

# Creating Interceptors

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# What Are Interceptors?

## Services

**Implement the `HttpInterceptor` interface**

**Manipulate HTTP requests before they're sent to the server**

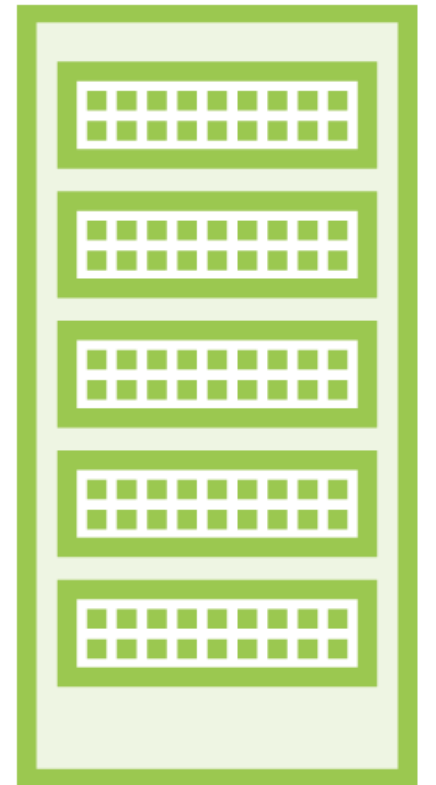
**Manipulate HTTP responses before they're returned to your app**



