Taller Autenticacion django

Registro de Usuarios

1. Se crea el ambiente, se activa y se instalan librerías

* python -m venv env
* se activa el ambiente
* pip install django
* pip install django-widget-tweaks (widget-tweaks se utiliza para controlar la forma en que se representan los formularios)
* pip install freeze
* pip install django-utils-six

1. Se crea el proyecto y la app

* django-admin startproject miproyecto
* cd miproyecto
* django-admin startapp miapp

1. En el settings realizar las siguientes configuraciones:

import os

# Build paths inside the project like this: os.path.join(BASE\_DIR, ...)

BASE\_DIR = os.path.dirname(os.path.dirname(os.path.abspath(\_\_file\_\_)))

INSTALLED\_APPS = [

    'django.contrib.admin',

    'django.contrib.auth',

    'django.contrib.contenttypes',

    'django.contrib.sessions',

    'django.contrib.messages',

    'django.contrib.staticfiles',

    'miapp',

    'widget\_tweaks',

]

DATABASES = {

    'default': {

        'ENGINE': 'django.db.backends.sqlite3',

        'NAME': os.path.join(BASE\_DIR, 'db.sqlite3'),

    }

}

EMAIL\_USE\_TLS = True

EMAIL\_HOST = 'smtp.gmail.com'

EMAIL\_HOST\_USER = 'creditoslibres3@gmail.com'

EMAIL\_HOST\_PASSWORD = 'CreditosLibres'

EMAIL\_PORT = 587

PASSWORD\_RESET\_TIMEOUT\_DAYS = 2

LOGOUT\_REDIRECT\_URL='/login/'

1. Agregar un archivo llamado ‘tokens.py’ en miapp

from django.contrib.auth.tokens import PasswordResetTokenGenerator

from django.utils import six

class UserTokenGenerator(*PasswordResetTokenGenerator*):

def \_make\_hash\_value(*self*, *user*, *timestamp*):

user\_id = six.text\_type(user.pk)

ts = six.text\_type(timestamp)

is\_active = six.text\_type(user.is\_active)

return f"{user\_id}{ts}{is\_active}"

user\_tokenizer = UserTokenGenerator()

1. Agregar un archivo llamado ‘forms’.py en miapp

from django import forms

from django.contrib.auth.forms import UserCreationForm

from django.contrib.auth.models import User

class RegistrationForm(*UserCreationForm*):

    email = forms.EmailField(*max\_length*=150)

    class Meta:

        model = User

        fields = ('username', 'email', 'password1', 'password2')

1. En el views poner el siguiente codigo:

import json

from django.conf import settings

from django.contrib.auth import authenticate, login

from django.contrib.auth.forms import UserCreationForm, AuthenticationForm

from django.contrib.auth.mixins import LoginRequiredMixin, UserPassesTestMixin

from django.contrib.auth.models import User, Group, Permission

from django.core.exceptions import ValidationError

from django.core.mail import EmailMessage

from django.template.loader import get\_template

from django.db import transaction

from django.db.models import Q

from django.http import HttpResponse

from django.utils.encoding import force\_bytes, force\_text

from django.utils.http import urlsafe\_base64\_encode, urlsafe\_base64\_decode

from django.shortcuts import render, redirect, reverse, get\_object\_or\_404

from miapp.forms import RegistrationForm

from django.views import View

from .tokens import user\_tokenizer

from django.views.generic import TemplateView

# Create your views here.

class profile\_View(*TemplateView*):

    template\_name = "profile.html"

class RegisterView(*View*):

    def get(*self*, *request*):

        return render(request, 'register.html', { 'form': RegistrationForm() })

    def post(*self*, *request*):

        form = RegistrationForm(request.POST)

        if form.is\_valid():

            user = form.save(*commit*=False)

            user.is\_valid = False

            user.save()

            token = user\_tokenizer.make\_token(user)

            user\_id = urlsafe\_base64\_encode(force\_bytes(user.id))

            url = 'http://localhost:8000' + reverse('confirm\_email', *kwargs*={'user\_id': user\_id, 'token': token})

            message = get\_template('register\_email.html').render({

              'confirm\_url': url

            })

            mail = EmailMessage('Django Survey Email Confirmation', message, *to*=[user.email], *from\_email*=settings.EMAIL\_HOST\_USER)

            mail.content\_subtype = 'html'

            mail.send()

            return render(request, 'login.html', {

              'form': AuthenticationForm(),

              'message': f'A confirmation email has been sent to {user.email}. Please confirm to finish registering'

