



МОСКОВСКИЙ ГОСУДАРСТВЕННЫЙ ТЕХНИЧЕСКИЙ
УНИВЕРСИТЕТ им. Н. Э. Баумана

Домашнее задание

Тема:

«Django Python»

по учебной дисциплине

«Разработка интернет-приложений»

Группа: ИУ5-52Б

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Москва, 2020

Задание работы

Цель: изучение возможностей создания прототипа веб-приложения на основе базы данных с использованием фреймворка Django.

Задание:

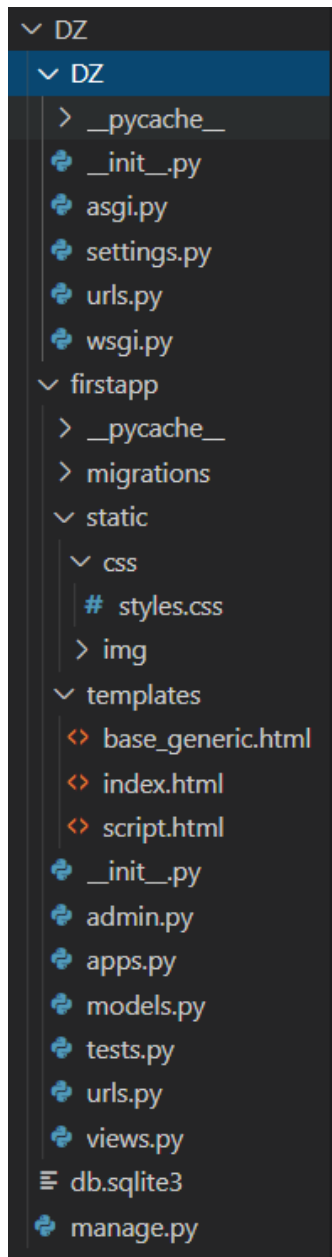
Создайте прототип веб-приложения с использованием фреймворка Django на основе базы данных, реализующий концепцию master/detail. Прототип должен содержать:

- Две модели, связанные отношением один-ко-многим.
- Стандартное средство администрирования Django позволяет редактировать данные моделей. Желательно настроить русификацию ввода и редактирования данных.
- Веб-приложение формирует отчет в виде отдельного view/template, отчет выводит HTML-страницу, содержащую связанные данные из двух моделей.
- Для верстки шаблонов используется фреймворк Bootstrap, или аналогичный фреймворк по желанию студента.

Была реализована БД про онлайн кинотеатры с двумя таблицами – Кинотеатр и Фильм, связанные отношением один-ко-многим. В таблице Кинотеатры – информация про кинотеатры, в Фильмы – информация о фильме и о том, в каком кинотеатре он присутствует.

Код

Структура проекта



Urls.py в каталоге проекта

```
from django.contrib import admin
from django.urls import path

urlpatterns = [
    path('home/admin/', admin.site.urls),
]
from django.urls import include
```

```

from django.urls import path
urlpatterns += [
    path('home/', include('firstapp.urls')),
]

from django.views.generic import RedirectView
urlpatterns += [
    path('', RedirectView.as_view(url='/home/', permanent = True)),
]

from django.conf import settings
from django.conf.urls.static import static
urlpatterns += static(settings.STATIC_URL, document_root=settings.STATIC_ROOT)

```

Urls.py в каталоге приложения

```

from django.urls import path
from django.contrib import admin
from . import views
from django.conf.urls import url
from DZ import urls

urlpatterns = [

    url(r'^$', views.index, name='indexx'),
    url(r'^script/$', views.script.as_view(), name='script'),
]

```

Файл с представлениями

```

from django.shortcuts import render
from django.views import generic
from firstapp.models import Cinema, Film

# Create your views here.
def index(request):
    return render(
        request,
        'index.html',
    )

class script(generic.ListView):
    model = Cinema
    context_object_name = 'Cin'
    template_name = 'script.html'

```

Файл с моделями

```

from django.db import models

class Cinema(models.Model):
    name = models.CharField(max_length=30)
    address = models.CharField(max_length=50)
    subscription = models.IntegerField()

    def __str__(self):
        return self.name

class Film(models.Model):
    cinema = models.ForeignKey(Cinema, on_delete = models.CASCADE)
    title = models.CharField(max_length=30)
    description = models.CharField(max_length=300)
    price = models.IntegerField()
    genre = models.CharField(max_length=15)

    def __str__(self):
        return self.title

```

Зарегистрированные модели в админ-панели

```

from django.contrib import admin
from .models import Cinema, Film

admin.site.register(Cinema)
admin.site.register(Film)

```

Базовый html base_generic.html

Вначале верхний блок header, потом блок с динамически меняющимся контентом, потом footer.

```

<!DOCTYPE html>
<html lang="en">

<head>
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    {% block title %}<title>Содержание</title>{% endblock %}
    <!-- <link rel="stylesheet" href="styles.css"> -->
    <link href="https://cdn.jsdelivr.net/npm/bootstrap@5.0.0-beta1/dist/css/bootstrap.min.css" rel="stylesheet" integrity="sha384-giJf6kkoqNQ00vy+HMDP7azOuL0xtbfIcaT9wjKhr8RbDVddVHyTfAAsrekWkMP1" crossorigin="anonymous">
    {% load static %}

```

```

    <link rel="stylesheet" href="{% static 'css/styles.css' %}">
</head>
<body>
    <div class="">
        <nav class="navbar navbar-expand-md sticky-top navbar-dark bg-dark">
            <div class="wwwwww">
                <div class="container-fluid d-flex justify-content-between papapa">
                    <div>
                        <a class="navbar-
brand size" href="{% url 'indexx' %}">My RIP_Dz</a>
                    </div>
                    <div class="d-flex justify-content-between" id="navbarNavDropdown">
                        <ul class="navbar-nav rr">
                            <li class="nav-item">
                                <a class="nav-link active" aria-
current="page" href="{% url 'indexx' %}">About</a>
                            </li>
                            <li class="nav-item">
                                <a class="nav-link c" href="{% url 'script' %}">Report</a>
                            </li>
                            <li class="nav-item">
                                <a class="nav-
link c" href="../../home/admin">Topics & Content</a>
                            </li>
                            <li class="nav-item">
                                <a class="nav-link c" href="#">Books</a>
                            </li>
                            <li class="nav-item">
                                <a class="nav-link c" href="#">Podcasts</a>
                            </li>
                        </ul>
                        <button type="button" class="btn btn-info rar text-
nowrap"><a href="../../home/admin" class="nou">Redact data</a></button>
                    </div>
                </div>
            </div>
        </nav>
        <nav class="navbar navbar-expand-md navbar-light bg-light">
            <div class="wwwwww">
                <div class="container-fluid d-flex justify-content-between">
                    <form class="d-flex">
                        <input class="form-control me-
2" type="search" placeholder="Search an article" aria-label="Search">
                        <button class="btn btn-outline-
success puk" type="submit">Search</button>
                    </form>
                    <div class="btn-group">

```

```

        <button type="button" class="btn btn-info dropdown-
toggle" data-bs-toggle="dropdown" aria-expanded="false">
            Select topic
        </button>
        <ul class="dropdown-menu">
            <li><a class="dropdown-item" href="#">Kinopoisk</a></li>
            <li><a class="dropdown-item" href="#">IVI</a></li>
            <li><a class="dropdown-item" href="#">Netflix</a></li>
            <li><a class="dropdown-item" href="#">Okko</a></li>
            <li><hr class="dropdown-divider"></li>
            <li><a class="dropdown-
item" href="{% url 'indexx' %}">About author</a></li>
        </ul>
    </div>
</div>
</div>
</nav>

<div class="zzz">
    <div class="">
        {% block content %}{% endblock %}
    </div>
</div>
<nav class="navbar fixed-bottom navbar-dark bg-dark">
    <div class="wwwwww">
        <div class="container-fluid d-flex justify-content-between papapa">
            <div>
                <a class="navbar-brand sizesize">My RIP_Dz</a>
            </div>

            <div class="d-flex justify-content-between" id="navbarNavDropdown">
                <a href="https://vk.com/andgen" target="_blank" class="social-item">
                    {% load static %}
                    
                </a>
                <a href="#" class="social-item">
                    {% load static %}
                    
                </a>
                <a href="https://github.com/Andrey-
vorobey123/In_App_Dev" target="_blank" class="">
                    {% load static %}
                    
                </a>
            </div>
        </div>
    </div>
</div>

```

```

</nav>

</div>
<script src="https://cdn.jsdelivr.net/npm/@popperjs/core@2.5.4/dist/umd/popper.min.js" integrity="sha384-q2kxQ16AaE6UbzuKqyBE9/u/KzioAlnx2maXQHiDX9d4/zp80k3f+M7DPm+Ib6IU" crossorigin="anonymous"></script>
<script src="https://cdn.jsdelivr.net/npm/bootstrap@5.0.0-beta1/dist/js/bootstrap.min.js" integrity="sha384-pQQkAEnwaBkjpqZ8RU1fF1AKtTcHJwF13pblpTlHXybJjHpMYo79HY3hIi4NKxyj" crossorigin="anonymous"></script>
</body>

</html>

```

Начальный блок index.html

```

{% extends "base_generic.html" %}

{% load static %}
<link rel="stylesheet" href="{% static 'css/styles.css' %}">

{% block content %}
<div class="">
<h1 style="font-weight: 700;">Internet Application Developing homework</h1>

    <p>Welcome to <em>My Django App</em>, a Django website of <strong>Andrew Kobyak IU5-52</strong></p>

<h2>Based on DataBase</h2>

    <p>The site has the following functions</p>
    <ul>
        <li><strong>There are two models: Internet Cinemas and Films</strong></li>
        <li><strong>Cinemas consists of varios internet apps, for ex, Netflix</strong></li>
        <li><strong>Films consists of data about different films we can see in corresponding sites</strong></li>
        <li><strong>You can see a report about cinemas and films in them as list</strong></li>
        <li><strong>If you have privilege you can modify, add and remove data from tables</strong></li>
        <!-- <li><strong>Authors:</strong> {{ num_authors }}</li> -->
    </ul>
    {% load static %}
    
</div>

```



```
{% endblock %}
```

Блок с отчетом из БД script.html

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

<!-- {% load static %}
<link rel="stylesheet" href="{% static 'css/styles.css' %}">
-->
{% block content %}
<div class="">

<h1 style="font-weight: 700;">Cinema List</h1>
    {% if Cin %}
        <ul>
            {% for element in Cin %}
                <li><div style="display: flex; align-items: baseline;">
                    <p class="film_item">{{ element.name }}</p><p class="film_item_site">&nbsp;
&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&~
&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&~</p><p class="film_item-
pr">subscription price: {{element.subscription}}</p></div>
                <ul>
                    {% for elem in element.film_set.all %}
                        <li class="">
                            <p class="item-film">{{ elem.title }}</p>
                            <p class="item-film-
price">Film price: {{ elem.price }}&#8381;</p>
                            <p class="item-film-desc">{{ elem.description }}</p>
                            <p class="item-film-desc ptt">Genre: {{ elem.genre }}</p>
                        </li>
                    {% endfor %}
                </ul>
            </li>
            {% endfor %}
        </ul>
    {% else %}
        <p>Error 404.There are no internet-cinemas.</p>
    {% endif %}
</div>

{% endblock %}
```

Результат

Проект выложен на хостинг-сервис pythonanywhere.com

andrewvorobey.pythonanywhere.com/home/

Начальный home

andrewvorobey.pythonanywhere.com/home/

My RIP_Dz

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Internet Application Developing homework

Welcome to My Django App, a Django website of Andrew Kobyak IU5-52
Based on DataBase

The site has the following functions

- There are two models: Internet Cinemas and Films
- Cinemas consists of varios Internet apps, for ex, Netflix
- Films consists of data about different films we can see in corresponding sites
- You can see a report about cinemas and films in them as list
- If you have privilege you can modify, add and remove data from tables



My RIP_Dz

vk instagram github

Страница с отчетом

andrewvorobey.pythonanywhere.com/home/script/

My RIP_Dz

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Search an article Search Select topic

Cinema List

- **Netflix** (www.netflix.com) subscription price: 599
 - **Klaus**
Film price: 69P
The owner of the postal empire, in order to teach a lazy offspring named Jesper wisdom, sends him to the far north in the city of Smirensburg. Arriving at the place, the guy finds himself in a war zone: two family clans, as it happened historically, harbor mutual hatred.
Genre: cartoon family
 - **The King**
Film price: 78P
England, early 15th century, the height of the Hundred Years War. Prince of Wales Hal leads a dissolute life with his friend Falstaff and does not think about claims to the throne.
Genre: story drama
 - **The Devil All the Time**
Film price: 120P
American psychological thriller based on the 2011 novel of the same name by Donald Ray Pollock.
Genre: thriller drama
 - **Enola Holmes**
Film price: 68P

My RIP_Dz

vk instagram github

Админ-панель

andrewvorobey.pythonanywhere.com/home/admin/

Django administration
WELCOME, **ANDREW** [VIEW SITE](#) / [CHANGE PASSWORD](#) / [LOG OUT](#)

Site administration

AUTHENTICATION AND AUTHORIZATION

Groups [+ Add](#) [Change](#)

Users [+ Add](#) [Change](#)

FIRSTAPP

Cinemas [+ Add](#) [Change](#)

Films [+ Add](#) [Change](#)

Recent actions

My actions

[✓ Волк с Уолл-стрит](#)
Film

[✗ Test](#)
Film

[+ Test](#)
Film

[✓ Агенты «Ц.И.Т.»](#)
Film

[✓ Enola Holmes](#)
Film

[✓ The Devil All the Time](#)
Film

[✓ Klaus](#)
Film

[✓ Агенты «Ц.И.Т.»](#)
Film

[✓ Фильм Волк с Уолл-стрит](#)
Film

[✓ Достать ножи](#)
Film

Редактирование:

Django administration

Home · Firstapp · Cinemas · Netflix

AUTHENTICATION AND AUTHORIZATION

Groups [+ Add](#)

Users [+ Add](#)

FIRSTAPP

Cinemas [+ Add](#)

Films [+ Add](#)

Change cinema
HISTORY

Name:

Address:

Subscription:

Delete

Save and add another

Save and continue editing

SAVE

Проект на Pythonanywhere.com



[Dashboard](#)
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[Files](#)
[Web](#)
[Tasks](#)
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Dashboard

Welcome, [AndrewVorobey](#)

CPU Usage: 17% used – 17.49s of 100s. Resets in 20 hours, 8 minutes [More info](#)

File storage: 16% full – 83.4 MB of your 512.0 MB quota

[Upgrade Account](#)

Recent Consoles

- [Bash console 18613112](#)
- [MySQL: AndrewVorobeySDZ](#)

New console:

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- [/home/AndrewVorobey/DZ_env/DZ/settings.py](#)
- [/home/AndrewVorobey/DZ_env/lib/pyt...base.py](#)
- [/home/AndrewVorobey/DZ_env/lib/pyt...base.py](#)
- [/home/AndrewVorobey/DZ_env/lib/pyt...client.py](#)
- [/var/www/andrewvorobey_pythonanywhere_com_...](#)

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