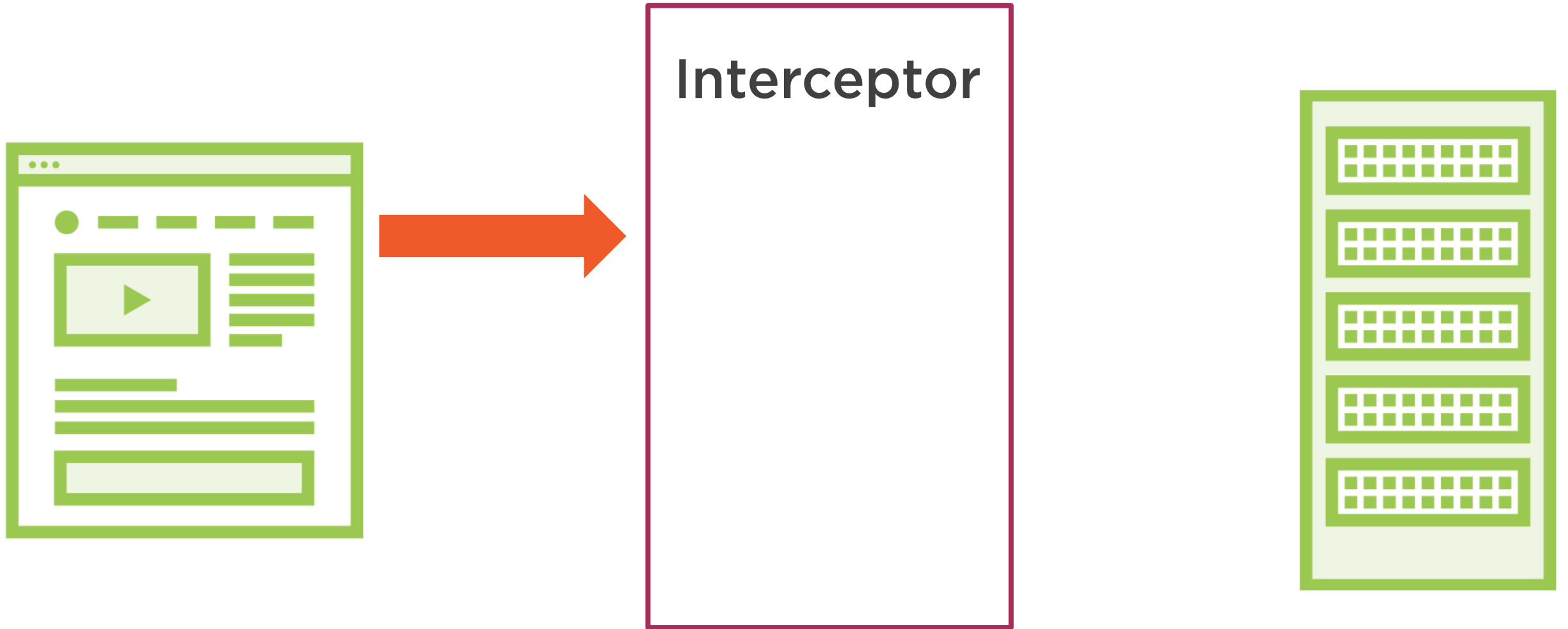
# Intercepting Requests and Responses



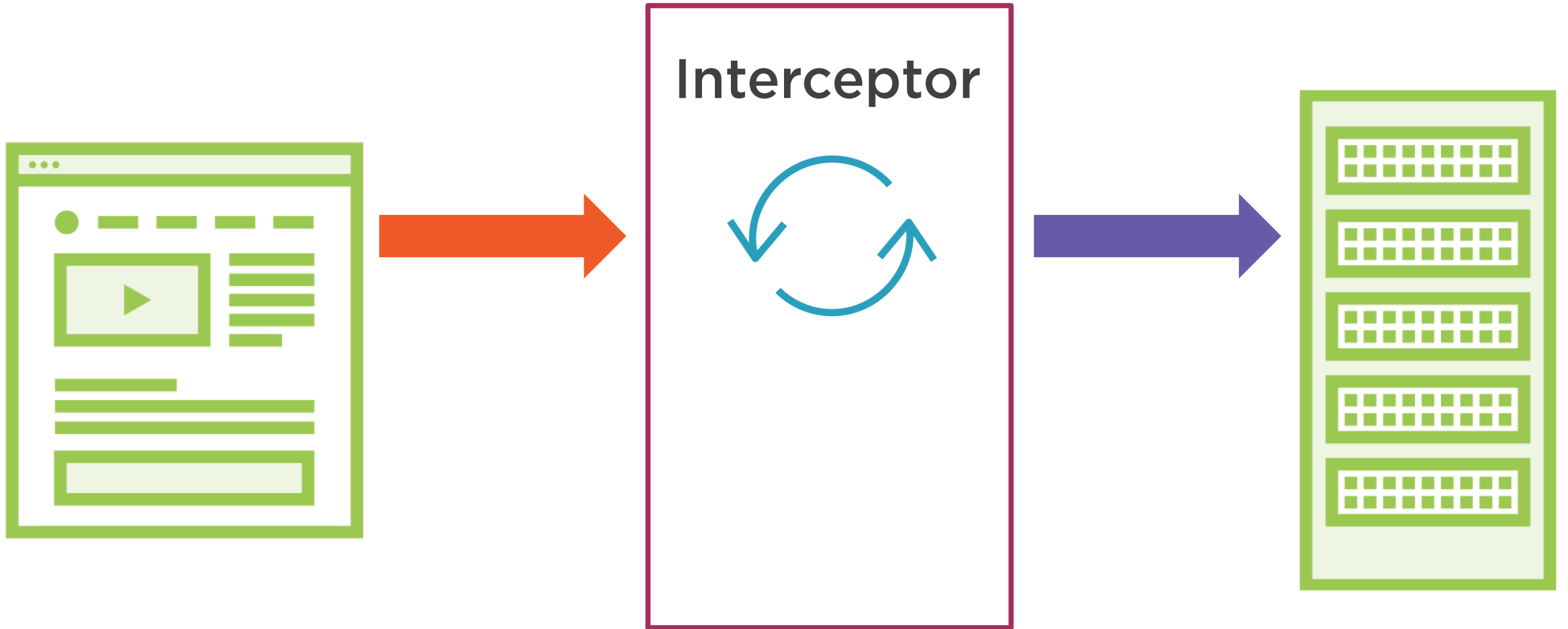
**Interceptor**