            })

        return render(request, 'register.html', { 'form': form })

# ... omitting everything below for brevity

class LoginView(*View*):

    def get(*self*, *request*):

        return render(request, 'login.html', { 'form':  AuthenticationForm })

    def post(*self*, *request*):

        form = AuthenticationForm(request, *data*=request.POST)

        if form.is\_valid():

            try:

                form.clean()

            except ValidationError:

                return render(

                    request,

                    'login.html',

                    { 'form': form, 'invalid\_creds': True }

                )

            login(request, form.get\_user())

            return redirect(reverse('profile'))

        return render(request, 'login.html', { 'form': form })

class ConfirmRegistrationView(*View*):

    def get(*self*, *request*, *user\_id*, *token*):

        user\_id = force\_text(urlsafe\_base64\_decode(user\_id))

        user = User.objects.get(*pk*=user\_id)

        context = {

          'form': AuthenticationForm(),

          'message': 'Registration confirmation error . Please click the reset password to generate a new confirmation email.'

        }

        if user and user\_tokenizer.check\_token(user, token):

            user.is\_valid = True

            user.save()

            context['message'] = 'Registration complete. Please login'

        return render(request, 'login.html', context)

1. Se crea un archivo llamado ‘urls.py’ y Se configuran las urls de mi app

from django.contrib.auth import views as auth\_views

from django.urls import path

from . import views

urlpatterns = [

  path('register/', views.RegisterView.as\_view(), *name*='register'),

  path('login/', views.LoginView.as\_view(), *name*='login'),

  path('profile/', views.profile\_View.as\_view(), *name*='profile'),

  path('confirm-email/<str:user\_id>/<str:token>/', views.ConfirmRegistrationView.as\_view(), *name*='confirm\_email')

]

1. Se configuran las urls generales

from django.contrib import admin

from django.urls import path, include

urlpatterns = [

    path('admin/', admin.site.urls),

    path('', include('miapp.urls'))

]

1. Se crea una carpeta llamada templates dentro de miapp, luego dentro de templates se crean register.html, login.html, profile.html, register\_email.html, index.html

Index.html

<!DOCTYPE *html*>

<html *lang*="en">

<head>

    <meta *charset*="UTF-8">

    <meta *name*="viewport" *content*="width=device-width, initial-scale=1.0">

    <link *rel*="stylesheet" *href*="https://cdn.jsdelivr.net/npm/bootstrap@4.5.3/dist/css/bootstrap.min.css"

*integrity*="sha384-TX8t27EcRE3e/ihU7zmQxVncDAy5uIKz4rEkgIXeMed4M0jlfIDPvg6uqKI2xXr2" *crossorigin*="anonymous">

    <title>Document</title>

    <style>

        p{

            font-size: 70px;

            text-align: center;

            padding-top: 100px;

        }

*.size*{

            font-size: 40px;

        }

    </style>

</head>

<body>

    <!-- Navbar -->

    <nav *class*="navbar navbar-expand-lg navbar-dark bg-dark">

        <a *class*="navbar-brand" *href*="#">Navbar</a>

        <button *class*="navbar-toggler" *type*="button" *data-toggle*="collapse" *data-target*="#navbarSupportedContent"

*aria-controls*="navbarSupportedContent" *aria-expanded*="false" *aria-label*="Toggle navigation">

            <span *class*="navbar-toggler-icon"></span>

        </button>

*<*<div *class*="collapse navbar-collapse " *id*="navbarSupportedContent">

            <ul *class*="navbar-nav ml-auto">

                <li *class*="nav-item active">

                    <a *class*="nav-link" *href*="{%url 'register'%}">Registro <span *class*="sr-only">(current)</span></a>

