

# Input Validation

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# Demo



Introducing our online shop

Registration

Logging in

Putting items up for sale

Searching for items

Buying items





Headers

Generator

Config

About

## HTTP Headers

<http://php.net/manual-lookup.php?pattern=input&scope=quickref>

GET /manual-lookup.php?pattern=input&scope=quickref HTTP/1.1

Host: php.net

User-Agent: Mozilla/5.0 (Windows NT 6.1; rv:47.0) Gecko/20100101 Firefox/47.0

Accept: text/html,application/xhtml+xml,application/xml;q=0.9,\*/\*;q=0.8

Accept-Language: en-US,en;q=0.5

Accept-Encoding: gzip, deflate

Referer: http://php.net/

Cookie: COUNTRY=NA%2C2.201.2.1; LAST\_NEWS=1467891879; LAST\_LANG=en

Connection: keep-alive

Cache-Control: max-age=0

HTTP/1.1 200 OK

Save All...

Replay...

☒ Capture

Clear

Close



# Further Input Sources

`$_REQUEST`

`$_ENV`

`$HTTP_*_VARS`

`$_SESSION`



# Demo



Hacking our shop

Sending spam

Getting a deep discount



# Validating Input

## Is there any data?

isset()  
?? operator  
is\_\*()

## Searching strings

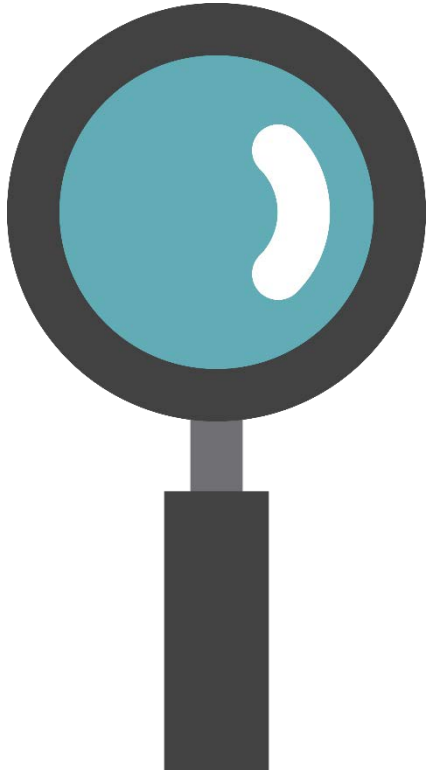
strpos()  
stripos()  
strrpos()  
strripos()

## Searching patterns

Regular expressions



# ctype Extension



`ctype_alnum`

`ctype_alpha`

`ctype_cntrl`

`ctype_digit`

`ctype_graph`

`ctype_lower`

`ctype_print`

`ctype_punct`

`ctype_space`

`ctype_upper`

`ctype_xdigit`

`is_numeric`

```
filter_var(  
    ' doe€snöt@€x!st',  
    FILTER_SANITIZE_EMAIL)
```

```
filter_var(  
    'X-123.456E789Y',  
    FILTER_SANITIZE_NUMBER_FLOAT,  
    FILTER_FLAG_ALLOW_SCIENTIFIC  
    |  
    FILTER_FLAG_ALLOW_FRACTION)
```

```
filter_has_var(  
    INPUT_GET, 'id')
```

```
filter_input(  
    INPUT_GET,  
    'id',  
    FILTER_VALIDATE_INT);
```

◀ **Validate or sanitize a variable**

◀ **Validate or sanitize a variable,  
using options**

◀ **Check whether an input variable  
has been set**

◀ **Validate or sanitize an input  
variable**





# PHP 7+ Type Declarations

```
<?php
```

```
declare(strict_types=1);
```

```
function add(int $a, int $b): int {  
    return $a + $b;  
}
```

```
$three = add('1', 2);
```



# Summary



**Validate input**

**Everything in the HTTP request can be manipulated**

**Use PHP's ctype and filter extensions**