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Факультет «Информатика и системы управления»

Кафедра «Автоматизированные системы обработки информации и управления»



**Отчет**

**Домашнее задание**

**По курсу «Разработка интернет приложений»**

**ИСПОЛНИТЕЛЬ:**

Группа ИУ5-51Б

Ахвердиев В.И.

"13" января 2020 г.

**ПРЕПОДАВАТЕЛЬ:**

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"\_\_"\_\_\_\_\_\_\_\_\_\_\_2020 г.

Москва 2020

1. **Задание**

Создайте прототип веб-приложения с использованием фреймоврка 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.
* Веб0приложение 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

Расширенные задания:

* Реализация связи много-ко-многим (с возможностью редактирования данных в пользовательском интерфейсе) и развертывание приложения на облачном сервисе (например, heroku)

1. **Текст программы**

HW\settings.py

*"""  
Django settings for djangoFootball project.  
  
Generated by 'django-admin startproject' using Django 3.1.5.  
  
For more information on this file, see  
https://docs.djangoproject.com/en/3.1/topics/settings/  
  
For the full list of settings and their values, see  
https://docs.djangoproject.com/en/3.1/ref/settings/  
"""*from pathlib import Path  
  
# Build paths inside the project like this: BASE\_DIR / 'subdir'.  
BASE\_DIR = Path(\_\_file\_\_).resolve().parent.parent  
  
  
# Quick-start development settings - unsuitable for production  
# See https://docs.djangoproject.com/en/3.1/howto/deployment/checklist/  
  
# SECURITY WARNING: keep the secret key used in production secret!  
SECRET\_KEY = 'e(a=l8ds3b15pe=8+4n8bmrh2ti9g2li4bcnsb92pnbi%i7&c)'  
  
# SECURITY WARNING: don't run with debug turned on in production!  
DEBUG = True  
  
ALLOWED\_HOSTS = []  
  
  
# Application definition  
  
INSTALLED\_APPS = [  
 'django.contrib.admin',  
 'django.contrib.auth',  
 'django.contrib.contenttypes',  
 'django.contrib.sessions',  
 'django.contrib.messages',  
 'django.contrib.staticfiles',  
 'footballs'  
]  
  
MIDDLEWARE = [  
 'django.middleware.security.SecurityMiddleware',  
 'django.contrib.sessions.middleware.SessionMiddleware',  
 'django.middleware.common.CommonMiddleware',  
 'django.middleware.csrf.CsrfViewMiddleware',  
 'django.contrib.auth.middleware.AuthenticationMiddleware',  
 'django.contrib.messages.middleware.MessageMiddleware',  
 'django.middleware.clickjacking.XFrameOptionsMiddleware',  
]  
  
ROOT\_URLCONF = 'djangoFootball.urls'  
  
TEMPLATES = [  
 {  
 'BACKEND': 'django.template.backends.django.DjangoTemplates',  
 'DIRS': [BASE\_DIR / 'templates']  
 ,  
 'APP\_DIRS': True,  
 'OPTIONS': {  
 'context\_processors': [  
 'django.template.context\_processors.debug',  
 'django.template.context\_processors.request',  
 'django.contrib.auth.context\_processors.auth',  
 'django.contrib.messages.context\_processors.messages',  
 ],  
 },  
 },  
]  
  
WSGI\_APPLICATION = 'djangoFootball.wsgi.application'  
  
  
# Database  
# https://docs.djangoproject.com/en/3.1/ref/settings/#databases  
  
DATABASES = {  
 'default': {  
 'ENGINE': 'django.db.backends.sqlite3',  
 'NAME': BASE\_DIR / 'db.sqlite3',  
 }  
}  
  
  
# Password validation  
# https://docs.djangoproject.com/en/3.1/ref/settings/#auth-password-validators  
  
AUTH\_PASSWORD\_VALIDATORS = [  
 {  
 'NAME': 'django.contrib.auth.password\_validation.UserAttributeSimilarityValidator',  
 },  
 {  
 'NAME': 'django.contrib.auth.password\_validation.MinimumLengthValidator',  
 },  
 {  
 'NAME': 'django.contrib.auth.password\_validation.CommonPasswordValidator',  
 },  
 {  
 'NAME': 'django.contrib.auth.password\_validation.NumericPasswordValidator',  
 },  
]  
  
  
# Internationalization  
# https://docs.djangoproject.com/en/3.1/topics/i18n/  
  
LANGUAGE\_CODE = 'ru'  
  
TIME\_ZONE = 'UTC'  
  
USE\_I18N = True  
  
USE\_L10N = True  
  
USE\_TZ = True  
  
  
# Static files (CSS, JavaScript, Images)  
# https://docs.djangoproject.com/en/3.1/howto/static-files/  
  
STATIC\_URL = '/static/'

HW\urls.py

*"""djangoFootball URL Configuration  
  
The `urlpatterns` list routes URLs to views. For more information please see:  
 https://docs.djangoproject.com/en/3.1/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.urls import path, include  
  
urlpatterns = [  
 path('admin/', admin.site.urls),  
 path("", include("footballs.urls"))  
]

Procfile

web: gunicorn djangoFootball.wsgi --log-file -

models.py

from django.db import models  
from datetime import date  
  
from django.urls import reverse  
  
  
class Footballers(models.Model):  
 *"""Футболисты"""* name = models.CharField(verbose\_name="Имя", max\_length=100)  
 age = models.PositiveSmallIntegerField(verbose\_name="Возраст", default=0)  
 description = models.TextField(verbose\_name="Описание")  
  
 def \_\_str\_\_(self):  
 return self.name  
  
 class Meta:  
 verbose\_name = "Футболисты"  
 verbose\_name\_plural = "Футболисты"  
  
  
class Club(models.Model):  
 *"""Клуб"""* title = models.CharField(verbose\_name="Название", max\_length=100)  
 tagline = models.CharField(verbose\_name="Слоган", max\_length=100, default='')  
 description = models.TextField(verbose\_name="Описание")  
 name = models.ManyToManyField(Footballers, verbose\_name="Футболист", related\_name="club\_name")  
  
 def \_\_str\_\_(self):  
 return self.title  
  
 def get\_absolute\_url(self):  
 return reverse("club\_detail", kwargs={"slug": self.url})  
  
 class Meta:  
 verbose\_name = "Клуб"  
 verbose\_name\_plural = "Клубы"  
# Create your models here.

\admin.py

from django.contrib import admin  
from .models import Footballers, Club  
  
  
admin.site.register(Footballers)  
  
admin.site.register(Club)  
# Register your models here.

\ursl.py

from django.urls import path  
  
from . import views  
  
urlpatterns = [  
 path("", views.FootballView.as\_view())  
]

\views.py

from django.shortcuts import render  
  
# Create your views here.  
  
from django.views.generic.base import View  
  
from .models import Club  
  
  
class FootballView(View):  
 def get(self, request):  
 clubs = Club.objects.all()  
 return render(request, "footballs/football\_list.html", {"club\_list": clubs})

football\_list.html

<!DOCTYPE html>  
<html lang="en">  
<head>  
 <meta charset="UTF-8">  
 <title>Title</title>  
 <link href="/docs/4.5/dist/css/bootstrap.min.css" rel="stylesheet"  
 integrity="sha384-TX8t27EcRE3e/ihU7zmQxVncDAy5uIKz4rEkgIXeMed4M0jlfIDPvg6uqKI2xXr2" crossorigin="anonymous">  
 <script src="https://code.jquery.com/jquery-3.3.1.slim.min.js"  
 integrity="sha384-q8i/X+965DzO0rT7abK41JStQIAqVgRVzpbzo5smXKp4YfRvH+8abtTE1Pi6jizo"  
 crossorigin="anonymous"></script>  
 <script src="https://cdnjs.cloudflare.com/ajax/libs/popper.js/1.14.7/umd/popper.min.js"  
 integrity="sha384-UO2eT0CpHqdSJQ6hJty5KVphtPhzWj9WO1clHTMGa3JDZwrnQq4sF86dIHNDz0W1"  
 crossorigin="anonymous"></script>  
 <script src="https://stackpath.bootstrapcdn.com/bootstrap/4.3.1/js/bootstrap.min.js"  
 integrity="sha384-JjSmVgyd0p3pXB1rRibZUAYoIIy6OrQ6VrjIEaFf/nJGzIxFDsf4x0xIM+B07jRM"  
 crossorigin="anonymous"></script>  
 <script src="https://cdnjs.cloudflare.com/ajax/libs/popper.js/1.12.3/umd/popper.min.js"></script>  
 <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">  
 <script src="https://cdn.jsdelivr.net/npm/bootstrap@5.0.0-beta1/dist/js/bootstrap.bundle.min.js"  
 integrity="sha384-ygbV9kiqUc6oa4msXn9868pTtWMgiQaeYH7/t7LECLbyPA2x65Kgf80OJFdroafW"  
 crossorigin="anonymous"></script>  
 <style>  
 .bd-placeholder-img {  
 font-size: 1.125rem;  
 text-anchor: middle;  
 -webkit-user-select: none;  
 -moz-user-select: none;  
 -ms-user-select: none;  
 user-select: none;  
 }  
  