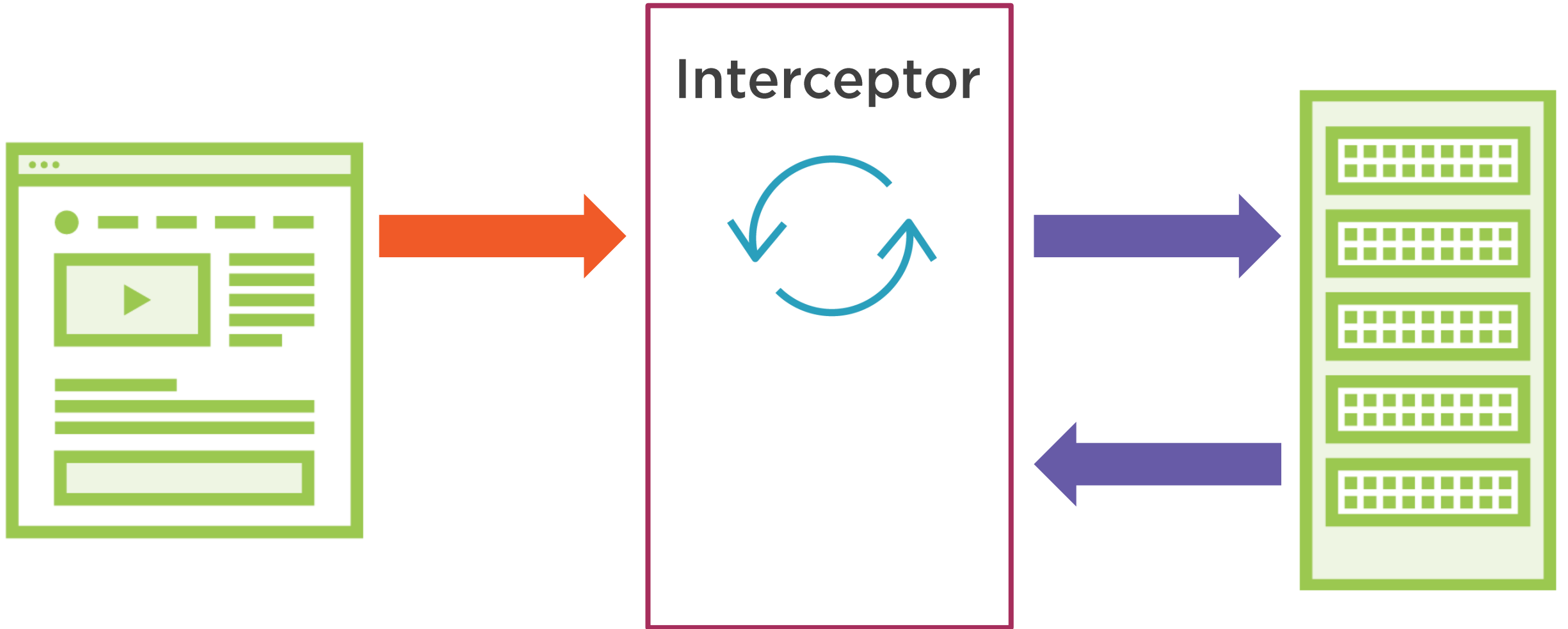
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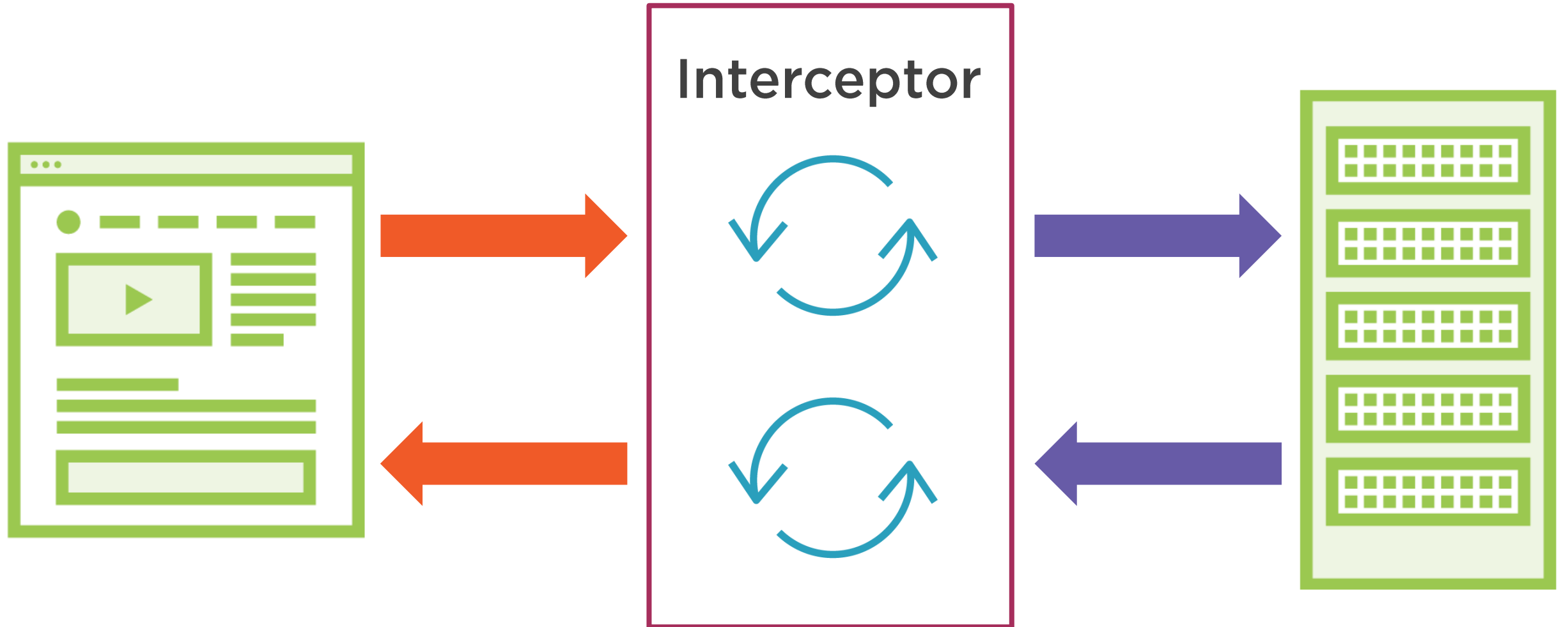
# Intercepting Requests and Responses



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# Intercepting Requests and Responses



# Uses for Interceptors

Adding headers to all requests

Logging

Reporting progress events

Client-side caching





# Defining an Interceptor

```
export class FirstInterceptor implements HttpInterceptor {
```



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export class FirstInterceptor implements HttpInterceptor {  
    intercept(req: HttpRequest<any>, next: HttpHandler): Observable<HttpEvent<any>> {
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    const modifiedRequest = req.clone();
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export class FirstInterceptor implements HttpInterceptor {  
  intercept(req: HttpRequest<any>, next: HttpHandler): Observable<HttpEvent<any>> {  
    const modifiedRequest = req.clone();  
    // ...  
  }  
}
```



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  intercept(req: HttpRequest<any>, next: HttpHandler): Observable<HttpEvent<any>> {  
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    return next.handle(modifiedRequest)  
  }  
}
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    // change modifiedRequest here  
    return next.handle(modifiedRequest)  
      .pipe(  
        .tap(event => {  
          if (event instanceof HttpResponse) {  
            // modify the HttpResponse here  
          }  
        })  
      );  
  }  
}
```



# Providing an Interceptor

```
@NgModule({  
  imports: [],  
  declarations: [],  
  providers: [  
  
  ]  
})  
  
export class AppModule { }
```



# Providing an Interceptor

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@NgModule({  
  imports: [],  
  declarations: [],  
  providers: [  
    { provide: HTTP_INTERCEPTORS, useClass: FirstInterceptor, multi: true },  
  ],  
})  
  
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# Demo



Creating an interceptor to add headers to all requests



# Demo



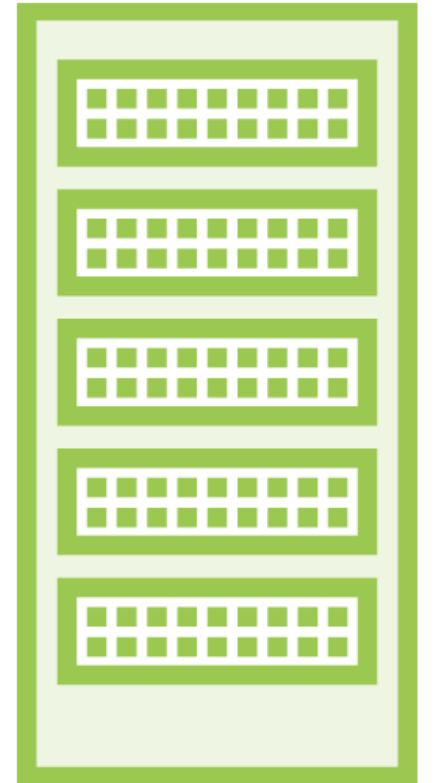
Intercepting responses and working with multiple interceptors



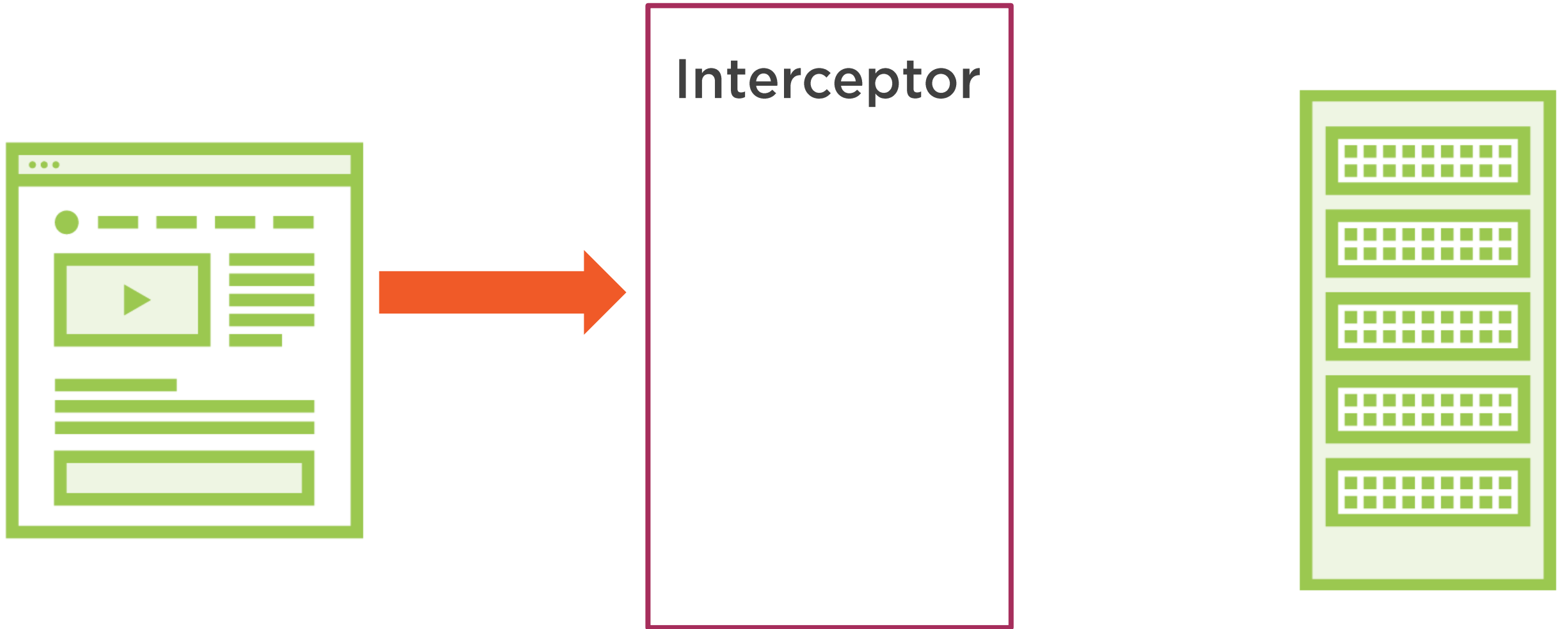
# Configuring Interceptors



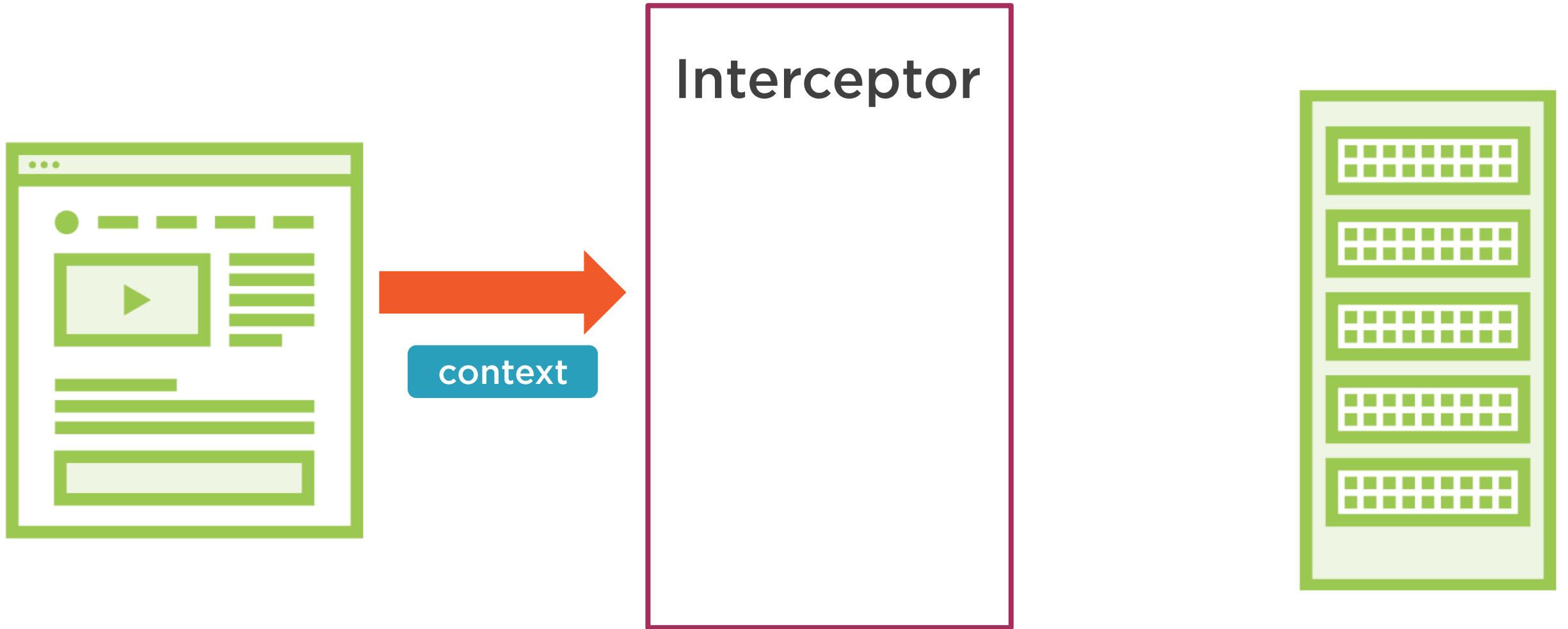
**Interceptor**



