-Driven UI (SDUI) framework

```php
public static function table(Table $table): Table
{
    return $table->columns([
        ImageColumn::make('image'),

        TextColumn::make('customer.name')
            ->searchable()
            ->sortable(),

        TextColumn::make('status')
            ->badge(),
    ]);
}
```

Overview

Performance | DX | New Components

Performance

Rendering | Partials | JS Methods

🚀 Rendering

Rendering is the biggest part of the request.

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Tailwind to CSS classes

```
.fi-badge {}
.fi-wi-stats-overview-stat {}
.fi-ta-actions {}
```

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Tailwind to CSS classes

```
.fi-badge {}
.fi-wi-stats-overview-stat {}
.fi-ta-actions {}
```

Reduced Blade components

```
public function toEmbeddedHtml(): string
{
    <?php ob_start(); ?>

    <div <?= $attributes->toHtml() ?>>
        <?php if (filled($placeholder !== null)) { ?>
            <p class="fi-ta-placeholder">
                <?= e($placeholder) ?>
            </p>
        <?php } ?>
    </div>

    <?php
    return ob_get_clean();
}
```

🚀 Benchmarks

Records	Size Before	Size After	%	Speed Before	Speed After	%
50	53 kB	39 kB	***26.5%***	270ms	170ms	***37%***
100	87 kB	63 kB	***27.5%***	450ms	250ms	***44%***
500	362 kB	255 kB	***29.5%***	1.77s	720ms	***59%***
1000	704 kB	493 kB	***29.9%***	3.6s	1.3s	***64%***

* `OrderResource` from Filament Demo on a MacBook Pro M4

🚀 Partials

Livewire gives us **flexibility** – but also **limits performance**.

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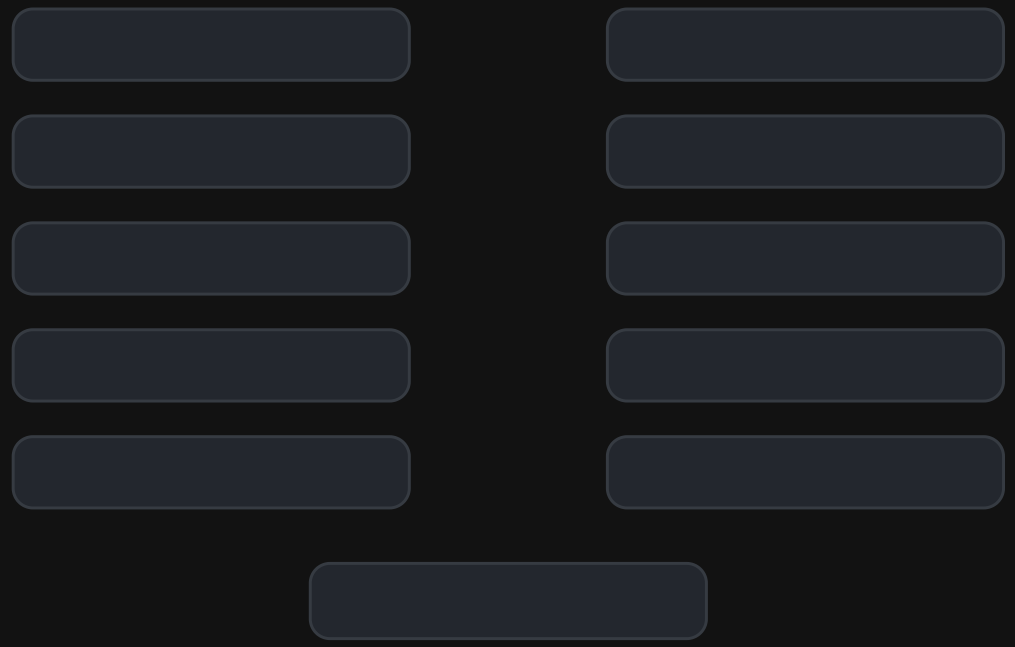
Before



