Задание и порядок выполнения ЛР №4

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

2.   Создать проект

3.   Реализовать view, в которых генерируются html-страницы

4.   В шаблонах должны быть использованы рассмотренные конструкции: переменные, вложенные значения, циклы, условия

5.   Все шаблоны должны расширять базовый шаблон

6.   Для элементов списка использовать тег include

7.   По нажатии на элемент списка должна открываться страница информации об элементе

8.   Для верстки необходимо использовать Bootstrap

Код программы

urls.py

```python
"""mylab URL Configuration

The `urlpatterns` list routes URLs to views. For more information please see:
    https://docs.djangoproject.com/en/3.0/topics/http/urls/
Examples:
Function views
    1. Add an import:  from my_app import views
    2. Add a URL to urlpatterns:  path('', views.home, name='home')
Class-based views
    1. Add an import:  from other_app.views import Home
    2. Add a URL to urlpatterns:  path('', Home.as_view(), name='home')
Including another URLconf
    1. Import the include() function: from django.urls import include, path
    2. Add a URL to urlpatterns:  path('blog/', include('blog.urls'))
"""
from django.contrib import admin
from django.conf.urls import url
from django.urls import path, include
from posts.views import PostView, ListPostView

urlpatterns = [
    url(r'^admin/', admin.site.urls),
    url(r'^post/(?P<post_id>\d+)', PostView.as_view()), # (?P<post_id>\d+)
    url(r'^$', ListPostView.as_view(), name='posts-list'),

]
```

base-template.html

```html
{% load static %}
<!DOCTYPE html>
<html lang="en">
  <head>
    <meta charset="utf-8">
    <meta http-equiv="X-UA-Compatible" content="IE=edge">
    <meta name="viewport" content="width=device-width, initial-scale=1">
```

```html
    <!-
- The above 3 meta tags *must* come first in the head; any other head content must come *after* these ta
gs -->

    <title>{% block title %}{% endblock %}</title>
    <!-- Bootstrap core CSS -->
    <link href="{% static 'css/bootstrap.min.css' %}" rel="stylesheet">

    <!-- Custom styles for this template -->
    <style>
        body {
          padding-top: 60px;
          background-color: white;
        }
        .jumbotron {
            margin: 20px -30px;
            padding: 20px 20px;
        }
    </style>

  </head>

  <body>
    <div class="container">

      <div class="starter-template">
        {% block body %}

        {% endblock %}
      </div>

    </div><!-- /.container -->

    <!-- Bootstrap core JavaScript
    ============================================ -->
    <!-- Placed at the end of the document so the pages load faster -->
    <script src="https://ajax.googleapis.com/ajax/libs/jquery/1.12.4/jquery.min.js"></script>
    <script src="{% static 'js/bootstrap.min.js' %}"></script>
  </body>
</html>
```

post_html.html

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

{% block title %} {% endblock %}


{% block navbar-links %}

    <ul class="nav navbar-nav">

        <li><a href="/"> back to list of all</a></li>
```

```
        </ul>

{% endblock %}

{% block body %}

    <h1>{{ post.post_name }}</h1>

    <div class="media">

        <div class="media-left">

            <a href="#">

                <img class="media-
object" src="{{ post.post_image }}" alt="{{ post.post_name }}" height=250>

            </a>

        </div>

        <div class="media-body">

            <div class="jumbotron">

                <h5>{{ post.pub_data }}</h5>

                <p>{{ post.post_text }}</p>

            </div>

            <p>

                 

                <a class="btn btn-lg btn-success" role="button">Read more</a>

            </p>

        </div>

    </div>

{% endblock %}
```

post_list.html

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

{% block title %} {% endblock %}

{% block navbar-links %} {% endblock %}

{% block body %}

    <h1>Posts</h1>
    <ul>
        {% for post in object_list%}
```

```
        {%include 'element.html' with post=post %}

    {% endfor %}
</ul>

{% endblock %}
```

element.html

```html
<div class="jumbotron">
    <div class="media-left media-middle">
        <a href="#">
            <img class="media-
object" src="{{ post.post_image }}" alt="{{ post.post_name }}" width=200>
        </a>
    </div>
    <div class="media-body">
        <br/>
        <h2>{{ post.post_name }}</h2>
        <p><span class="label label-default">{{ post.pub_data }}</span></p>
        <p>{{ post.post_text }}</p>
        <p><a class="btn btn-primary btn-
lg" href="post/{{ post.id }}" role="button">Learn more</a></p>
    </div>
</div>
```

views.py

```python
from django.http import HttpResponse
from django.shortcuts import render
from django.views.generic import View, ListView
from posts.models import Post
from django.http import HttpResponse


def func_view(request):
    return HttpResponse("Function view response")


class ListPostView(ListView):
    model = Post
    template_name = 'post_list.html'


class PostView(View):
    def get(self, request, post_id):
        post = Post.objects.get(id=post_id)
        return render(request, 'post_html.html', {"post": post})
```

models.py

```python
from django.db import models
```

```python
class Post(models.Model):
    post_name = models.CharField('Заголовок поста', max_length=255)
    post_text = models.CharField('Текст поста', max_length=500)
    pub_data = models.DateTimeField('Дата публикации')
    post_image = models.URLField('Изображение', max_length=255)

    def __str__(self):
        return 'Post {}'.format(self.post_name)
```
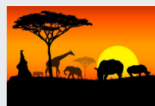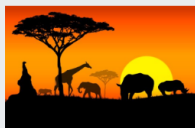
Скриншоты выполнения

Posts

Education in Russia

Dec. 25, 2019, 7:39 p.m.

Education in Russia is compulsory for children between the ages of 6 and 15. It consists of primary school education for ages 6-10.

Learn more

Africa

Dec. 25, 2019, 8:02 p.m.

Africa hosts a large diversity of ethnicities, cultures and languages. In the late 19th century, European countries colonised almost all of Africa; most present states in Africa emerged from a process of decolonisation in the 20th century. African nations cooperate through the establishment of the African Union, which is headquartered in Addis Ababa.

Learn more

World of Cats

Dec. 25, 2019, 8:06 p.m.

There are around 40 extant species of cat around the globe, ranging from the tiny rusty-spotted cat to the well-known big cats (including tigers, lions, jaguars and leopards).

Learn more

Education in Russia

Dec. 25, 2019, 7:39 p.m.

Education in Russia is compulsory for children between the ages of 6 and 15. It consists of primary school education for ages 6-10.

Read more

Africa

Dec. 25, 2019, 8:02 p.m.

Africa hosts a large diversity of ethnicities, cultures and languages. In the late 19th century, European countries colonised almost all of Africa; most present states in Africa emerged from a process of decolonisation in the 20th century. African nations cooperate through the establishment of the African Union, which is headquartered in Addis Ababa.

Read more

World of Cats

Dec. 25, 2019, 8:06 p.m.

There are around 40 extant species of cat around the globe, ranging from the tiny rusty-spotted cat to the well-known big cats (including tigers, lions, jaguars and leopards).

Read more

```
Командная строка                                      —    □    ∧
[26/Dec/2019 02:21:38] "GET / HTTP/1.1" 200 3736
C:\Users\belun\Documents\РИП\Lab_4\mylab\mylab\apps\posts\admin.py changed, relo
ading.
Watching for file changes with StatReloader
Performing system checks...

System check identified no issues (0 silenced).
December 26, 2019 - 02:29:15
Django version 3.0.1, using settings 'mylab.settings'
Starting development server at http://127.0.0.1:8000/
Quit the server with CTRL-BREAK.
[26/Dec/2019 02:30:27] "GET /post/2 HTTP/1.1" 200 2128
[26/Dec/2019 02:30:50] "GET /post/1 HTTP/1.1" 200 1951
[26/Dec/2019 02:31:13] "GET /post/3 HTTP/1.1" 200 1958
C:\Users\belun\Documents\РИП\Lab_4\mylab\mylab\urls.py changed, reloading.
Watching for file changes with StatReloader
Performing system checks...

System check identified no issues (0 silenced).
December 26, 2019 - 02:32:05
Django version 3.0.1, using settings 'mylab.settings'
Starting development server at http://127.0.0.1:8000/
Quit the server with CTRL-BREAK.
^C
C:\Users\belun\Documents\РИП\Lab_4\mylab>
```