# Московский Государственный Технический Университет им. Н.Э. Баумана

# Разработка интернет-приложений

Отчёт по лабораторной работе №7 «Работа с формами, авторизация»

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## 1. Цель работы

Реализовать авторизацию с ручной валидацией (вариант 1) и с помощью Django Forms (вариант 2).

#### 2. Листинг

Модуль views.py – ручная валидация данных POST запроса (только регистрация)

```
# coding=utf-8
from django.shortcuts import render
from django.shortcuts import render to response
from django.template.loader import render to string
from django.http import HttpResponse
from django.http import HttpResponseRedirect
from django.template import RequestContext, loader
from .models import Article
from django.contrib.auth.models import User
# Create your views here...
def index(request):
  articles = Article.objects.all()
  content = {
    'articles': articles
  for a in articles:
    print(a)
  return render(request, 'articles.html', content)
def register(request):
  errors = []
  formdata = \{\}
  if request.method == 'POST':
    username = request.POST.get('username')
    if not username:
       errors.append("Введите имя пользователя")
    elif len(username) < 5:</pre>
       errors.append("Имя пользователя должно содержать не менее 5
символов")
    email = request.POST.get('email')
    if not email:
       errors.append("Введите адрес эл. почты")
    firstname = request.POST.get('firstname')
    if not firstname:
       errors.append("Введите своё имя")
    else:
       formdata['firstname'] = firstname
    lastname = request.POST.get('lastname')
    if not lastname:
       errors.append("Введите своё фамилию")
    else:
       formdata['lastname'] = lastname
```

password = request.POST.get('password')

```
if not password:
       errors.append("Введите пароль")
    elif len(password) < 8:</pre>
       errors.append("Пароль должен содержать не менее 8 символов")
    else:
       confirmpass = request.POST.get('confirmpass')
       if not confirmpass:
         errors.append("Подтвердите пароль")
       elif password != confirmpass:
         errors.append("Пароли не совпадают")
         formdata['confirmpass'] = confirmpass
       formdata['password'] = password
    sameusers = []
    try:
       sameusers.append(User.objects.get(username=username))
    except User.DoesNotExist:
       formdata['username'] = username
    try:
       sameusers.append(User.objects.get(email=email))
    except User.DoesNotExist:
       formdata['email'] = email
    if sameusers:
       errors.append("Пользователь с таким именем или адресом эл. почты
уже существует")
    if errors:
       return render(request, 'register.html', {'errors': errors, 'formdata':
formdata})
    User.objects.create user(username=username, email=email,
password=password)
    return HttpResponseRedirect("/login/")
  return render(request, 'register.html', {'errors': [], 'formdata': formdata})
def login(request):
  return render(request, 'login.html')
def article(request, id):
  art = Article.objects.get(id=int(id))
  content = {
    'article' : art
  return render(request, 'single.html', content)
Модуль views.py – использование Django Forms (регистрация + логин).
# coding=utf-8
from django.shortcuts import render
from django.shortcuts import render to response
from django.template.loader import render_to_string
from django.http import HttpResponse
from django.http import HttpResponseRedirect
from django.template import RequestContext, loader
from .models import Article
from django.contrib.auth.models import User
```

```
from django.contrib.auth import authenticate, login as l in, logout as
l out
import forms
# Create your views here..
def _get_user_context(request):
  context = {}
  if request.user.is authenticated():
    context['user logged in'] = True
    context['username'] = request.user.username
  else:
    context['user logged in'] = False
  return context
def index(request):
  context = get user context(request)
  articles = Article.objects.all()
  context['articles'] = articles
  return render(request, 'articles.html', context)
def register(request):
  context = _get_user_context(request)
  errors = []
  if context['user logged in']:
    return HttpResponseRedirect('/')
  if request.method == 'POST':
    form = forms.RegistrationForm(request.POST)
    if form.is valid():
      username = form.cleaned data['username']
      email = form.cleaned data['email']
      firstname = form.cleaned data['firstname']
      lastname = form.cleaned data['lastname']
      password = form.cleaned data['password']
      confirmpass = form.cleaned data['confirmpass']
      if password != confirmpass:
        errors.append("Пароли не совпадают")
      data = form.data.copy()
      same = None
      try:
        same = User.objects.get(username=username)
      except User.DoesNotExist:
        pass
      if same:
        errors.append("Пользователь с таким именем уже существует")
        data['username'] = ""
      same = None
      try:
        same = User.objects.get(email=email)
      except User.DoesNotExist:
        pass
      if same:
        errors.append("Пользователь с таким адресом эл. почты уже
существует")
        data['email'] = ""
      form.data = data
```

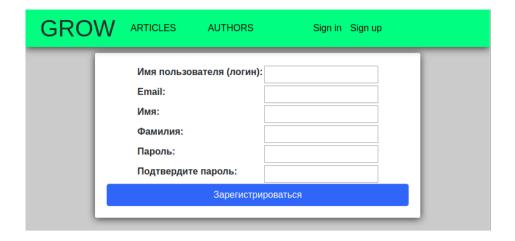
```
if errors:
        return render(request, 'register.html', {'form': form,
                               'errors': errors})
      User.objects.create user(username=username, email=email,
password=password, first name=firstname, last name=lastname)
      return HttpResponseRedirect("/login/")
return render(request, 'register.html', {'form':
forms.RegistrationForm(), 'errors': []})
def login(request):
  context = get user context(request)
  errors = []
  if context["user logged in"]:
    return HttpResponseRedirect('/')
  if request.method == 'POST':
    form = forms.LoginForm(request.POST)
    if form.is valid():
      username or email = form.cleaned data['username or email']
      password = form.cleaned data['password']
      user = None
      try:
        user = User.objects.get(username=username or email)
      except User.DoesNotExist:
        try:
           user = User.objects.get(email=username or email)
        except User.DoesNotExist:
           errors.append("Пользователя с таким именем или адресом эл.
почты не существует")
           return render(request, 'login.html', {'form': form, 'errors':
errors})
      user auth = authenticate(username=user.username, password=password)
      if user auth is not None:
        l in(request, user auth)
        return HttpResponseRedirect("/success/")
        errors.append("Пароль неверен")
        return render(request, 'login.html', {'form': form, 'errors':
errors})
  return render(request, 'login.html', {'form': forms.LoginForm()})
def success(request):
  context = get user context(request)
  if request.user.is authenticated():
    context['success'] = True
    return render(request, 'success.html', context)
  else:
    return render(request, 'success.html', {"success": False})
def logout(request):
  if request.user.is authenticated():
    l out(request)
    return HttpResponseRedirect('/login/')
    return HttpResponseRedirect('/')
def article(request, id):
  context = get user context(request)
```

```
art = Article.objects.get(id=int(id))
  context['article'] = art
  return render(request, 'single.html', context)
Шаблон register.html
{% extends 'base.html' %}
{% block content %}
<div class="article-body">
  {% if errors %}
    {% for error in errors %}
      <div class="error">
        {{error}}
      </div>
    {% endfor %}
  {% endif %}
  <form method="POST">
    {% csrf token %}
    <div class="content">
      {{form.as_table}}
      <button action="submit" class="btn btn-
primary">Зарегистрироваться</button>
    </div>
  </form>
  </div>
{% endblock %}
```

# 3. Результат

Форма регистрации:

Шаблон login.html аналогичен.



## Форма входа:



### Главная страница после входа пользователя:

