

# Tempates

**template()** function or **view()** decorator can be used.

Bottle will look for templates in the `./views/` folder or any folder specified in the **bottle.TEMPLATE\_PATH** list.

The syntax of template (<http://www.bottlepy.org/docs/dev/stpl.html>)

```
In [3]: from bottle import template, route
```

```
In [4]: #In the way of function template()
@route('/hello')
@route('/hello/<name>')
def hello(name='World'):
    return template('hello_template', name=name)
#It will load "hello_template.tpl" with the name variable set.
```

```
In [5]: from bottle import view
```

```
In [6]: #In the way of decorator view()
@route('/hello')
@route('/hello/<name>')
@view('hello_template')
def hello(name='World'):
    return dict(name=name)
#Here, we transmit the name variable set by returing a dict.
```

If we modify the template files, **bottle.TEMPLATES.clear()** should be called to clear the caching.

```
In []:
```

## Basic API Usage

**bottle.SimpleTemplate()** can return a object.

And **render()** function of the object can be used to transmit values.

```
In [7]: from bottle import SimpleTemplate
```

```
In [8]: tp1 = SimpleTemplate('Hello {{name}}!')
```

```
In [9]: tp1.render(name='world')
```

Out[9]: u'Hello world!'

```
In []:
```

## Pass a dictionary into the template using keyword arguments

```
In [11]: from bottle import template
```

```
In [12]: my_dict={'number': '123', 'street': 'Fake St.', 'city': 'Fakeville'}
```

```
In [13]: template('I live at {{number}} {{street}}, {{city}}', **my_dict)
```

```
Out[13]: u'I live at 123 Fake St., Fakeville'
```

```
In []:
```

## Python expression can be used

```
In [14]: template('Hello {{name.title() if name else "stranger"}}!', name=None)
```

```
Out[14]: u>Hello stranger!
```

```
In [15]: template('Hello {{name.title() if name else "stranger"}}!', name='mArC')
```

```
Out[15]: u>Hello Marc!
```

```
In [16]: #'title()' is a function of strings
```

```
In []:
```

## HTML special characters are escaped

to prevent XSS attacks

But we can disable escaping by using exclamation mark(!).

```
In [17]: #Escape  
template('Hello {{name}}!', name='<b>World</b>')
```

```
Out[17]: u>Hello &lt;b&gt;World&lt;/b&gt;!
```

```
In [18]: #Disable Escaping  
template('Hello {{!name}}!', name='<b>World</b>')
```

```
Out[18]: u>Hello <b>World</b>!
```

```
In []:
```

## Syntax for template files

- Variables

They are used in `{{...}}`, such as `{{name}}`.

- Python code is allowed, but with two additional syntax rules:

1. Indentation is ignored.
2. Code blocks should be ended by "`% end`"  
For example:

```
.....  
<ul>  
    % for item in basket:  
        <li>{{item}}</li>  
    % end  
</ul>
```

.....

- **Code lines**

They are used after % ..., such as % name = 'Bob'

- **Code Blocks**

They are used in <% ... %>, such as

.....

```
<%
```

```
# A block of python code  
name = name.title().strip()
```

```
%>
```

.....

- Use % or <%, %> but not python codes

For example:

\% This text-line starts with the '%' token.

\<% Another line that starts with a token but is rendered as text.

\{\%\}\} this line starts with an escaped token.

- **Whitespace Control**

1、

```
<div>  
    % if True:  
        <span>content</span>  
    % end  
</div>
```

**will generate into -->**

```
<div>  
    <span>content</span>  
</div>
```

.....

2、

```
<div>\\  
    %if True:  
        <span>content</span>\\  
    %end  
</div>
```

**will generate into -->**

```
<div><span>content</span></div>
```

- Some functions are provided

1. include(sub\_template, \*\*variables)

Just like the **include()** in C code.

For example:

```
% include('header.tpl', title='Page Title') Page Content % include('foother.tpl')
```

.....

2. rebase(name, \*\*variables)

Mark the current template to be later included into a different template.

For example:

In **a.tpl**:

```
% rebase(' base.tpl', title='Page Title')
<p>Page Content ...</p>
```

In **base.tpl**:

```
<html>
  <head>
    <title>{{title or 'No title'}}</title>
  </head>
  <body>
    {{!base}}
  </body>
</html>
```

When we use **a.tpl**,

`<p>Page Content ...</p>` will be included into **base.tpl** and replace `{{!base}}`

3. defined(name)

Check whether **name** variable is defined in the current template.

4. get(name, default=None)

Get the **name** variable just like the **get** function of dictionary.

5. setdefault(name, default)

Get the **name** variable just like the **setdefault** function of dictionary.

In []: