

**Отчет по лабораторной работе № 5 по курсу
Разработка интернет-приложений**

Тема работы: "Шаблонизация"

5

(количество листов)

Выполнила:

студентка группы ИУ5-53

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СОДЕРЖАНИЕ

- | | |
|---|---------------------------------|
| 1. Описание задания лабораторной работы | Ошибка! Закладка не определена. |
| 2. Результаты | Ошибка! Закладка не определена. |

Задание и порядок выполнения

В этой ЛР вы создадите Django-проект, покажете пользователю статичную страницу, познакомитесь с конструкциями шаблонизаторов: переменные, теги, наследование шаблонов.

- Создать проект
- Реализовать view, в которых генерируются html-страницы
- В шаблонах должны быть использованы рассмотренные конструкции: переменные, вложенные значения, циклы, условия
- Все шаблоны должны расширять базовый шаблон
- Для элементов списка использовать тег include
- По нажатии на элемент списка должна открываться страница информации об элементе
- Для верстки необходимо использовать Bootstrap

Код программы:

Urls.py

```
untitled2 - [C:\Users\Asus\Desktop\untitled2] - ...\\untitled2\urls.py - PyCharm 2017.2.3
File Edit View Navigate Code Refactor Run Tools VCS Window Help
untitled2 untitled2 urls.py
Project Structure
untitled2 C:\Users\Asus\Desktop\untitled2
  templates
    base.html
    el_zadanie.html
    example.html
    order.html
    order_element.html
    orders.html
    zadanie.html
    zadanie1.html
    zadanie2.html
  testApp
    migrations
      __init__.py
    static
      css
        aaa.css
        bootstrap.css
        bootstrap-theme.css
      fonts
      js
      __init__.py
    admin.py
    apps.py
    models.py
    tests.py
    views.py
  untitled2
    __init__.py
    settings.py
    urls.py
    wsgi.py
    db.sqlite3
    manage.py
Data Sources Detected: Connection properties are detected. // Configure (today 11:38)
Event Log
30:1 CRLF: UTF-8: 'a' Event Log
```

```
'''untitled2 URL Configuration

The 'urlpatterns' list routes URLs to views. For more information please see:
    https://docs.djangoproject.com/en/1.11/topics/http/urls/
Examples:
Function views
    1. Add an import: from my_app import views
    2. Add a URL to urlpatterns: url(r'^$', views.home, name='home')
Class-based views
    1. Add an import: from other_app.views import Home
    2. Add a URL to urlpatterns: url(r'^home/$', Home.as_view(), name='home')
Including another URLconf
    1. Import the include() function: from django.conf.urls import url, include
    2. Add a URL to urlpatterns: url(r'^blog/', include('blog.urls'))
'''

import ...

urlpatterns = [
    url(r'^admin/', admin.site.urls),
    url(r'^function_view/$', views.function_view),
    url(r'^example_based_view/$', views.ExampleClassBased.as_view()),
    url(r'^example_view/$', views.ExampleView.as_view()),
    url(r'^orders/$', views.OrdersView.as_view()),
    url(r'^order/(\?P<id>\d+)$', views.OrderView.as_view(), name='order_url'),
    url(r'^zadanie/$', views.ZadanieView.as_view()),
    url(r'^zadanie1/(\?P<id>\d+)$', views.Zadanie1View.as_view(), name='zadanie1_url'),
]
```