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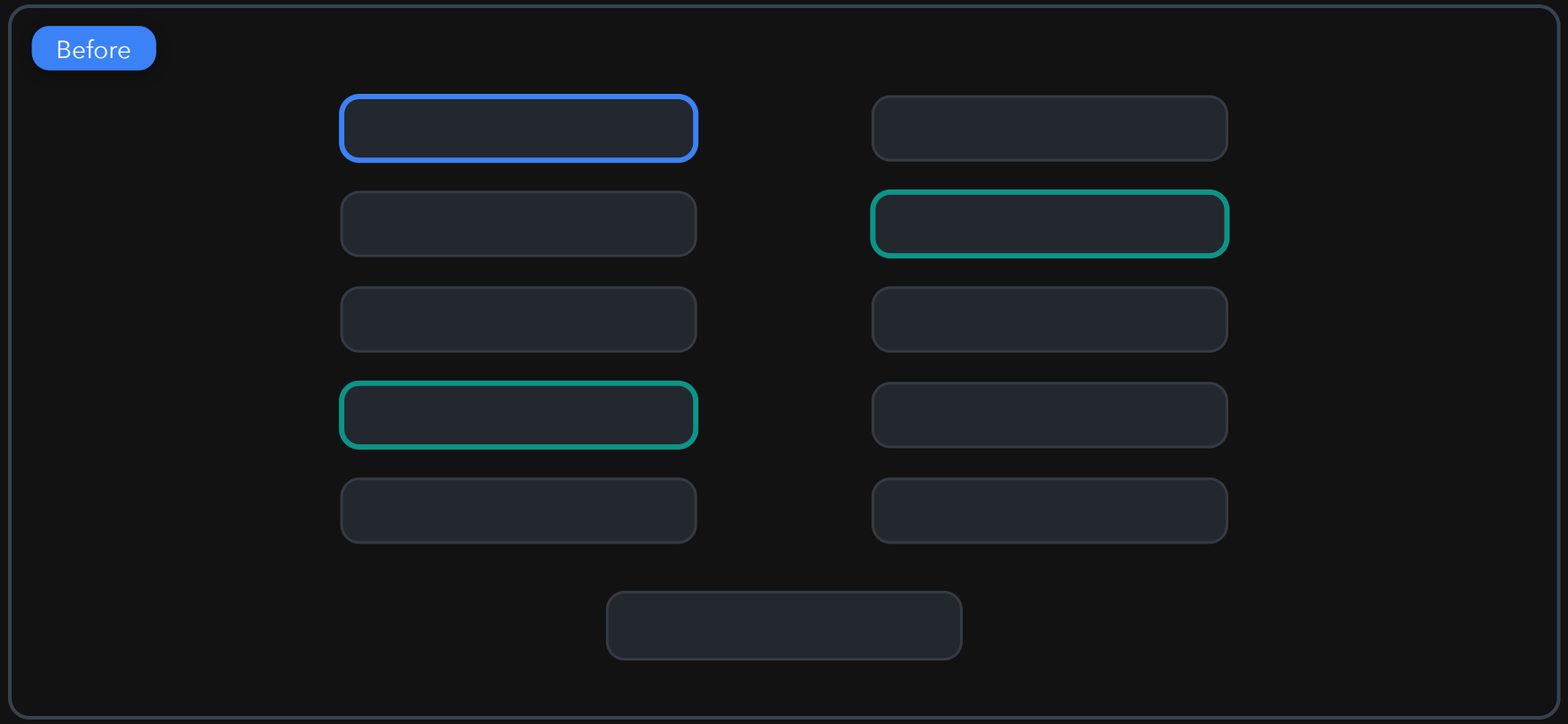

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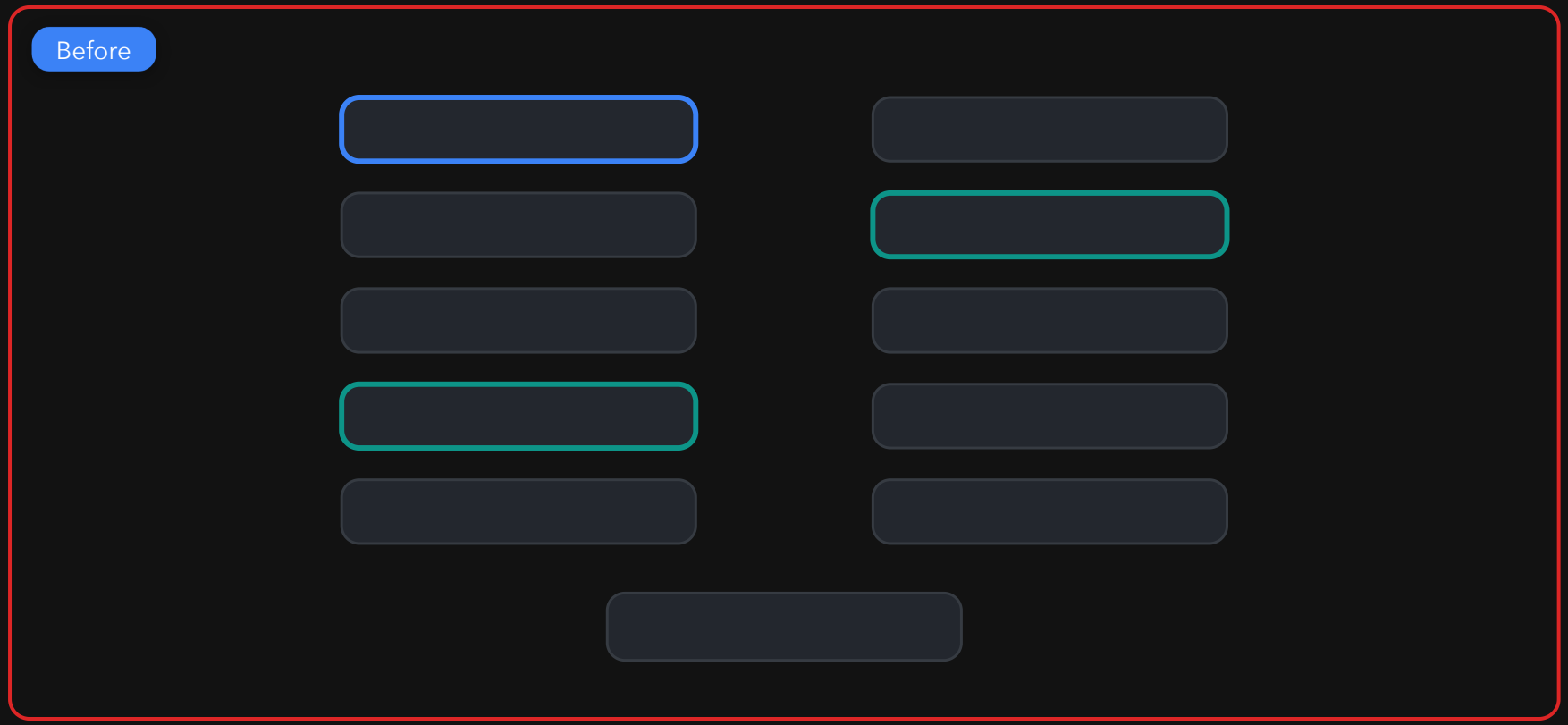

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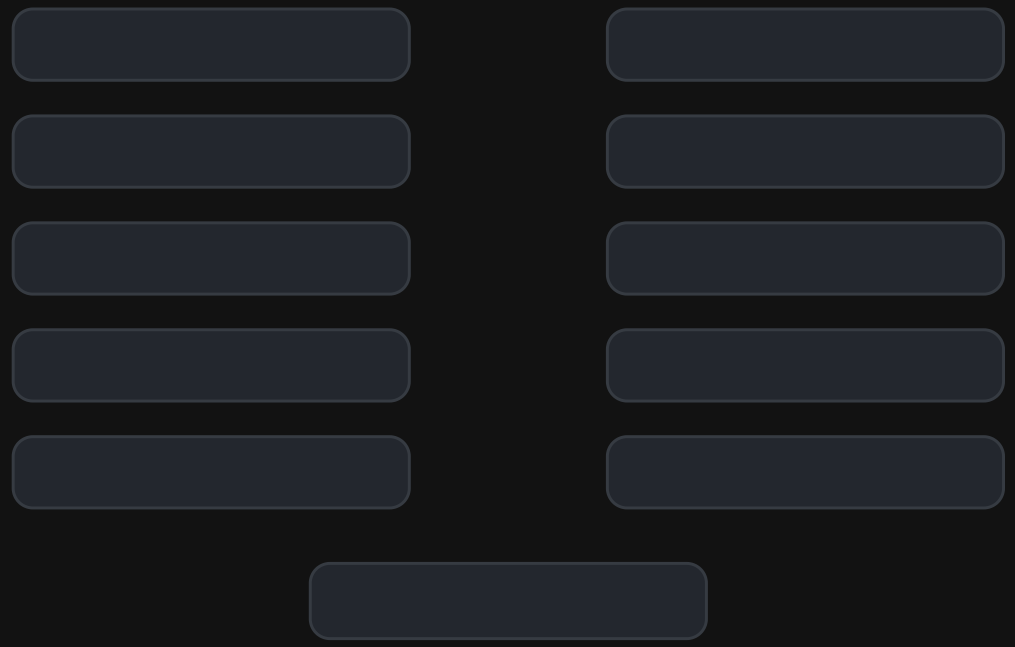

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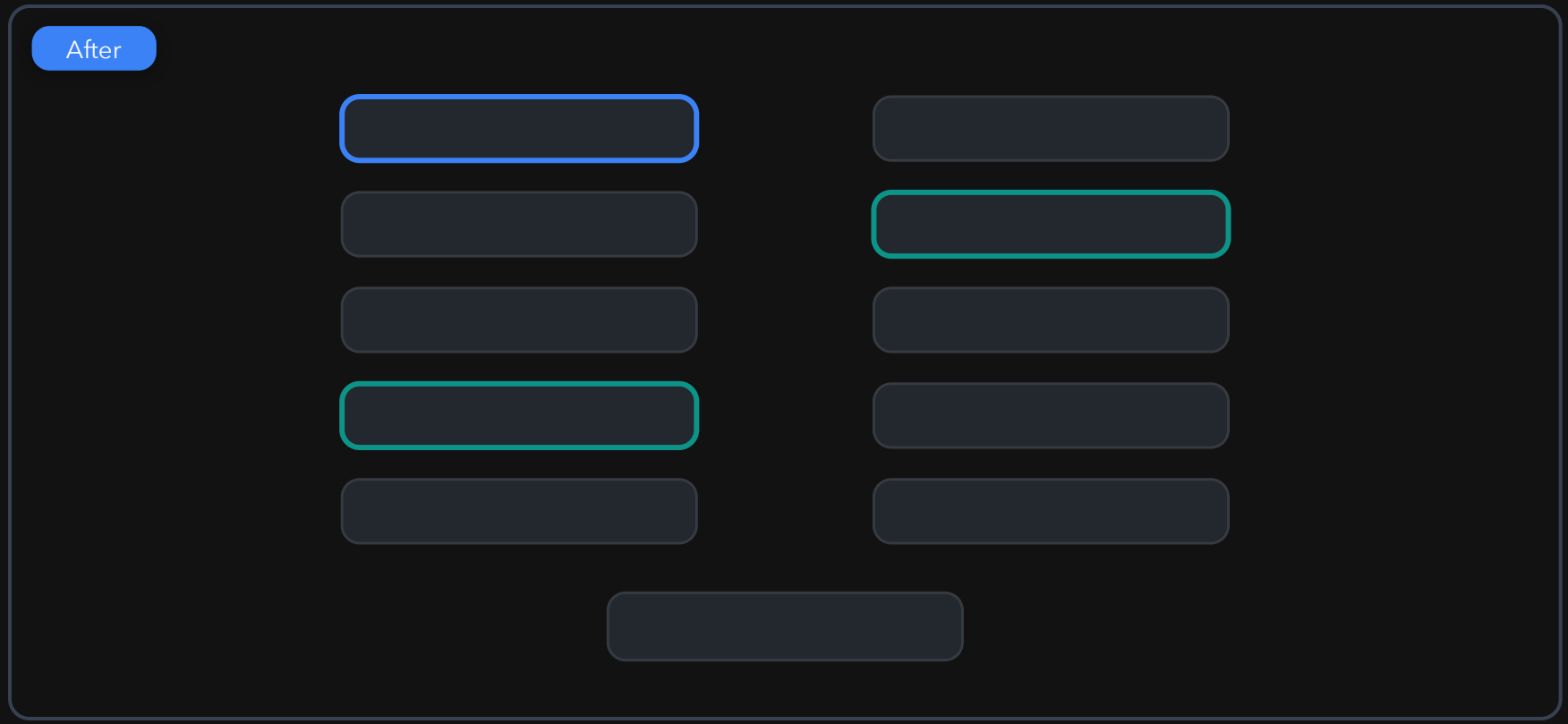

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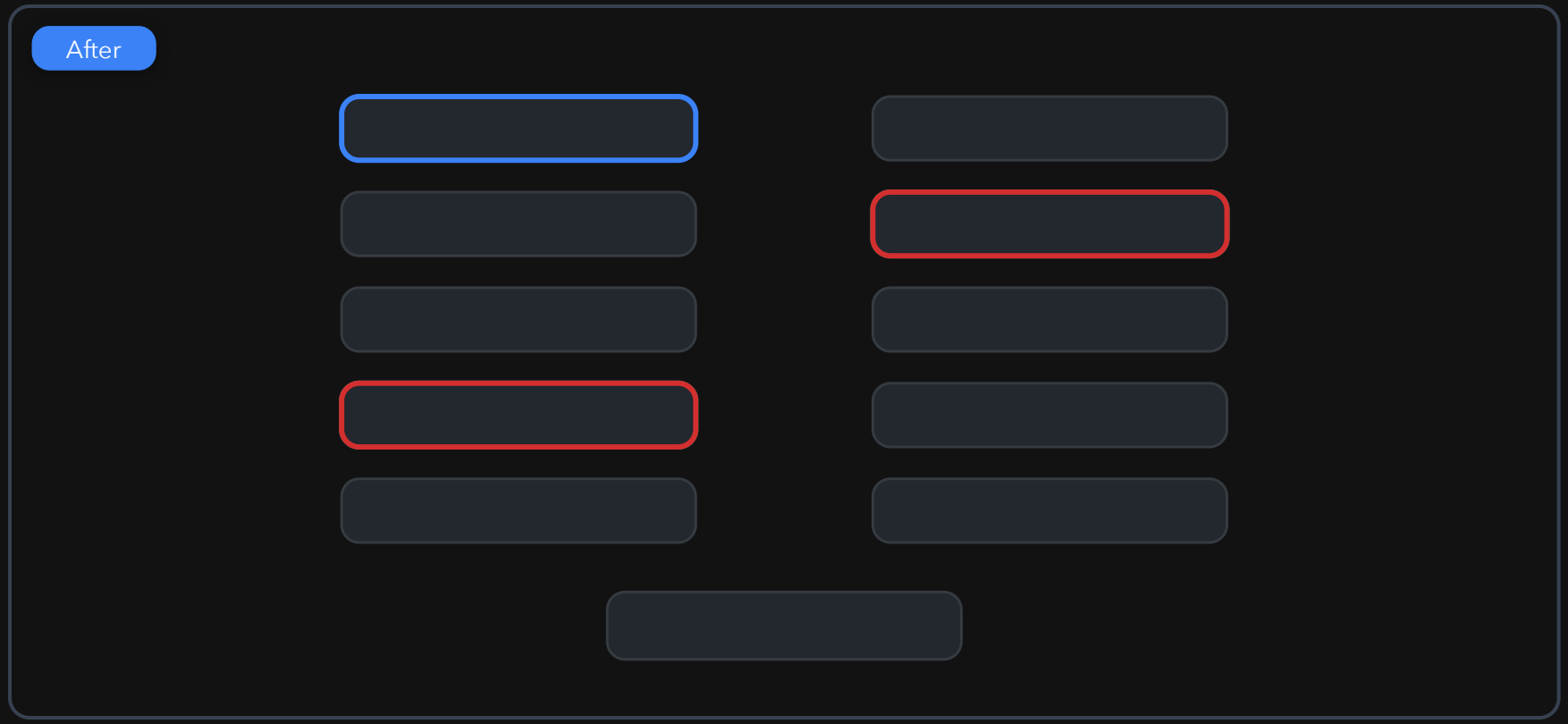