                </li>

                <li *class*="nav-item active">

                    <a *class*="nav-link" *href*="{%url 'login'%}">Iniciar Sesión</a>

                </li>

            </ul>

        </div>

    </nav>

    <!-- Page Content -->

    <div *class*="container">

        <p>Bienvenidos</p>

        <p *class*="size">

            Elaborado por: Anyi Jimenez, Zuleidy Yaruro y Johan Santiago Zuñiga

        </p>

    </div>

</body>

</html>

# login.html

{% load widget\_tweaks %}

<!DOCTYPE *html*>

<html *lang*="en">

<head>

    <meta *charset*="UTF-8">

    <meta *name*="viewport" *content*="width=device-width, initial-scale=1.0">

    <link *rel*="stylesheet" *href*="https://cdn.jsdelivr.net/npm/bootstrap@4.5.3/dist/css/bootstrap.min.css"

*integrity*="sha384-TX8t27EcRE3e/ihU7zmQxVncDAy5uIKz4rEkgIXeMed4M0jlfIDPvg6uqKI2xXr2" *crossorigin*="anonymous">

    <title>Document</title>

    <style>

        footer,

        span {

            text-align: center;

            display: block;

            color: rgb(187, 186, 186);

        }

    </style>

</head>

<body>

    <!-- Navbar -->

    <nav *class*="navbar navbar-expand-lg navbar-dark bg-dark">

        <a *class*="navbar-brand" *href*="#">Navbar</a>

        <button *class*="navbar-toggler" *type*="button" *data-toggle*="collapse" *data-target*="#navbarSupportedContent"

*aria-controls*="navbarSupportedContent" *aria-expanded*="false" *aria-label*="Toggle navigation">

            <span *class*="navbar-toggler-icon"></span>

        </button>

        <div *class*="collapse navbar-collapse " *id*="navbarSupportedContent">

            <ul *class*="navbar-nav ml-auto">

                <li *class*="nav-item active">

                    <a *class*="nav-link" *href*="{%url 'register'%}">Registro <span *class*="sr-only">(current)</span></a>

                </li>

                <li *class*="nav-item active">

                    <a *class*="nav-link" *href*="{%url 'login'%}">Iniciar Sesión</a>

                </li>

            </ul>

        </div>

    </nav>

    <!-- Page Content -->

    <div *class*="container">

        <div *class*="row">

            <div *class*="col-lg-12 text-center">

                <h3 *class*="mt-3"> Iniciar Sesión</h3>

            </div>

        </div>

        <div *class*="card row mt-2  offset-3 col-6">

            <div *class*="card-body">

                <form *method*='POST' *class*="mt-3 ">{%csrf\_token%}

                    <div *class*="row ">

                        <div *class*="form-group col-6 text-center">

                            <label *for*="codigo">Usuario</label>

                            <div *class*="control">

                                {{ form.username|add\_class:"input" }}

                              </div>

                              <p *class*="help is-danger">{{ form.username.errors }}</p>

                        </div>

                        <div *class*="form-group col-6 text-center ">

                            <label *for*="direccion">Contraseña</label>

                            <div *class*="control">

                                {{ form.password|add\_class:"input" }}

                              </div>

                              <p *class*="help is-danger">{{ form.password.errors }}</p>

                        </div>

                    </div>

            </div>

            <div *class*="text-center  mb-3">

                <button *type*="submit" *class*="btn btn-success">Submit</button>

            </div>

            <div *class*="text-center  mb-5">

                <button *type*="submit" *class*="btn btn-danger">Iniciar Sesión con Gmail</button>

            </div>

            </form>

        </div>

    </div>

    </div>

    <div *class*="container mt-3">

        <footer>

            <span> Copyright © 2020 - Anyi Jimenez, Zuleidy Yaruro Orozco, Johan Santiago Zuñiga</span>

            <span>FUP-Créditos Libres III</span>

        </footer>

    </div>

</body>

</html>

Profile.html

<!DOCTYPE *html*>

<html *lang*="en">

<head>

    <meta *charset*="UTF-8">

    <meta *name*="viewport" *content*="width=device-width, initial-scale=1.0">

    <link *rel*="stylesheet" *href*="https://cdn.jsdelivr.net/npm/bootstrap@4.5.3/dist/css/bootstrap.min.css"

