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Факультет «Информатика и системы управления»

**Отчёт по лабораторной работе №6
по курсу «Разработка интернет-приложений»**

Разработка REST API с использованием Django REST Framework.

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Описание задания.

1. С использованием Django REST Framework разработайте REST API для одной модели (одной таблицы базы данных).

Ход выполнения лабораторной работы

Создание модели:

models.py:

```
from django.db import models

# Create your models here.
class Computer(models.Model):
    name = models.CharField(max_length=255, verbose_name="Название компьютера")
    cost = models.IntegerField(verbose_name="Стоимость компьютера")
    description = models.CharField(max_length=255, verbose_name="Описание компьютера")
    date_modified = models.DateTimeField(auto_now=True, verbose_name="Когда последний раз обновлялась информация о ")
    "компьютере?")
```

Сериализатор:

serializers.py:

```
from computers_app.models import Computer
from rest_framework import serializers

class ComputerSerializer(serializers.ModelSerializer):
    class Meta:
        # Модель, которую мы сериализуем
        model = Computer
        # Поля, которые мы сериализуем
        fields = ["pk", "name", "cost", "description", "date_modified"]
```

views.py:

```
from rest_framework import viewsets
from computers_app.serializers import ComputerSerializer
from computers_app.models import Computer

class ComputerViewSet(viewsets.ModelViewSet):
    queryset = Computer.objects.all().order_by('date_modified')
    serializer_class = ComputerSerializer # Сериализатор для модели
```

urls.py:

```
from django.contrib import admin
from computers_app import views as computer_views
from django.urls import include, path
from rest_framework import routers
```

```

router = routers.DefaultRouter()
router.register(r'computers_app', computer_views.ComputerViewSet)

# Wire up our API using automatic URL routing.
# Additionally, we include login URLs for the browsable API.
urlpatterns = [
    path('', include(router.urls)),
    path('api-auth/', include('rest_framework.urls',
namespace='rest_framework'))),
    path('admin/', admin.site.urls),
]

```

Изменение данных

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Sign In Create Account

Working locally in Scratch Pad. Switch to a Workspace

Scratch Pad

New Import

Overview GET GET X

RIP_Jab6 / GET

GET POST PUT DELETE

Save

Send

Params Authorization Headers (6) Body Pre-request Script Tests Settings Cookies

Query Params

KEY	VALUE	DESCRIPTION
Key	Value	Description

Body Cookies Headers (10) Test Results

200 OK 82 ms 444 B Save Response

Pretty Raw Preview Visualize JSON

```

1 {
2   "pk": 3,
3   "name": "ASUS 3",
4   "cost": 1351,
5   "description": "Cool computer!",
6   "date_modified": "2021-12-20T16:45:15.704419Z"
7 }
8
9

```

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Scratch Pad

New Import

Overview GET GET RI... POST P... PUT PUT DEL D... + ... No Environment

Collections

RIP_lab6

GET GET

GET POST

GET PUT

GET DELETE

Mock Servers

Monitors

History

RIP_lab6 / POST

POST http://127.0.0.1:8000/computers_app/...

Send

Params Authorization Headers (8) Body Pre-request Script Tests Settings Cookies

none form-data x-www-form-urlencoded raw binary GraphQL

KEY	VALUE	DESCRIPTION	Bulk Edit
<input checked="" type="checkbox"/> name	ASUS 3		
<input checked="" type="checkbox"/> cost	1351		
<input checked="" type="checkbox"/> description	Cool computer!		
Key	Value	Description	

Body Cookies Headers (10) Test Results 201 Created 98 ms 447 B Save Response

Pretty Raw Preview Visualize JSON

```
1 {
2   "pk": 4,
3   "name": "ASUS 3",
4   "cost": 1351,
5   "description": "Cool computer!",
6   "date_modified": "2021-12-28T15:58:35.666293Z"
7 }
```

Postman

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Scratch Pad

New Import

Overview GET GET X RI... POST P... PUT PUT DEL D... + ... No Environment

Collections

RIP_lab6

GET GET

GET POST

GET PUT

GET DELETE

Mock Servers

Monitors

History

RIP_lab6 / GET

GET http://127.0.0.1:8000/computers_app/

Send

Params Authorization Headers (6) Body Pre-request Script Tests Settings Cookies

Query Params

KEY	VALUE	DESCRIPTION	Bulk Edit
Key	Value	Description	

Body Cookies Headers (10) Test Results 200 OK 13 ms 558 B Save Response

Pretty Raw Preview Visualize JSON

```
3 {
4   "pk": 3,
5   "name": "ASUS 3",
6   "cost": 1351,
7   "description": "Cool computer!",
8   "date_modified": "2021-12-28T16:45:15.704419Z"
9 },
10 {
11   "pk": 4,
12   "name": "ASUS 3"
13 }
```