🚀 Partial Render Self

`->partiallyRenderAfterStateUpdated()`

```
Forms\Components\TextInput::make('password')
    ->live()
    ->password()
    ->partiallyRenderAfterStateUpdated()
    ->belowContent(
        fn ($state) => match (true) {
            strlen($state) > 12 => '🎉 Awesome!',
            strlen($state) > 8 => '🙂 Yeah okay',
            strlen($state) > 4 => '😒 Try harder.',
            strlen($state) > 0 => '😢 This sucks!',
            default => ''
        }
    ),
```

Email — Rendered: 09:41:39

mail@example.org

Password — Rendered: 09:41:39

🚀 Partial Render Other Components

`->partiallyRenderComponentsAfterStateUpdated()`

```
use Filament\Forms\Components\TextInput;

Forms\Components\Select::make('level')
  ->default('error')
  ->live()
  ->partiallyRenderComponentsAfterStateUpdated([
    'logs'
  ])
  ->options([
      'debug' => 'Debug',
      'error' => 'Error',
  ]),

Infolists\Components\CodeEntry::make('logs')
  ->state(
    fn (Get $get) => (new GetLogs)($get('level'))
  ),
```

Level — Rendered: 09:41:38

Error

Logs — Rendered: 09:41:38

```
ERROR:   Filament v5 not found.
WARNING: Do not spend too much time on examp
```

JavaScript Methods

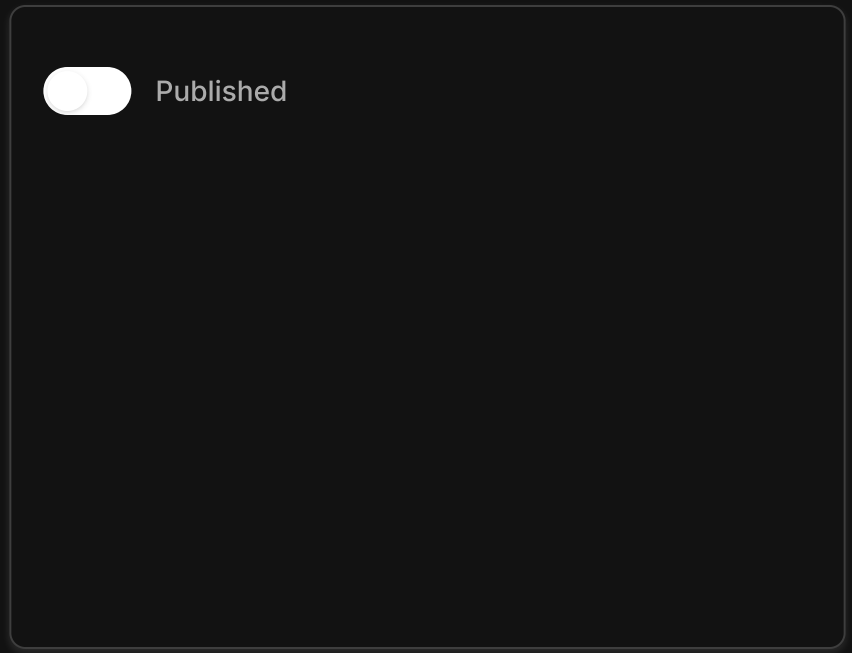
No server loop required.

Show/Hide via JavaScript

`→hiddenJs()` / `→visibleJs()`

```
Forms\Components\Toggle::make('published'),

Forms\Components\DatePicker::make('published_at')
    →visibleJs(<<<'JS'
        $get('published')
    JS)
```



Hiding an entry using JavaScript

Update Fields via JavaScript

`->afterStateUpdatedJs()`

```
Forms\Components\TextInput::make('name')
    ->afterStateUpdatedJs(<<<'JS'
        slugify = str => str.toLowerCase();

        $set('slug', slugify($state));
    JS),

Forms\Components\TextInput::make('slug')
    ->readOnly(),
```

Name

Slug

Preventing the Livewire component from rendering after a field is updated

Output Content via JavaScript

`JsContent::make()`

```
Forms\Components\TextInput::make('name')
  ->maxLength(20)
  ->hint(JsContent::make(<<<'JS'
      ($state?.length ?? 0) + '/20'
  JS)),
```

Name

Using JavaScript to determine text content

🚀 Bulk Actions

🚀 Bulk Actions

Before

```
"updates": {
    "selectedTableRecords.4": "5",
    "selectedTableRecords.5": "6",
    "selectedTableRecords.6": "7"
    "...",
    "selectedTableRecords.9999": "1000"
}
```

- Send all selected items over the wire
- 0.3 MB for 10.000 records
- Might be declined by your server
- Crashing your browser

🚀 Bulk Actions

Before

```
"updates": {
    "selectedTableRecords.4": "5",
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    "...",
    "selectedTableRecords.9999": "1000"
}
```

- Send all selected items over the wire
- 0.3 MB for 10.000 records
- Might be declined by your server
- Crashing your browser

After

```
"updates": {
    "isTrackingDeselectedTableRecords": true,
    "deselectedTableRecords.0": "1",
    "deselectedTableRecords.1": "2",
    "deselectedTableRecords.2": "3",
    "deselectedTableRecords.3": "4"
}
```

- Only send necessary info
- 4 KB for 10.000 records
- Browser Happy
- Server Happy

🚀 Bulk Actions

Chunking

```
BulkAction::make()
    ->chunkSelectedRecords(250)
    ->action(function (LazyCollection $records) {
        // Process the records ...
    })
```

🚀 Bulk Actions

Chunking

```
BulkAction::make()
    ->chunkSelectedRecords(250)
    ->action(function (LazyCollection $records) {
        // Process the records ...
    })
```

No Fetching

```
BulkAction::make()
    ->fetchSelectedRecords(false)
    ->action(function (Collection $records) {
        // Process the records ...
    })
```

Developer Experience

Unified Actions | Schemas | Static Tables

👨🏼‍💻 Unified Actions

One class to rule them all.

👨🏼‍💻 Unified Actions

One class to rule them all.

- `Filament\Tables\Actions`
- `Filament\Pages\Actions`
- `Filament\Notifications\Actions`
- `Filament\GlobalSearch\Actions`
- `Filament\Forms\Components\Actions`
- `Filament\Infolists\Components\Actions`
- `Filament\Actions`

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- `Filament\Actions`

→

- `Filament\Actions`

👨🏼‍💻 Schemas

Mix and match as you like

Schemas

Mix and match as you like

```php
public function form(Schema $schema): Schema
{
  return $schema->components([
    Schemas\Components\Actions::make([
      Action::make('Special')->action( ... ),
    ]),

    Forms\Components\Select::make('gif')
      ->live()
      ->options([
        asset('noice.gif') => 'Noice 1',
        asset('noice-2.gif') => 'Noice 2',
      ]),

    Infolist\Components\ImageEntry::make('image')
      ->state(fn ($get) => $get('gif'))

    Schemas\Components\Livewire::make(MyComp::class)
  ]);
}
```

First Second Special

Gif

Select an option

Image

Select a gif ...

Hello from Livewire 👋

👨🏼‍💻 Page Schemas

Mix and match the whole page.

- String
- HTML
- View
- LW
- Table
- Form

👨🏼‍💻 Page Schemas

Mix and match the whole page.

```
public function content(Schema $schema) {
    return $schema→components([
        'Some simple content'
    ]);
}
```

String

HTML

View

LW

Table

Form

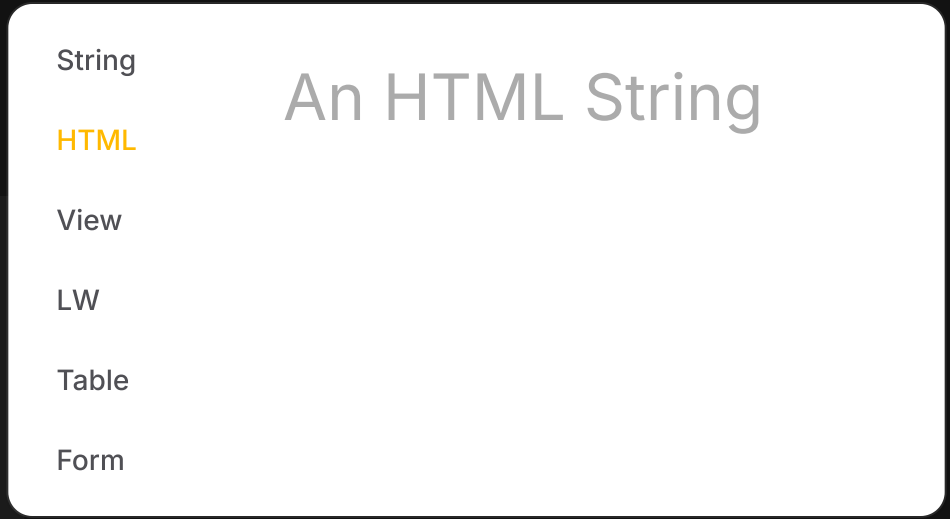
Some simple content

👨🏼‍💻 Page Schemas

Mix and match the whole page.

```
public function content(Schema $schema) {
    return $schema→components([
        new HtmlString( <<<HTML
          <h1 style="font-size: 2rem">
            An HTML String
          </h1>
        HTML),

        svg('heroicon-c-rocket-launch')
    ]);
}
```