*integrity*="sha384-TX8t27EcRE3e/ihU7zmQxVncDAy5uIKz4rEkgIXeMed4M0jlfIDPvg6uqKI2xXr2" *crossorigin*="anonymous">

    <title>Document</title>

    <style>

        p{

            font-size: 70px;

            text-align: center;

            padding-top: 100px;

        }

    </style>

</head>

<body>

    <!-- Navbar -->

    <nav *class*="navbar navbar-expand-lg navbar-dark bg-dark">

        <a *class*="navbar-brand" *href*="#">Navbar</a>

        <button *class*="navbar-toggler" *type*="button" *data-toggle*="collapse" *data-target*="#navbarSupportedContent"

*aria-controls*="navbarSupportedContent" *aria-expanded*="false" *aria-label*="Toggle navigation">

            <span *class*="navbar-toggler-icon"></span>

        </button>

        <div *class*="collapse navbar-collapse " *id*="navbarSupportedContent">

            <ul *class*="navbar-nav ml-auto">

                <li *class*="nav-item active">

                    <a *class*="nav-link" *href*="#">Registro <span *class*="sr-only">(current)</span></a>

                </li>

                <li *class*="nav-item active">

                    <a *class*="nav-link" *href*="#">Iniciar Sesión</a>

                </li>

                <li *class*="nav-item active">

                    <a *class*="nav-link" *href*="#">Cerrar Sesión</a>

                </li>

            </ul>

        </div>

    </nav>

    <!-- Page Content -->

    <div *class*="container">

        <p>Welcome, {{ user.username }} !</p>

    </div>

</body>

</html>

Register\_email.html

{% load widget\_tweaks %}

<html *lang*="en">

<head>

  <meta *charset*="UTF-8">

  <meta *name*="viewport" *content*="width=device-width, initial-scale=1.0">

  <meta *http-equiv*="X-UA-Compatible" *content*="ie=edge">

  <title>Registration Confirmation</title>

</head>

<body>

  <h1>Bienvenido, te acabas de registrar</h1>

</body>

</html>

Register.html

{% load widget\_tweaks %}

{% load socialaccount %}

<!DOCTYPE *html*>

<html *lang*="en">

<head>

    <meta *charset*="UTF-8">

    <meta *name*="viewport" *content*="width=device-width, initial-scale=1.0">

    <link *rel*="stylesheet" *href*="https://cdn.jsdelivr.net/npm/bootstrap@4.5.3/dist/css/bootstrap.min.css"

*integrity*="sha384-TX8t27EcRE3e/ihU7zmQxVncDAy5uIKz4rEkgIXeMed4M0jlfIDPvg6uqKI2xXr2" *crossorigin*="anonymous">

    <title>Document</title>

    <style>

        footer,

        span {

            text-align: center;

            display: block;

            color: rgb(187, 186, 186);

        }

    </style>

</head>

<body>

    <!-- Navbar -->

    <nav *class*="navbar navbar-expand-lg navbar-dark bg-dark">

        <a *class*="navbar-brand" *href*="#">Sistema de Registro y Login</a>

        <button *class*="navbar-toggler" *type*="button" *data-toggle*="collapse" *data-target*="#navbarSupportedContent"

*aria-controls*="navbarSupportedContent" *aria-expanded*="false" *aria-label*="Toggle navigation">

            <span *class*="navbar-toggler-icon"></span>

        </button>

        <div *class*="collapse navbar-collapse " *id*="navbarSupportedContent">

            <ul *class*="navbar-nav ml-auto">

                <li *class*="nav-item active">

                    <a *class*="nav-link" *href*="{%url 'register'%}">Registro <span *class*="sr-only">(current)</span></a>

                </li>

                <li *class*="nav-item active">

                    <a *class*="nav-link" *href*="{%url 'login'%}">Iniciar Sesión</a>

                </li>

            </ul>

        </div>

    </nav>

    <!-- Page Content -->

    <div *class*="container">

        <div *class*="row">

            <div *class*="col-lg-12 text-center">

                <h3 *class*="mt-3"> Nuevo Registro</h3>

            </div>

        </div>

        <div *class*="card row mt-1  offset-3 col-6">

            <div *class*="card-body">

                <form *action*="{% url 'register' %}" *method*="POST" *autocomplete*="off">

                    {% csrf\_token %}

                    <div *class*="field text-center ">

                        <label *for*="{{ form.username.id\_for\_label }}" *class*="label">

                            Username

                        </label>

                        <div *class*="control">

                            {{ form.username|add\_class:"input" }}

                        </div>

                        <p *class*="help is-danger">{{ form.username.errors }}</p>

                    </div>

                    <div *class*="field text-center ">

                        <label *for*="{{ form.email.id\_for\_label }}" *class*="label">

                            Email

                        </label>

                        <div *class*="control">

                            {{ form.email|add\_class:"input" }}

                        </div>

                        <p *class*="help is-danger">{{ form.email.errors }}</p>

                    </div>

                    <div *class*="field text-center">

                        <label *for*="{{ form.password1.id\_for\_label }}" *class*="label">

                            Password

                        </label>

                        <div *class*="control">

                            {{ form.password1|add\_class:"input" }}

                        </div>

                        <p *class*="help is-danger">{{ form.password1.errors }}</p>

                    </div>

                    <div *class*="field text-center">

                        <label *for*="{{ form.password2.id\_for\_label }}" *class*="label">

                            Password Check

                        </label>

                        <div *class*="control">

                            {{ form.password2|add\_class:"input" }}

                        </div>

                        <p *class*="help is-danger">{{ form.password2.errors }}</p>

                    </div>

                    <div *class*="text-center mt-2">

                        <button *type*="submit" *class*="btn btn-success">Enviar</button>

                    </div>

                    <div *class*="text-center  mt-3">

                        <!-- <button type="submit" class="btn btn-danger">Iniciar Sesión con Gmail</button> -->

                        <a *href*="{% provider\_login\_url 'google' %}" *class*="gp"><i *class*="fa fa-google-plus btn btn-danger">Registrarse con Gmail</i></a>

                    </div>

                </form>

            </div>

        </div>

    </div>

    <div *class*="container mt-3">

        <footer>

            <span> Copyright © 2020 - Anyi Jimenez, Zuleidy Yaruro Orozco, Johan Santiago Zuñiga</span>

            <span>FUP-Créditos Libres III</span>

        </footer>

    </div>

</body>

</html>

1. Se realizan las migraciones y se crea el superuser

* python manage.py makemigrations
* python manage.py migrate
* python manage.py createsuperuser
* Python manage.py runserver

Login con Gmail

1. Se instala en scripts pip install django-allauth
2. En el settings se modifica:

INSTALLED\_APPS = [

    'django.contrib.admin',

    'django.contrib.auth',

    'django.contrib.contenttypes',

    'django.contrib.sessions',

    'django.contrib.messages',

    'django.contrib.staticfiles',

    'miapp',

    'widget\_tweaks',

    'django.contrib.sites',

    'allauth',

    'allauth.account',

    'allauth.socialaccount',

    'allauth.socialaccount.providers.google',

]

AUTHENTICATION\_BACKENDS = (

    'django.contrib.auth.backends.ModelBackend',

    'allauth.account.auth\_backends.AuthenticationBackend',

 )

SITE\_ID = 1

SOCIALACCOUNT\_PROVIDERS = {

    'google': {

        'SCOPE': [

            'profile',

            'email',

        ],

        'AUTH\_PARAMS': {

            'access\_type': 'online',

        }

    }

}

1. En login se pone lo siguiente

{% load widget\_tweaks %}

{% load socialaccount %}

<!DOCTYPE *html*>

<html *lang*="en">

<head>

    <meta *charset*="UTF-8">

    <meta *name*="viewport" *content*="width=device-width, initial-scale=1.0">

    <link *rel*="stylesheet" *href*="https://cdn.jsdelivr.net/npm/bootstrap@4.5.3/dist/css/bootstrap.min.css"

*integrity*="sha384-TX8t27EcRE3e/ihU7zmQxVncDAy5uIKz4rEkgIXeMed4M0jlfIDPvg6uqKI2xXr2" *crossorigin*="anonymous">