Views.py

```
untitled2 - [C:\Users\Asus\Desktop\untitled2] - ...\\testApp\views.py - PyCharm 2017.2.3
File Edit View Navigate Code Refactor Run Tools VCS Window Help
untitled2 testApp views.py
Project Structure
untitled2 C:\Users\Asus\Desktop\untitled2
  templates
    base.html
    el_zadanie.html
    example.html
    order.html
    order_element.html
    orders.html
    zadanie.html
    zadanie1.html
    zadanie2.html
  testApp
    migrations
      __init__.py
    static
      css
        aaa.css
        bootstrap.css
        bootstrap-theme.css
      fonts
      js
      __init__.py
    admin.py
    apps.py
    models.py
    tests.py
    views.py
  untitled2
    __init__.py
    settings.py
    urls.py
    wsgi.py
    db.sqlite3
    manage.py
Data Sources Detected: Connection properties are detected. // Configure (today 11:38)
Event Log
25:10 CRLF: UTF-8: 'a' Event Log
```

```
from django.shortcuts import render
from django.http import HttpResponse
from django.views.generic import View
# Create your views here.

def function_view(request):
    return HttpResponse('response from function view')

class ExampleClassBased(View):
    def get(self, request):
        return HttpResponse('response from class based view')

class ExampleView(View):
    def get(self, request):
        return render(request, 'example.html', {'list': ['1', '2', '3', '4', '5']})

class OrdersView(View):
    def get(self, request):
        data = [
            'orders': [
                {'title': 'Немножко салат', 'id': 1},
                {'title': 'Борщ с салатом', 'id': 2},
                {'title': 'Тушеная салата', 'id': 3}
            ]
        ]
        return render(request, 'orders.html', data)

class OrderView(View):
    def get(self, request, id):
        data = [
            'order': {
                'id': id
            }
        ]
        return render(request, 'order.html', data)

OrdersView | get()
```

```
untitled2 - [C:\Users\Asus\Desktop\untitled2] - ...\\testApp\views.py - PyCharm 2017.2.3
File Edit View Navigate Code Refactor Run Tools VCS Window Help
untitled2 > testApp > views.py
Project Structure
untitled2 C:\Users\Asus\Desktop\untitled2
  + templates
    + base.html
    + el_zadanie.html
    + example.html
    + order.html
    + order_element.html
    + orders.html
    + zadanie.html
    + zadanie1.html
    + zadanie2.html
  + testApp
  + migrations
  + static
    + css
      + aaa.css
      + bootstrap.css
      + bootstrap-theme.css
    + js
    + init_.py
    + admin.py
    + apps.py
    + models.py
    + tests.py
    + views.py
  + untitled2
    + __init__.py
    + settings.py
    + urls.py
    + wsgi.py
    + db.sqlite3
    + manage.py
  Favorites
  Data Sources Detected: Connection properties are detected. // Configure (today 11:38)
  Event Log
  25:10 CRLF+ UTF-8
  Configure Python Interpreter
```

```
base.html
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class OrderView(View):
    def get(self, request, id):
        data = [
            {
                'order': [
                    {
                        'id': id
                    }
                ]
            }
        ]
        return render(request, 'orders.html', data)

class ZadanieView(View):
    def get(self, request):
        data = [
            {
                'orders': [
                    {
                        'title': 'Первый заказ', 'id': 1,
                        'title': 'Второй заказ', 'id': 2,
                        'title': 'Третий заказ', 'id': 3
                    }
                ]
            }
        ]
        return render(request, 'zadaniel.html', data)

class ZadanielView(View):
    def get(self, request, id):
        data = [
            {
                'order': [
                    {
                        'id': id
                    }
                ]
            }
        ]
        return render(request, 'el_zadanie.html', data)
```

Base.html

```
untitled2 - [C:\Users\Asus\Desktop\untitled2] - ...\\templates\\base.html - PyCharm 2017.2.3
File Edit View Navigate Code Refactor Run Tools VCS Window Help
untitled2 > templates > base.html
Project Structure
untitled2 C:\Users\Asus\Desktop\untitled2
  + templates
    + base.html
    + el_zadanie.html
    + example.html
    + order.html
    + order_element.html
    + orders.html
    + zadanie.html
    + zadanie1.html
    + zadanie2.html
  + testApp
  + migrations
  + static
    + css
      + aaa.css
      + bootstrap.css
      + bootstrap-theme.css
    + js
    + init_.py
    + admin.py
    + apps.py
    + models.py
    + tests.py
    + views.py
  + untitled2
    + __init__.py
    + settings.py
    + urls.py
    + wsgi.py
    + db.sqlite3
    + manage.py
  Favorites
  Data Sources Detected: Connection properties are detected. // Configure (today 11:38)
  Event Log
  16:58 CRLF+ UTF-8
  Configure Python Interpreter
```

```
<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <title>(& block title &){& endblock &}</title>
    (& block head &){& endblock &}
```

```
</head>
<body>
<div>Опросы участия</div>
<div>
    (& block body &)Переопределяется в наследниках(& endblock &)
</div>
</body>
</html>
```