 @media (min-width: 768px) {  
 .bd-placeholder-img-lg {  
 font-size: 3.5rem;  
 }  
 }  
 </style>  
</head>  
<nav class="navbar navbar-expand-lg navbar-light bg-light">  
 <a href="#" class="navbar-brand green pl-3">Топ футбольных <b>клубов</b></a>  
 <div class="dropdown open">  
 <a class="btn btn-secondary dropdown-toggle" id="dropdownMenuLink" data-toggle="dropdown" aria-haspopup="true"  
 aria-expanded="false">  
 Об Авторе  
 </a>  
  
 <div class="dropdown-menu" aria-labelledby="dropdownMenuLink">  
 <a class="dropdown-item" href="#">Ахвердиев</a>  
 <a class="dropdown-item" href="#">ИУ5-51Б</a>  
 </div>  
 </div>  
</nav>  
<body class="d-flex flex-column h-100" style="background-color: #333">  
<main role="main" class="mb-5">  
 <div id="myCarousel" class="carousel slide" style="height: 800px" data-ride="carousel">  
 <ol class="carousel-indicators">  
 {% for c in club\_list %}  
 {% if forloop.counter == 1 %}  
 <li data-target="#myCarousel" data-slide-to="0" class="active"></li>  
 {% else %}  
 <li data-target="#myCarousel" data-slide-to={{ i }}></li>  
 {% endif %}  
 {% endfor %}  
 </ol>  
  
 <div class="carousel-inner" style="height: 100%">  
 {% for club in club\_list %}  
 {% if forloop.counter == 1 %}  
 <div class="carousel-item active" style="height: 90%">  
 {% else %}  
 <div class="carousel-item" style="height: 90%">  
 {% endif %}  
 <svg class="bd-placeholder-img" width="100%" height="100%" xmlns="http://www.w3.org/2000/svg"  
 preserveAspectRatio="xMidYMid slice" focusable="false" role="img">  
 <rect width="100%" height="100%" fill="#333"/>  
 </svg>  
 <div class="container">  
 <div class="carousel-caption text-left">  
 <h2 class="card-title">{{ club.title }}</h2>  
 <h6 class="card-subtitle mb-2">{{ club.tagline }}</h6>  
 <p class=>{{ club.description }}</p>  
 <h4> Основной состав </h4>  
 <ul style="margin-left: -33px">  
 {% for name in club.name.all %}  
 <li style="list-style-type: none"> {{ name.name }}, {{ name.age }}, {{ name.description }}</li>  
 {% endfor %}  
 </ul>  
 </div>  
 </div>  
 </div>  
 {% endfor %}  
 </div>  
 <a class="carousel-control-prev" href="#myCarousel" role="button" data-slide="prev">  
 <span class="carousel-control-prev-icon" aria-hidden="true"></span>  
 </a>  
 <a class="carousel-control-next" href="#myCarousel" role="button" data-slide="next">  
 <span class="carousel-control-next-icon" aria-hidden="true"></span>  
 </a>  
 </div>  
 </div>  
</main>  
</body>  
<footer class="footer mt-auto py-3" style="background-color: white">  
 <div class="container">  
 <p>&copy; 2020 Valeriy, Inc. &middot; <a href="https://github.com/Ash1eyJoy/DZrip">Github</a> &middot; <a  
 href="#">Telegram</a></p>  
 </div>  
</footer>  
</html>

1. }
2. **Экранные формы с примерами выполнения программы**