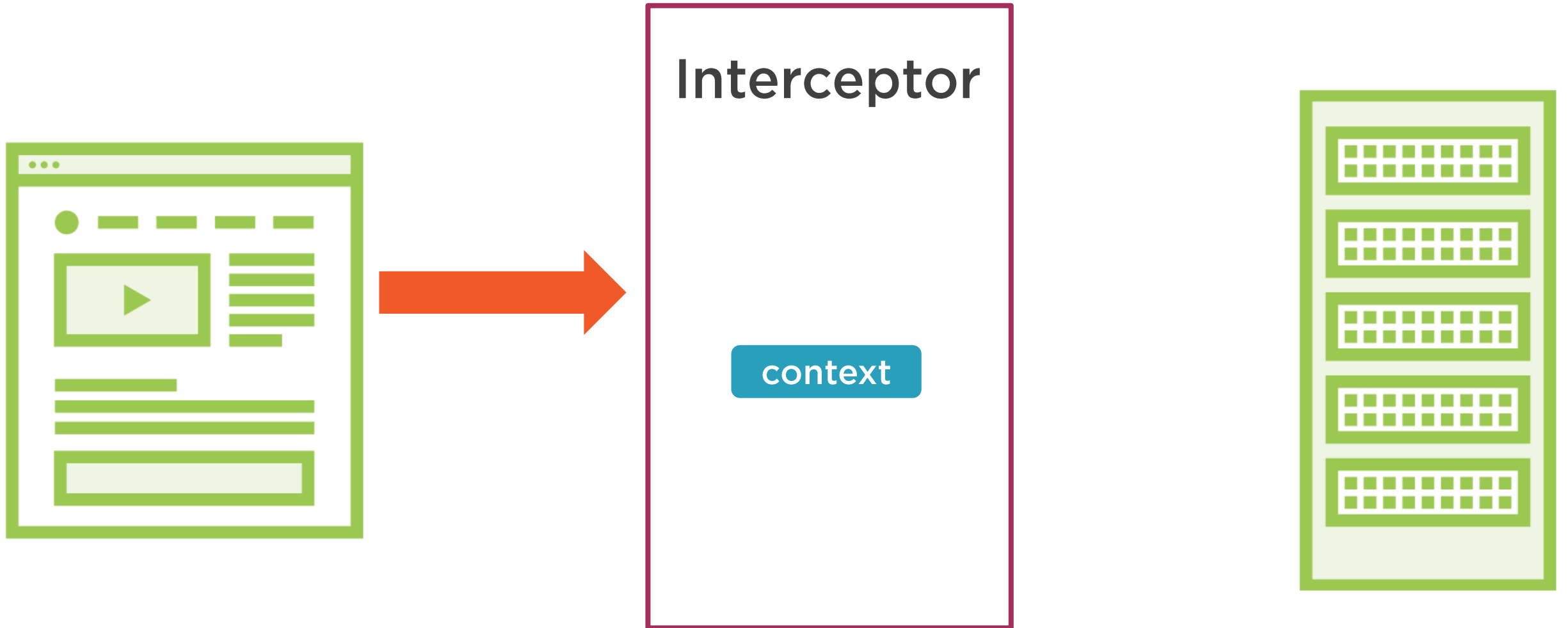
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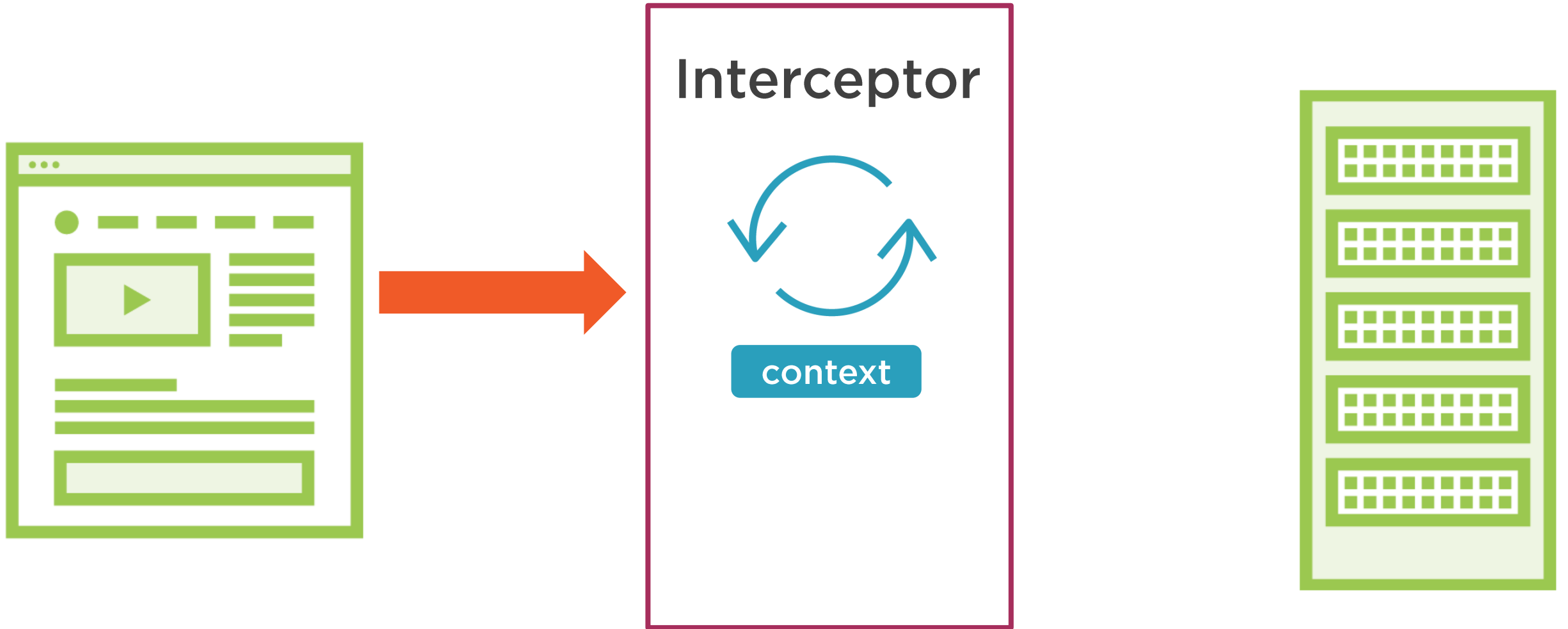


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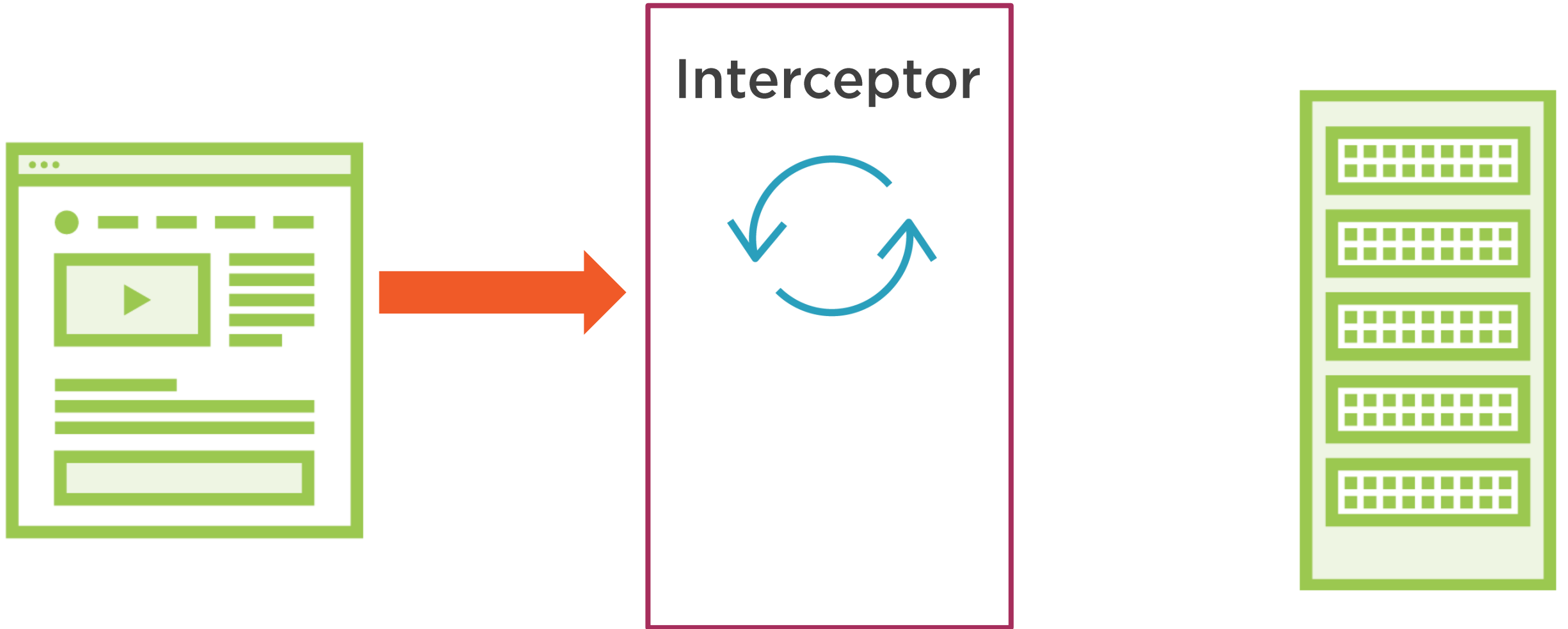




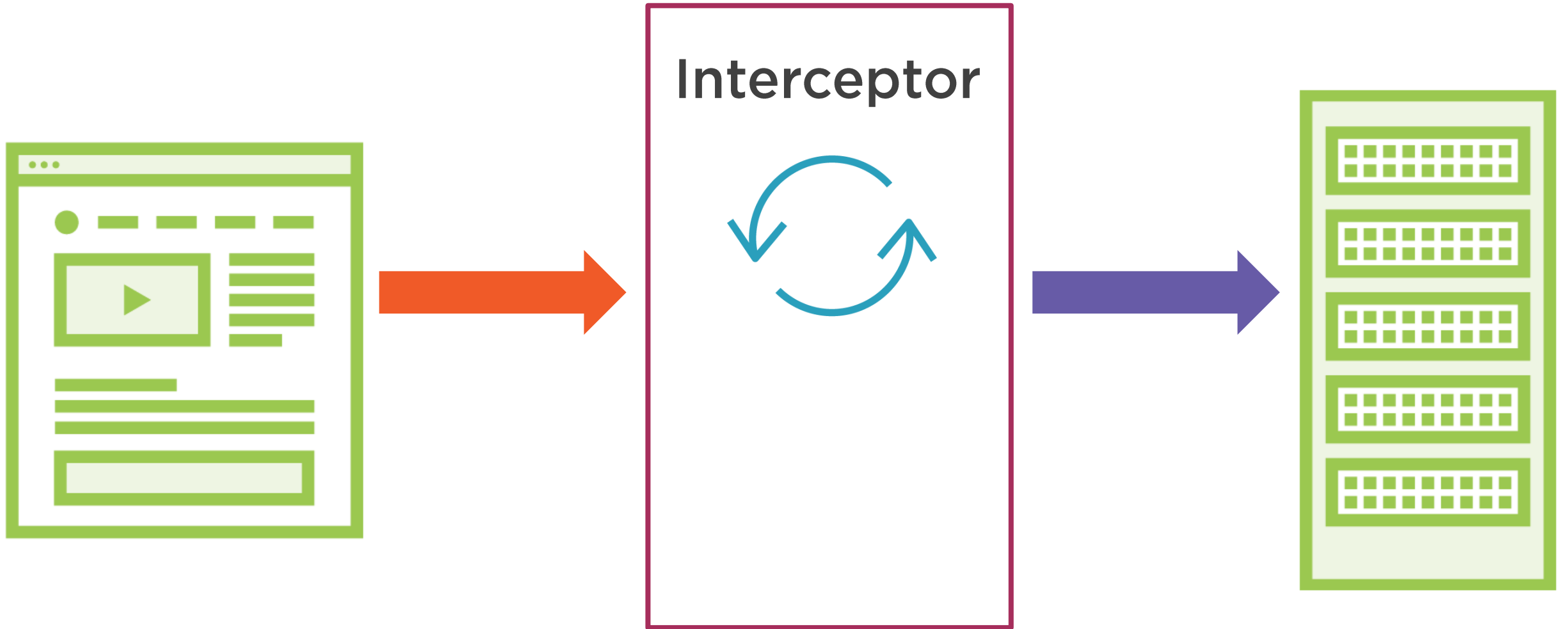
# Configuring Interceptors



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# Configuring Interceptors



# Creating and Processing Interceptor Metadata

```
// interceptor  
export const OPTION_1 = new HttpContextToken<number>(() => 42);
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```
// interceptor
export const OPTION_1 = new HttpContextToken<number>(() => 42);

// service
let my_context: HttpContext = new HttpContext();
```



# Creating and Processing Interceptor Metadata

```
// interceptor
export const OPTION_1 = new HttpContextToken<number>(() => 42);

// service
let my_context: HttpContext = new HttpContext();
my_context.set(OPTION_1, 13);
```



# Creating and Processing Interceptor Metadata

```
// interceptor
export const OPTION_1 = new HttpContextToken<number>(() => 42);

// service
let my_context: HttpContext = new HttpContext();
my_context.set(OPTION_1, 13);

this.http.get('/api/books', {
  context: my_context
});
```



# Creating and Processing Interceptor Metadata

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// service
let my_context: HttpContext = new HttpContext();
my_context.set(OPTION_1, 13);

this.http.get('/api/books', {
  context: my_context
});

// interceptor
let first_option: number = req.context.get<number>(OPTION_1);
```



# Creating and Processing Interceptor Metadata

```
// interceptor  
export const OPTION_1 = new HttpContextToken<number>(() => 42);
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```
// service  
let my_context: HttpContext = new HttpContext();  
my_context.set(OPTION_1, 13);
```

```
this.http.get('/api/books', {  
  context: my_context  
});
```



```
// interceptor  
let first_option: number = req.context.get<number>(OPTION_1);
```

# Demo



## Using metadata with interceptors

