ФЕДЕРАЛЬНОЕ ГОСУДАРСТВЕННОЕ АВТОНОМНОЕ ОБРАЗОВАТЕЛЬНОЕ УЧРЕЖДЕНИЕ ВЫСШЕГО ОБРАЗОВАНИЯ САНКТ-ПЕТЕРБУРГСКИЙ НАЦИОНАЛЬНЫЙ ИССЛЕДОВАТЕЛЬСКИЙ УНИВЕРСИТЕТ ИНФОРМАЦИОННЫХ ТЕХНОЛОГИЙ, МЕХАНИКИ И ОПТИКИ

Факультет «Инфокоммуникационных технологий» Направление подготовки «45.03.04 Интеллектуальные системы в гуманитарной сфере»

ОТЧЕТ

<u>Лабораторная работа №2</u>

Тема задания: Реализация простого сайта средствами Django

Выполнил:

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Проверил:

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(Фамилия И.О)

Санкт-Петербург 2020

Ход работы.

models.py:

```
from django.db import models
from django.contrib.auth.models import AbstractUser

class User(AbstractUser):
    homeworks = models.ManyToManyField('Homework', through='Answer')

class Homework(models.Model):
    course = models.CharField(max_length=100)
    teacher = models.DateField()
    deadline = models.DateField()
    description = models.TextField(max_length=10000)

def __str__(self):
    return "{}:{}:".format(self.id, self.course, self.date)

class Answer(models.Model):
    student = models.ForeignKey(User, on_delete=models.CASCADE)
    homework = models.ForeignKey(Homework, on_delete=models.CASCADE)
    grade = models.CharField(max_length=3)
    answer = models.TextField(max_length=1000)
```

forms.py:

Регистрация в views.py:

```
def registerPage(request):
         if request.user.is authenticated:
             return redirect('/homeworks/')
             form = CreateUserForm()
             if request.method == 'POST':
                 form = CreateUserForm(request.POST)
                 if form.is valid():
                     form.save()
                     user = form.cleaned data.get('username')
                     messages.success(request, 'Account was created for ' + user)
                     return redirect('login')
             context = {'form': form}
4
             return render(request, 'register.html', context)
    |def loginPage(request):
         if request.user.is_authenticated:
             return redirect('/homeworks/')
             if request.method == 'POST':
                 username = request.POST.get('username')
                 password = request.POST.get('password')
                 user = authenticate(request, username=username, password=password)
                     login(request, user)
                    return redirect('/homeworks/')
                     messages.info(request, 'Username OR password is incorrect')
             context = {}
#
             return render(request, 'login.html', context)
     def logoutUser(request):
         logout(request)
         return redirect('login')
```

Homework в views.py:

Answers B views.py:

```
class Answerstist(ListView):
    model = Answer
    template_name = 'answers.html'

def get_queryset(self):
        return Answer.objects.all()

class AddAnswer(CreateView):
    form_class = AddAnswerForm
    model = Answer
    template_name = 'add_answer.html'

def get_initial(self):
    initial = super(AddAnswer, self).get_initial()
    initial = initial.copy()
    initial['student'] = self.request.user.id
    initial['homework'] = get_object_or_404(Homework, pk=self.kwargs['pk'])
    return initial

class AnswerUpdate(UpdateView):
    model = Answer
    fields = ('answer']
    template_name = 'update_answer.html'

class AnswerDelete(DeleteView):
    model = Answer
    template_name = 'delete_answer.html'

class GradesTable(ListView):
    model = Answer
    template_name = 'grades_table.html'
    def get_queryset(self):
        return Answer.objects.all()
```

urls.py приложения:

```
from django.urls import path

flom . import views

durlpatterns = [
    path('register/', views.registerPage, name="register"),
    path('login/', views.loginPage, name='login'),
    path('logout/', views.logoutUser, name='logout'),
    path('homeworks/', views.HomeworksList.as_view()),
    path('homeworks/<int:pk>', views.HomeworkDetail.as_view()),
    path('answers/', views.AnswersList.as_view()),
    path('answers/<int:pk>/add/', views.AddAnswer.as_view(success_url="/answers/")),
    path('answers/<int:pk>/update/', views.AnswerUpdate.as_view(success_url="/answers/")),
    path('answers/<int:pk>/delete/', views.AnswerDelete.as_view(success_url="/answers/")),
    path('grades/', views.GradesTable.as_view()),
```

urls.py проекта:

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

Gurlpatterns = [
    path('admin/', admin.site.urls),
    path('', include('hw_system.urls')),
```

admin.py:

```
from django.contrib import admin

from django.contrib import admin

admin.models import *

admin.site.register(User)

admin.site.register(Homework)

admin.site.register(Answer)
```

Вход:

LOG IN

Alex
Log in

No account? Register

Регистрация:

Register Account

Username

First Name

Last Name

Enter Password

Enter Password Again

Register Account

Have an account? Login

Список домашних заданий до их добавления:

Homework Manager

- Homeworks
- Answers
- Grades

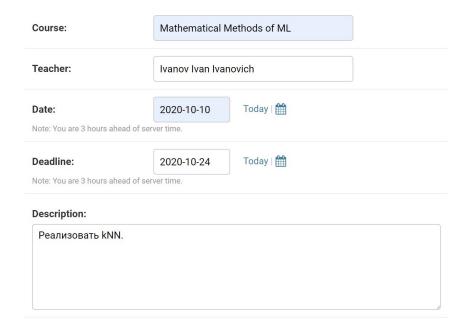
Signed in as Alex

Quit

Homeworks:

No homeworks for now.

Добавление домашнего задания через django-admin:



Homework Manager

- Homeworks
- Answers
- Grades

Signed in as Alex

Quit

Homeworks:

4:Mathematical Methods of ML:2020-10-10

Course: Mathematical Methods of ML

Date: Oct. 10, 2020

Deadline: Oct. 24, 2020

Description: Реализовать kNN.

Homework Manager

- Homeworks
- Answers
- Grades

Signed in as Alex

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_	_		•

Solutions:

• No solutions for now.

Добавление решения:

Signed in as Alex		
Quit		

Add answer:

Back to the answers

Student:	Alex ~
Homewo	rk: 4:Mathematical Methods of ML:2020-10-10 V
	Реализация kNN.
Answer:	
Submit	

Список решений после добавления решения:

Homework Manager

- <u>Homeworks</u>
- Answers
- Grades

Signed in as Alex

Quit

Solutions:

4:Mathematical Methods of ML:2020-10-10 Change Delete

Solution: Реализация kNN.

Попытка изменить:

Signed in as Alex

Quit

Update answer:

	Другая	реализация	knn.
inswer:			

Submit

Back to the answers

После изменения:

Homework Manager

- Homeworks
- Answers
- Grades

Signed in as Alex

Quit

Solutions:

4:Mathematical Methods of ML:2020-10-10 Change Delete

Solution: Другая реализация kNN.

Попытка удалить:

Signed in as Alex

Quit

Delete answer:

Are you sure that you want to delete the solution to the "4:Mathematical Methods of ML:2020-10-10"?

Submit

Back to the answers

Таблица успеваемости до выставления оценки преподавателем-администатором:

Homework Manager

- Homeworks
- Answers
- Grades

Signed in as Alex

Quit

Student	Course	Homework	Grade
Aleksei Alekseev	Mathematical Methods of ML	4:Mathematical Methods of ML:2020-10-10	

Добавление оценки:

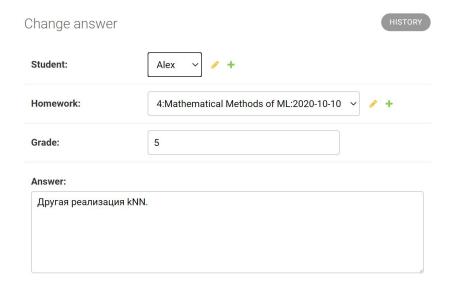


Таблица с оценкой:

Homework Manager

- Homeworks
- Answers
- Grades

Signed in as admin

Quit

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Student	Course	Homework	Grade
Aleksei Alekseev	Mathematical Methods of ML	4:Mathematical Methods of ML:2020-10-10	5