👨🏼‍💻 Page Schemas

Mix and match the whole page.

```
public function content(Schema $schema) {
    return $schema→components([
        view('laravel')
    ]);
}
```

String

HTML

View

LW

Table

Form

Laravel

👨🏼‍💻 Page Schemas

Mix and match the whole page.

```
public function content(Schema $schema) {
    return $schema→components([
        Livewire::make(DemoComponent::class),
    ]);
}
```

String

HTML

View

LW

Table

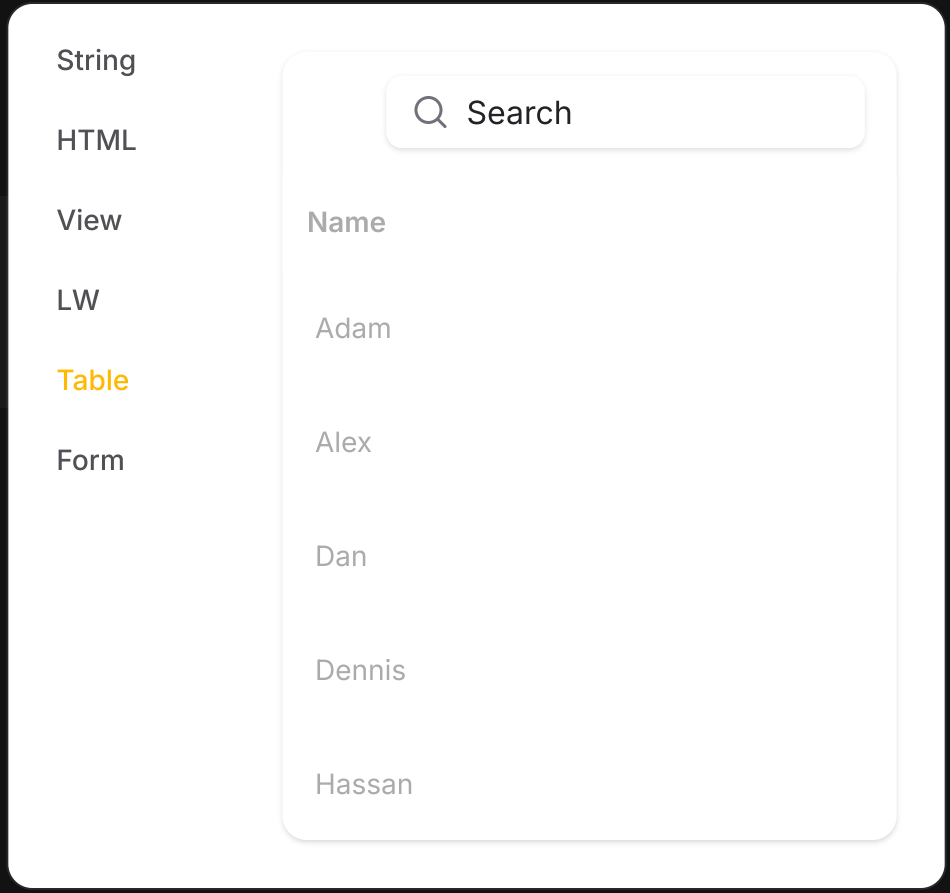
Form

Hello from Livewire 👋🏼

👨🏼‍💻 Page Schemas

Mix and match the whole page.

```
public function content(Schema $schema) {
    return $schema→components([
        EmbeddedTable::make()
    ]);
}
```



👨🏼‍💻 Page Schemas

Mix and match the whole page.

```
public function content(Schema $schema) {
    return $schema→components([
        Form::make()→schema([
            Forms\Components\TextInput::make('name')
        ])
    ]);
}
```

👨🏼‍💻 Static Tables

Before: Sushi – Lots of limitations

```
class SubscriptionApiWrapper extends Model
{
    use Sushi;

    public function getRows(): array
    {
        $resp = Http::get('https://your-api.com');

        return $resp->json('data');
    }
}
```

👨🏼‍💻 Static Tables

Now: Static data via `->records()`.

```
return $table
  ->records(function ($search, $sortColumn, $sortDirection) {

    return collect(File::json('meetups.json'))
      ->filter(function ($record) use ($search) {
        if (blank($search)) return true;

        return stripos($record['name'], $search) !== false;
      })
      ->sortBy(
          $sortColumn,
          descending: $sortDirection === 'desc'
      );
});
```

👨🏼‍💻 Static Tables

Now: Static data via `->records()`.

```
return $table
  ->records(function ($search, $sortColumn, $sortDirection) {

    return collect(File::json('meetups.json'))
      ->filter(function ($record) use ($search) {
        if (blank($search)) return true;

        return stripos($record['name'], $search) !== false;
      })
      ->sortBy(
          $sortColumn,
          descending: $sortDirection === 'desc'
      );
});
```

Search

Name	Location	Date
January 2025	Zurich	30.01.2025
February 2025	Neuchâtel	25.02.2025
March 2025	Zurich	26.03.2025
April 2025	Basel	30.04.2025
May 2025	Aarau	28.05.2025
June 2025	Zurich	17.06.2025
June 2025	Luzern	26.06.2025

