

Twig

Divide and rule!

**Why we shouldn't
use PHP?**

Short tags

No a sandbox

No inheritance

No automatic escaping

A lot of not needed features

PHP is not a template engine

Have no any cool features

**What should be the
template engine?**

Caching

Concision

Debugging

Syntactic sugar

Optimal features

Separate namespace

Comprehensive documentation

Twig!
It's easy!

`{{ ... }}` — print

`{% ... %}` — execute

`{# ... #}` — comment-out

Variables

```
{{ user.firstName }}
```

can be any of the following:

```
<?php  
echo $user['firstName'];  
echo $user->firstName;  
echo $user->firstName();  
echo $user->getFirstName();  
echo $user->isFirstName();
```

```
{% set foo = null %}
```

```
{{ foo }} {# #}
```

```
{% set foo = 20.3 %}
```

```
{{ foo }} {# 20.3 #}
```

```
{% set foo = 'bar' %}
```

```
{{ foo }} {# bar #}
```

```
{% set foo = true %}
```

```
{{ foo }} {# 1 #}
```

```
{% set foo = [1, 2, 3] %}
```

```
{{ foo['1'] }} {# 2 #}
```

```
{% set foo = {'first' : 'bar'} %}
```

```
{{ foo.first }} {# bar #}
```

Operators

```
{{ 1 + 2 * 3 }}
```

```
{{ 'con' ~ 'cat' }}
```

```
{{ foo ? 'yes' : 'no' }}
```

```
{% if not user.age == 18 %}
```

```
    Hello {{ user.name }}
```

```
{% endif %}
```

```
{% if user is defined %}
```

```
    Hello {{ user.name }}
```

```
{% endif %}
```

Filters

```
{{ user.name | upper }}  
{{ 'now' | date('d.m.Y') }}  
{{ user.name | striptags | trim }}
```

is compiled to something like the following:

```
<?php  
echo strtoupper($user->name);  
echo twig_date_format_filter('now', 'd.m.Y');  
echo trim(strip_tags($user->name));
```

Functions


```
{{ random(['apple', 'orange']) }}
```

```
{{ include('template.html.twig') }}
```

```
{% for i in range(0, 3) %}  
    {{ i }},  
{% endfor %}
```

Tags

```
{% for user in users %}  
    {{ user.name }} <br />
```

```
{% else %}  
    nobody!
```

```
{% endfor %}
```

```
{% spaceless %}
```

```
<p> <span> foo </span> </p>
```

```
{% endspaceless %}
```

```
{# <p><span>foo</span></p> #}
```

Filters

abs
capitalize
date
default
escape
join
length
lower
merge
nl2br
slice
split
striptags
trim
upper
...

Tags

autoescape
block
do
extends
filter
for
from
if
import
include
macro
set
spaceless
...

Tests

attribute
block
constant
defined
divisibleby
empty
even
iterable
null
odd
sameas
...

Functions

attribute
block
constant
cycle
date
dump
include
parent
random
range
...

Operators

in
is
and
or
not
compare
math
...

Escaping

```
{ { user.username | escape } }  
{ { user.username | e } }  
{ { user.username | e( 'html' ) } }
```

Escaping strategies:

js

css

url

html

html_attr

```
{% autoescape %}
```

```
    something...
```

```
{% endautoescape %}
```

```
{% autoescape false %}
```

```
    something...
```

```
{% endautoescape %}
```

```
{% autoescape 'js' %}
```

```
    something...
```

```
{% endautoescape %}
```

Template inheritance


```
{# base.html #}
<html>
  <head>
    <title>
      {% block title %}Site{% endblock %}
    </title>
  </head>
  <body>
    {% block body %}Just Page{% endblock %}
  </body>
</html>
```

```
{# about.html #}
{% extends "base.html" %}

{% block title "About" %}

{% block body %}
  My name is Ivan!
  {% include 'education.html' %}
  {{ parent() }}
{% endblock %}
```

Extends another template

Override parent blocks

Include another template

Parent content

Dynamic Inheritance

```
{% extends layout %}
```

```
{% extends 'layout' ~ extension %}
```

Conditional Inheritance

```
{% extends ajax? 'layout_ajax.twig' : 'layout.twig' %}
```

Parent template from controller

```
// controller  
$layout = $twig->loadTemplate('layout.twig');  
$twig->display('template.twig', array(  
    'layout' => $layout  
));
```

```
{# template.twig #}  
{% extends layout %}
```

```
{# education.html #}
<div class="box">
  {% block education_skeleton %}
    default content of education
  {% endblock %}
</div>
```

```
{# about.html #}
{% extends "base.html" %}

{% block title "About" %}

{% block body %}
  My name is Ivan!
  {% embed "education.html" %}
    {% block education_skeleton %}
      other content of education
    {% endblock %}
  {% endembed %}
  {{ parent() }}
{% endblock %}
```

**Include another
template**

**Override
included block**

Horizontal reuse

```
{% extends "base.html" %}
```

```
{% use "blocks.html" %}
```

Import the blocks



```
{% block title %}{% endblock %}
```

```
{% block body %}{% endblock %}
```

Override the imported block

```
{% use "blocks.html" with sidebar as base_sidebar %}
```

```
{% block sidebar %}
```

```
    {{ block('base_sidebar') }}
```

```
{% endblock %}
```

Macros

```
{# macros.html #}
{% macro input(name, type, value, size) %}
    <input type="{{ type|default('text') }}"
        name="{{ name }}"
        value="{{ value|e }}"
        size="{{ size|default(20) }}"
    />
{% endmacro %}
```

```
{# theme.html #}
{% import "macros.html" as macros %}

<p>{{ macros.input('username') }}</p>
<p>{{ macros.input('pass', 'password') }}</p>
```

Extension

```
// Project_Twig_Extension.php
class Project_Twig_Extension extends Twig_Extension
{
    public function getName()
    {
        return 'project';
    }

    public function getFilters()
    {
        return array(
            'md5' => new \Twig_Filter_Method( 'md5' )
        );
    }
}
```

```
{# theme.html #}
{{ text | md5 }}
```

<http://twig.sensiolabs.org/doc/advanced.html>

Performance

Twig 1.13.2

vs

Smarty 3.1.14

Compile

echo

Twig: 2.1870 sec

Smarty: 5.5089 sec

foreach

Twig: 0.0284 sec

Smarty: 0.0162 sec

inheritance

Twig: 0.3077 sec

Smarty: 0.3994 sec

Execute

echo

Twig: 0.0369 sec

Smarty: 0.0256 sec

foreach

Twig: 0.0219 sec

Smarty: 0.0046 sec

inheritance

Twig: 0.0217 sec

Smarty: 0.0008 sec

<http://habrahabr.ru/post/128083/>

Compile

time

Twig: 0.0253 sec

Smarty: 0.0288 sec

memory

Twig: 2 725 160 B

Smarty: 4 561 024 B

Execute

time

Twig: 0.0016 sec

Smarty: 0.0019 sec

memory

Twig: 1 013 760 B

Smarty: 1 328 056 B

Not bad!

<https://github.com/SlowProg/twig-vs-smarty>

**Twig – what the
doctor ordered!**

Questions?

speaker: Andrey Tyshev

twitter: @SlowProg

e-mail: slowprog@gmail.com