    <title>Document</title>

    <style>

        footer,

        span {

            text-align: center;

            display: block;

            color: rgb(187, 186, 186);

        }

    </style>

</head>

<body>

    <!-- Navbar -->

    <nav *class*="navbar navbar-expand-lg navbar-dark bg-dark">

        <a *class*="navbar-brand" *href*="#">Navbar</a>

        <button *class*="navbar-toggler" *type*="button" *data-toggle*="collapse" *data-target*="#navbarSupportedContent"

*aria-controls*="navbarSupportedContent" *aria-expanded*="false" *aria-label*="Toggle navigation">

            <span *class*="navbar-toggler-icon"></span>

        </button>

        <div *class*="collapse navbar-collapse " *id*="navbarSupportedContent">

            <ul *class*="navbar-nav ml-auto">

                <li *class*="nav-item active">

                    <a *class*="nav-link" *href*="{%url 'register'%}">Registro <span *class*="sr-only">(current)</span></a>

                </li>

                <li *class*="nav-item active">

                    <a *class*="nav-link" *href*="{%url 'login'%}">Iniciar Sesión</a>

                </li>

            </ul>

        </div>

    </nav>

    <!-- Page Content -->

    <div *class*="container">

        <div *class*="row">

            <div *class*="col-lg-12 text-center">

                <h3 *class*="mt-3"> Iniciar Sesión</h3>

            </div>

        </div>

        <div *class*="card row mt-2  offset-3 col-6">

            <div *class*="card-body">

                <form *method*='POST' *class*="mt-3 ">{%csrf\_token%}

                    <div *class*="row ">

                        <div *class*="form-group col-6 text-center">

                            <label *for*="codigo">Usuario</label>

                            <div *class*="control">

                                {{ form.username|add\_class:"input" }}

                              </div>

                              <p *class*="help is-danger">{{ form.username.errors }}</p>

                        </div>

                        <div *class*="form-group col-6 text-center ">

                            <label *for*="direccion">Contraseña</label>

                            <div *class*="control">

                                {{ form.password|add\_class:"input" }}

                              </div>

                              <p *class*="help is-danger">{{ form.password.errors }}</p>

                        </div>

                    </div>

            </div>

            <div *class*="text-center  mb-3">

                <button *type*="submit" *class*="btn btn-success">Submit</button>

            </div>

            <div *class*="text-center  mb-5">

                <!-- <button type="submit" class="btn btn-danger">Iniciar Sesión con Gmail</button> -->

                <a *href*="{% provider\_login\_url 'google' %}" *class*="gp"><i *class*="fa fa-google-plus btn btn-danger">Iniciar Sesión con Gmail</i></a>

            </div>

            </form>

        </div>

    </div>

    </div>

    <div *class*="container mt-3">

        <footer>

            <span> Copyright © 2020 - Anyi Jimenez, Zuleidy Yaruro Orozco, Johan Santiago Zuñiga</span>

            <span>FUP-Créditos Libres III</span>

        </footer>

    </div>

</body>

</html>

1. En urls.py de miapp

from django.contrib.auth import views as auth\_views

from django.urls import path, include

from django.views.generic import TemplateView

from . import views

urlpatterns = [

    path('register/', views.RegisterView.as\_view(), *name*='register'),

    path('login/', views.LoginView.as\_view(), *name*='login'),

path('profile/', views.profile\_View.as\_view(), *name*='profile'),

    path('accounts/', include('allauth.urls')),

    path('', TemplateView.as\_view(*template\_name*="index.html")),

    path('confirm-email/<str:user\_id>/<str:token>/', views.ConfirmRegistrationView.as\_view(), *name*='confirm\_email')

]

1. Migracions

* python manage.py makemigrations
* python manage.py migrate

1. vamos a <https://console.developers.google.com/>

Cerrar sesión

1. en urls.py de miapp agregamos la url

path('logout/', auth\_views.LogoutView.as\_view(), *name*='logout'),

1. En settings agregamos

LOGOUT\_REDIRECT\_URL='/'

1. Modificamos profile.html

<li *class*="nav-item active">

                    <a *class*="nav-link" *href*="{%url 'logout'%}">Cerrar Sesión</a>

                </li>