Orders.html

The screenshot shows the PyCharm IDE interface with a Django project named 'untitled2'. The left sidebar displays the project structure, including 'templates' containing 'base.html', 'zadanie2.html', 'example.html', 'order.html', 'order_element.html', 'orders.html', 'zadanie1.html', and 'zadanie2.html'; 'testApp' with 'migrations' and 'static' (css, fonts, js); and 'untitled2' with '_init_.py', 'Settings.py', 'urls.py', 'wsgi.py', 'db.sqlite3', and 'manage.py'. The main editor window shows the 'views.py' file with the following code:

```
1  {% extends 'base.html' %}  
2  {% load static %}  
3  {% block head %}  
4      <link rel="stylesheet" type="text/css" href="{% static 'css/aaa.css' %}">  
5  {% endblock %}  
6  {% block title %}Saxamaz{% endblock %}  
7  {% block body %}  
8      

  
9          {% for order in orders %}  
10              {% include 'order_element.html' with element=order %}  
11          {% empty %}  
12              <li>nyctoR cmccox</li>  
13          {% endfor %}  
14      </ul>  
15  {% endblock %}
```

The bottom navigation bar includes tabs for Python Console, Terminal, and TODO, along with status bars for Data Sources Detected, Event Log, and file encoding.

Zadanie.html

The screenshot shows the PyCharm 2017.2.3 interface with the following details:

- Project Tree:** The left sidebar displays the project structure under "untitled2". It includes a "templates" folder containing "base.html", "el_zadanie.html", "example.html", "order.html", "order_element.html", and "orders.html", each with its own "zadanie.html" file. Other parts of the project include "testApp", "migrations", "static" (with "css" and "fonts" subfolders), and "untitled2" (with "init_.py", "settings.py", "urls.py", "wsgi.py", "db.sqlite3", and "manage.py").
- Editor:** The main window shows the content of "zadanie.html". The code is a template混合了HTML和Python语法，使用了Bootstrap框架。关键部分包括：
 - 头部 `` 区块包含字符集声明、IE兼容性提示、元数据（viewport）、标题`<title>{{ block title }}{{ endblock }}</title>`，以及对Bootstrap CSS的引用。
 - 主体 `` 区块包含对jQuery和Bootstrap JavaScript插件的引用。
- Bottom Status Bar:** Shows tabs for "Python Console", "Terminal", and "TODO".
- Bottom Right:** Includes "Event Log" and "Data Sources Database" buttons.

Zadanie1.html

The screenshot shows the PyCharm IDE interface with the project 'untitled2'. The 'templates' directory contains several HTML files: base.html, el_zadanie.html, example.html, order.html, order_element.html, orders.html, zadanie.html, zadanie1.html, and zadanie2.html. The 'zadanie1.html' file is open in the editor, displaying Jinja2 template code. The code includes blocks like `block title` and `for x in orders`. The code editor has syntax highlighting for Jinja2 tags.

```
{% extends 'zadanie.html' %}

{# block title ${% endblock %}
{# block body ${%
{# for x in orders ${%
{# include 'zadanie2.html' with element=x %}
{# endif ${%
{# endblock ${%
```

Zadanie2.html

The screenshot shows the PyCharm IDE interface with the project 'untitled2'. The 'templates' directory contains several HTML files: base.html, el_zadanie.html, example.html, order.html, order_element.html, orders.html, zadanie.html, zadanie1.html, and zadanie2.html. The 'zadanie2.html' file is open in the editor, displaying Jinja2 template code. The code includes a block with an href attribute that uses the 'url' filter to generate a URL for 'zadanie1.html' based on the 'element.id' value.

```
<div class="alert alert-success" role="alert">
  <a href="{% url 'zadanie1' element.id %}" class="proba">{{ element.title }}</a>
</div>
```

Результаты:









