# Interfaces

The purpose of this list is to help in finding the methods when working with PSR-7. This can be considered as a cheatsheet for PSR-7 interfaces.

The interfaces defined in PSR-7 are the following:

| **Class Name** | **Description** |
| --- | --- |
| [Psr\Http\Message\MessageInterface](http://www.php-fig.org/psr/psr-7/#psrhttpmessagemessageinterface) | Representation of a HTTP message |
| [Psr\Http\Message\RequestInterface](http://www.php-fig.org/psr/psr-7/#psrhttpmessagerequestinterface) | Representation of an outgoing, client-side request. |
| [Psr\Http\Message\ServerRequestInterface](http://www.php-fig.org/psr/psr-7/#psrhttpmessageserverrequestinterface) | Representation of an incoming, server-side HTTP request. |
| [Psr\Http\Message\ResponseInterface](http://www.php-fig.org/psr/psr-7/#psrhttpmessageresponseinterface) | Representation of an outgoing, server-side response. |
| [Psr\Http\Message\StreamInterface](http://www.php-fig.org/psr/psr-7/#psrhttpmessagestreaminterface) | Describes a data stream |
| [Psr\Http\Message\UriInterface](http://www.php-fig.org/psr/psr-7/#psrhttpmessageuriinterface) | Value object representing a URI. |
| [Psr\Http\Message\UploadedFileInterface](http://www.php-fig.org/psr/psr-7/#psrhttpmessageuploadedfileinterface) | Value object representing a file uploaded through an HTTP request. |

## Psr\Http\Message\MessageInterface Methods

| **Method Name** | **Description** | **Notes** |
| --- | --- | --- |
| getProtocolVersion() | Retrieve HTTP protocol version | 1.0 or 1.1 |
| withProtocolVersion($version) | Returns new message instance with given HTTP protocol version |  |
| getHeaders() | Retrieve all HTTP Headers | [Request Header List](https://en.wikipedia.org/wiki/List_of_HTTP_header_fields#Request_fields), [Response Header List](https://en.wikipedia.org/wiki/List_of_HTTP_header_fields#Response_fields) |
| hasHeader($name) | Checks if HTTP Header with given name exists |  |
| getHeader($name) | Retrieves a array with the values for a single header |  |
| getHeaderLine($name) | Retrieves a comma-separated string of the values for a single header |  |
| withHeader($name, $value) | Returns new message instance with given HTTP Header | if the header existed in the original instance, replaces the header value from the original message with the value provided when creating the new instance. |
| withAddedHeader($name, $value) | Returns new message instance with appended value to given header | If header already exists value will be appended, if not a new header will be created |
| withoutHeader($name) | Removes HTTP Header with given name |  |
| getBody() | Retrieves the HTTP Message Body | Returns object implementing StreamInterface |
| withBody(StreamInterface $body) | Returns new message instance with given HTTP Message Body |  |

## Psr\Http\Message\RequestInterface Methods

Same methods as Psr\Http\Message\MessageInterface + the following methods:

| **Method Name** | **Description** | **Notes** |
| --- | --- | --- |
| getRequestTarget() | Retrieves the message's request target | origin-form, absolute-form, authority-form, asterisk-form ([RFC7230](https://www.rfc-editor.org/rfc/rfc7230.txt)) |
| withRequestTarget($requestTarget) | Return a new message instance with the specific request-target |  |
| getMethod() | Retrieves the HTTP method of the request. | GET, HEAD, POST, PUT, DELETE, CONNECT, OPTIONS, TRACE (defined in [RFC7231](https://tools.ietf.org/html/rfc7231)), PATCH (defined in [RFC5789](https://tools.ietf.org/html/rfc5789)) |
| withMethod($method) | Returns a new message instance with the provided HTTP method |  |
| getUri() | Retrieves the URI instance |  |
| withUri(UriInterface $uri, $preserveHost = false) | Returns a new message instance with the provided URI |  |