👨🏼‍💻 Static Tables

Now: Static data via `→records()`.

```
return $table
  →records(function ($search, $sortColumn, $sortDirection) {

    return collect(File::json('meetups.json'))
      →filter(function ($record) use ($search) {
        if (blank($search)) return true;

        return stripos($record['name'], $search) !== false;
      })
      →sortBy(
          $sortColumn,
          descending: $sortDirection === 'desc'
      );
});
```

```
fn (
  $sortColumn, $sortDirection,
  $page, $recordsPerPage
  $search, $filters,
)
```

Tables: Custom Data

Search

Name	Location	Date
January 2025	Zurich	30.01.2025
February 2025	Neuchâtel	25.02.2025
March 2025	Zurich	26.03.2025
April 2025	Basel	30.04.2025
May 2025	Aarau	28.05.2025
June 2025	Zurich	17.06.2025
June 2025	Luzern	26.06.2025

👨🏼‍💻 Nested Resources

Relation Manager

```
class MeetupsRelationManager extends RelationManager
{
  protected static $relatedResource = MeetupResource::class;
}
```

Nested Resource

```
class MeetupResource extends Resource
{
    protected static $parentResource = LocationResource::class;
}
```

👨🏼‍💻 Nested Resources

Relation Manager

```
class MeetupsRelationManager extends RelationManager
{
  protected static $relatedResource = MeetupResource::class;
}
```

Nested Resource

```
class MeetupResource extends Resource
{
    protected static $parentResource = LocationResource::class;
}
```

Locations > List

Locations

Name	City	Meetups	
Novu Campus	Zurich	5	View
Liip Arena	Zurich	2	View
Infomaniak	Geneve	3	View
Byro	Aarau	0	View
Neustadt Agentur	Luzern	2	View

10

2FA

Choose between Authenticator App or Email

🔐 2FA

Choose between Authenticator App or Email

```
$panel
    ->profile()
    ->multiFactorAuthentication([
        AppAuthentication::make(),
    ]);
```

🔐 2FA

Choose between Authenticator App or Email

```
$panel
    ->profile()
    ->multiFactorAuthentication([
        AppAuthentication::make(),
    ]);
```

Prepare User Model

```
Schema::table('users', function (Blueprint $table) {
    $table->text('app_authentication_secret')->nullable();
});
```

🔐 2FA

Choose between Authenticator App or Email

```
$panel
    ->profile()
    ->multiFactorAuthentication([
        AppAuthentication::make(),
    ]);
```

Prepare User Model

```
Schema::table('users', function (Blueprint $table) {
    $table->text('app_authentication_secret')->nullable();
});
```

```
interface HasAppAuthentication
{
    public function getAppAuthenticationSecret(): ?string;
    public function saveAppAuthenticationSecret(?string $secret): void;
    public function getAppAuthenticationHolderName(): string;
}
```

✨

New Components

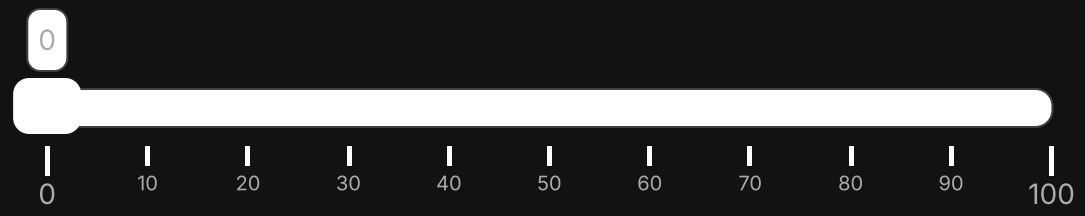
FusedGroup

Phone

+XX 123 345

Fusing fields together into a group

Slider



Forms: Slider

Code Editor

```php
<?php

public function form(Schema $schema): Schema
{
    return $schema
        ->statePath('data')
        ->schema([
            Forms\Components\CodeEditor::make('code')
                ->language(Forms\Components\CodeEditor\Enums\Langua
    ]);
}
```

Code Entry

Theme

Select an option

```php
<?php

public function form(Schema $schema): Schema
{
    return $schema
        ->statePath('data')
        ->schema([
            Infolists\Components\CodeEntry::make('code')
                ->hiddenLabel()
                ->grammar(Grammar::Php)
    ]);
}
```

Table Repeater

Table

Name

Dan

Role*

Member

Forms: Table Repeaters

Modal Table Select

Meetup Attendees

Select

RichEditor

✨ What else?

- A11Y improvements
- Timezone setting via `FilamentTimezone`
- Sidebar & Topbar as Livewire components
- Vertical Tabs
- Icon Enum
- New file structure
- Better Documentation
- …

🚧 Current Status

- v4 still in Beta
- Still some issues reported on GitHub
- Probably stable in next 1–2 months

🕵🏻 How you can help

- Test the beta
- Report issues on GitHub
- Spread the word
- Sponsor the project

https://github.com/sponsors/danharrin

Thank you!

Questions?