

Two things to know about PSR-7

Rob Allen ~ August 2015

A quick review of HTTP

Request:

{METHOD} {URI} HTTP:/1.1

Header: value1,value2

Another-Header: value

Message body

A quick review of HTTP

Response:

HTTP:/1.1 {STATUS CODE} {REASON PHRASE}

Header: value1,value2

Another-Header: value

Message body

How does PHP do it?

Request

- Superglobals
- php://input

How does PHP do it?

Response:

- `header()`
- `echo` (& `ob_*`() methods)

PSR-7

It's just some interfaces

- Request & ServerRequest
- Response

PSR-7

It's just some interfaces

- Request & ServerRequest
- Response
- Header
- Stream

PSR-7

It's just some interfaces

- Request & ServerRequest
- Response
- Header
- Stream
- Uri
- UploadFile

Now, we come to the two
important things!

Immutable

Request, Response, Uri & UploadFile are *immutable*

```
$uri = new Uri('https://api.joinind.in/v2.1/events');
```

Immutable

Request, Response, Uri & UploadFile are *immutable*

```
$uri = new Uri('https://api.joinind.in/v2.1/events');  
$uri = $uri->withQuery('?filter=upcoming');
```

Immutable

Request, Response, Uri & UploadFile are *immutable*

```
$uri = new Uri('https://api.joinind.in/v2.1/events');  
$uri = $uri->withQuery('?filter=upcoming');
```

```
$request = (new Request())  
    ->withMethod('GET')  
    ->withUri($uri)  
    ->withHeader('Accept', 'application/json')  
    ->withHeader('Authorization', 'Bearer 0873418d');
```

Streams

Message bodies are *streams*

```
$image = __DIR__ . '/huge_photo.jpg';  
$body = new Stream($image);  
  
$response = (new Response())  
    ->withStatus(200, 'OK')  
    ->withHeader('Content-Type', 'image/jpeg')  
    ->withHeader('Content-Length', filesize($image))  
    ->withBody($body);
```

Streams

Text is common - use write()

```
$body = new Stream();  
$body->write(json_encode(['foo' => 'bar']));  
  
$response = (new Response())  
    ->withStatus(200, 'OK')  
    ->withHeader('Content-Type', 'application/json')  
    ->withHeader('Accept', 'application/json')  
    ->withBody($body);
```

Streams

Writable streams are mutable

```
$body = new Stream();  
$body->write('Hello ');  
$body->write('World!');
```

```
$response = (new Response())  
    ->withStatus(200, 'OK')  
    ->withHeader('Content-Type', 'text/plain')  
    ->withBody($body);
```

Why PSR-7?

Interoperability

Interoperability

```
$file = $s3Client->getObject(/*...*/);  
return $response->withBody($file['body']);
```

Remember this!

- Immutable objects
- Body is a stream

Thank you

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