## Psr\Http\Message\ServerRequestInterface Methods

Same methods as Psr\Http\Message\RequestInterface + the following methods:

| **Method Name** | **Description** | **Notes** |
| --- | --- | --- |
| getServerParams() | Retrieve server parameters | Typically derived from $\_SERVER |
| getCookieParams() | Retrieves cookies sent by the client to the server. | Typically derived from $\_COOKIES |
| withCookieParams(array $cookies) | Returns a new request instance with the specified cookies |  |
| withQueryParams(array $query) | Returns a new request instance with the specified query string arguments |  |
| getUploadedFiles() | Retrieve normalized file upload data |  |
| withUploadedFiles(array $uploadedFiles) | Returns a new request instance with the specified uploaded files |  |
| getParsedBody() | Retrieve any parameters provided in the request body |  |
| withParsedBody($data) | Returns a new request instance with the specified body parameters |  |
| getAttributes() | Retrieve attributes derived from the request |  |
| getAttribute($name, $default = null) | Retrieve a single derived request attribute |  |
| withAttribute($name, $value) | Returns a new request instance with the specified derived request attribute |  |
| withoutAttribute($name) | Returns a new request instance that without the specified derived request attribute |  |

## Psr\Http\Message\ResponseInterface Methods:

Same methods as Psr\Http\Message\MessageInterface + the following methods:

| **Method Name** | **Description** | **Notes** |
| --- | --- | --- |
| getStatusCode() | Gets the response status code. |  |
| withStatus($code, $reasonPhrase = '') | Returns a new response instance with the specified status code and, optionally, reason phrase. |  |
| getReasonPhrase() | Gets the response reason phrase associated with the status code. |  |

## Psr\Http\Message\StreamInterface Methods

| **Method Name** | **Description** | **Notes** |
| --- | --- | --- |
| \_\_toString() | Reads all data from the stream into a string, from the beginning to end. |  |
| close() | Closes the stream and any underlying resources. |  |
| detach() | Separates any underlying resources from the stream. |  |
| getSize() | Get the size of the stream if known. |  |
| eof() | Returns true if the stream is at the end of the stream. |  |
| isSeekable() | Returns whether or not the stream is seekable. |  |
| seek($offset, $whence = SEEK\_SET) | Seek to a position in the stream. |  |
| rewind() | Seek to the beginning of the stream. |  |
| isWritable() | Returns whether or not the stream is writable. |  |
| write($string) | Write data to the stream. |  |
| isReadable() | Returns whether or not the stream is readable. |  |
| read($length) | Read data from the stream. |  |
| getContents() | Returns the remaining contents in a string |  |
| getMetadata($key = null)() | Get stream metadata as an associative array or retrieve a specific key. |  |

## Psr\Http\Message\UriInterface Methods

| **Method Name** | **Description** | **Notes** |
| --- | --- | --- |
| getScheme() | Retrieve the scheme component of the URI. |  |
| getAuthority() | Retrieve the authority component of the URI. |  |
| getUserInfo() | Retrieve the user information component of the URI. |  |
| getHost() | Retrieve the host component of the URI. |  |
| getPort() | Retrieve the port component of the URI. |  |
| getPath() | Retrieve the path component of the URI. |  |
| getQuery() | Retrieve the query string of the URI. |  |
| getFragment() | Retrieve the fragment component of the URI. |  |
| withScheme($scheme) | Return an instance with the specified scheme. |  |
| withUserInfo($user, $password = null) | Return an instance with the specified user information. |  |
| withHost($host) | Return an instance with the specified host. |  |
| withPort($port) | Return an instance with the specified port. |  |
| withPath($path) | Return an instance with the specified path. |  |
| withQuery($query) | Return an instance with the specified query string. |  |
| withFragment($fragment) | Return an instance with the specified URI fragment. |  |
| \_\_toString() | Return the string representation as a URI reference. |  |

## Psr\Http\Message\UploadedFileInterface Methods

| **Method Name** | **Description** | **Notes** |
| --- | --- | --- |
| getStream() | Retrieve a stream representing the uploaded file. |  |
| moveTo($targetPath) | Move the uploaded file to a new location. |  |
| getSize() | Retrieve the file size. |  |
| getError() | Retrieve the error associated with the uploaded file. |  |
| getClientFilename() | Retrieve the filename sent by the client. |  |
| getClientMediaType() | Retrieve the media type sent by the client. |  |

RequestInterface, ServerRequestInterface, ResponseInterface extend MessageInterface because the Request and the Response are HTTP Messages. When using ServerRequestInterface, both RequestInterface and Psr\Http\Message\MessageInterface methods are considered.