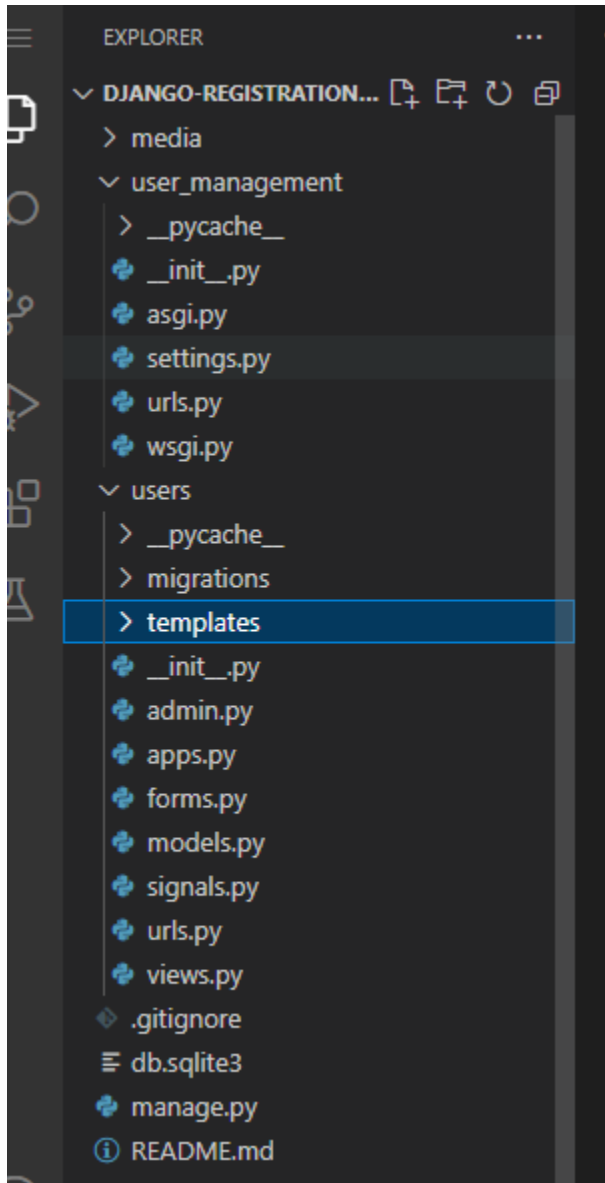


**Project structure of signup, login , logout, update profile and change password .**



Step 1:-

Settings.py file:-

```
ALLOWED_HOSTS = []  
  
# Application definition
```

```

INSTALLED_APPS = [
    'django.contrib.admin',
    'django.contrib.auth',
    'django.contrib.contenttypes',
    'django.contrib.sessions',
    'django.contrib.messages',
    'django.contrib.staticfiles',
    'users.apps.UserConfig',
    'social_django',
]

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 = 'user_management.urls'

```

Step 2:-

urls.py file (user\_management) project folder :-

```

from django.contrib import admin

from django.urls import path, include, re_path

from django.conf import settings
from django.conf.urls.static import static

from django.contrib.auth import views as auth_views
from users.views import CustomLoginView, ResetPasswordView, ChangePasswordView

from users.forms import LoginForm

urlpatterns = [
    path('admin/', admin.site.urls),

```

```

    path('', include('users.urls')),

    path('login/', CustomLoginView.as_view(redirect_authenticated_user=True,
template_name='users/login.html',
                                authentication_form=LoginForm),
name='login'),

    path('logout/',
auth_views.LogoutView.as_view(template_name='users/logout.html'), name='logout'),

    path('password-reset/', ResetPasswordView.as_view(), name='password_reset'),

    path('password-reset-confirm/<uidb64>/<token>/',
        auth_views.PasswordResetConfirmView.as_view(template_name='users/passwor
d_reset_confirm.html'),
        name='password_reset_confirm'),

    path('password-reset-complete/',
        auth_views.PasswordResetCompleteView.as_view(template_name='users/passwo
rd_reset_complete.html'),
        name='password_reset_complete'),

    path('password-change/', ChangePasswordView.as_view(),
name='password_change'),

    re_path(r'^oauth/', include('social_django.urls', namespace='social')),
] + static(settings.MEDIA_URL, document_root=settings.MEDIA_ROOT)

```

Step 3:- models.py file (under users app folder)

```

from django.db import models
from django.contrib.auth.models import User
from PIL import Image

# Extending User Model Using a One-To-One Link
class Profile(models.Model):
    user = models.OneToOneField(User, on_delete=models.CASCADE)

    avatar = models.ImageField(default='default.jpg', upload_to='profile_images')

```

```
bio = models.TextField()

def __str__(self):
    return self.user.username

# resizing images
def save(self, *args, **kwargs):
    super().save()

    img = Image.open(self.avatar.path)

    if img.height > 100 or img.width > 100:
        new_img = (100, 100)
        img.thumbnail(new_img)
        img.save(self.avatar.path)
```

admins.py file code :-

```
from django.contrib import admin
from .models import Profile

admin.site.register(Profile)
```

Step 4:-

forms.py file :-

```
from django import forms
```



```

    password2 = forms.CharField(max_length=50,
                                required=True,
                                widget=forms.PasswordInput(attrs={'placeholder':
                                                                    'Confirm Password',
                                                                    'class': 'form-
control',
                                                                    'data-toggle':
                                                                    'password',
                                                                    'id':
                                                                    'password',
                                                                    'name':
                                                                    'password2'}))

    class Meta:
        model = User
        fields = ['first_name', 'last_name', 'username', 'email', 'password1',
                  'password2']

class LoginForm(AuthenticationForm):
    username = forms.CharField(max_length=100,
                               required=True,
                               widget=forms.TextInput(attrs={'placeholder':
                                                             'Username',
                                                             'class': 'form-
control',
                                                             'data-toggle':
                                                             'password',
                                                             'id':
                                                             'password',
                                                             'name':
                                                             'password1'}))

    password = forms.CharField(max_length=50,
                                required=True,
                                widget=forms.PasswordInput(attrs={'placeholder':
                                                                    'Password',
                                                                    'class': 'form-
control',
                                                                    'data-toggle':
                                                                    'password',
                                                                    'id':
                                                                    'password',
                                                                    'name':
                                                                    'password2'}))

    remember_me = forms.BooleanField(required=False)

    class Meta:
        model = User
        fields = ['username', 'password', 'remember_me']

```

```

class UpdateUserForm(forms.ModelForm):
    username = forms.CharField(max_length=100,
                               required=True,
                               widget=forms.TextInput(attrs={'class': 'form-
control'}))
    email = forms.EmailField(required=True,
                              widget=forms.TextInput(attrs={'class': 'form-
control'}))

    class Meta:
        model = User
        fields = ['username', 'email']

class UpdateProfileForm(forms.ModelForm):
    avatar = forms.ImageField(widget=forms.FileInput(attrs={'class': 'form-
control-file'}))
    bio = forms.CharField(widget=forms.Textarea(attrs={'class': 'form-control',
'rows': 5}))

    class Meta:
        model = Profile
        fields = ['avatar', 'bio']

```

Step 5:- signals.py file code (users)

```

from django.db.models.signals import post_save

```

```

from django.contrib.auth.models import User
from django.dispatch import receiver

from .models import Profile

@receiver(post_save, sender=User)
def create_profile(sender, instance, created, **kwargs):
    if created:
        Profile.objects.create(user=instance)

@receiver(post_save, sender=User)
def save_profile(sender, instance, **kwargs):
    instance.profile.save()

```

Step 6:- urls.py file (users)

```

from django.urls import path
from .views import home, profile, RegisterView

urlpatterns = [
    path('', home, name='users-home'),
    path('register/', RegisterView.as_view(), name='users-register'),
    path('profile/', profile, name='users-profile'),
]

```

Step 7:-

Views.py file code:-

```

from django.shortcuts import render, redirect
from django.urls import reverse_lazy
from django.contrib.auth.views import LoginView, PasswordResetView,
PasswordChangeView
from django.contrib import messages
from django.contrib.messages.views import SuccessMessageMixin
from django.views import View
from django.contrib.auth.decorators import login_required

from .forms import RegisterForm, LoginForm, UpdateUserForm, UpdateProfileForm

```

```

def home(request):
    return render(request, 'users/home.html')

class RegisterView(View):
    form_class = RegisterForm
    initial = {'key': 'value'}
    template_name = 'users/register.html'

    def dispatch(self, request, *args, **kwargs):
        # will redirect to the home page if a user tries to access the register
page while logged in
        if request.user.is_authenticated:
            return redirect(to='/')

        # else process dispatch as it otherwise normally would
        return super(RegisterView, self).dispatch(request, *args, **kwargs)

    def get(self, request, *args, **kwargs):
        form = self.form_class(initial=self.initial)
        return render(request, self.template_name, {'form': form})

    def post(self, request, *args, **kwargs):
        form = self.form_class(request.POST)

        if form.is_valid():
            form.save()

            username = form.cleaned_data.get('username')
            messages.success(request, f'Account created for {username}')

            return redirect(to='login')

        return render(request, self.template_name, {'form': form})

# Class based view that extends from the built in login view to add a remember me
functionality
class CustomLoginView(LoginView):
    form_class = LoginForm

    def form_valid(self, form):
        remember_me = form.cleaned_data.get('remember_me')

        if not remember_me:

```

```

        # set session expiry to 0 seconds. So it will automatically close the
        session after the browser is closed.
        self.request.session.set_expiry(0)

        # Set session as modified to force data updates/cookie to be saved.
        self.request.session.modified = True

        # else browser session will be as long as the session cookie time
        "SESSION_COOKIE_AGE" defined in settings.py
        return super(CustomLoginView, self).form_valid(form)

class ResetPasswordView(SuccessMessageMixin, PasswordResetView):
    template_name = 'users/password_reset.html'
    email_template_name = 'users/password_reset_email.html'
    subject_template_name = 'users/password_reset_subject'
    success_message = "We've emailed you instructions for setting your password,
    " \
        "if an account exists with the email you entered. You
    should receive them shortly." \
        " If you don't receive an email, " \
        "please make sure you've entered the address you registered
    with, and check your spam folder."
    success_url = reverse_lazy('users-home')

class ChangePasswordView(SuccessMessageMixin, PasswordChangeView):
    template_name = 'users/change_password.html'
    success_message = "Successfully Changed Your Password"
    success_url = reverse_lazy('users-home')

@login_required
def profile(request):
    if request.method == 'POST':
        user_form = UpdateUserForm(request.POST, instance=request.user)
        profile_form = UpdateProfileForm(request.POST, request.FILES,
instance=request.user.profile)

        if user_form.is_valid() and profile_form.is_valid():
            user_form.save()
            profile_form.save()
            messages.success(request, 'Your profile is updated successfully')
            return redirect(to='users-profile')
    else:

```

```

user_form = UpdateUserForm(instance=request.user)
profile_form = UpdateProfileForm(instance=request.user.profile)

return render(request, 'users/profile.html', {'user_form': user_form,
'profile_form': profile_form})

```

step 8:-

base.html file (templates folder under users)

```

<!doctype html>
<html lang="en">
<head>
    <!-- Required meta tags -->
    <meta charset="utf-8">
    <meta name="viewport" content="width=device-width, initial-scale=1, shrink-
to-fit=no">

    <!-- Bootstrap CSS -->
    <link rel="stylesheet"
href="https://maxcdn.bootstrapcdn.com/bootstrap/4.0.0/css/bootstrap.min.css"
integrity="sha384-
Gn5384xqQ1aowXA+058RXPxPg6fy4IWvTNh0E263XmFcJlSAwiGgFAW/dAiS6JXm"
crossorigin="anonymous">

    <!--Font awesome icons -->
    <link rel="stylesheet"
href="https://use.fontawesome.com/releases/v5.8.2/css/all.css" integrity="sha384-
oS3vJWv+0UjzBfQzYUhtDYW+Pj2YciDJxpsK10YPAYjqT085Qq/1cq5FLXAZQ7Ay"
crossorigin="anonymous">

    <title>{% block title %} {% endblock %}</title>
</head>
<body>
    <div class="container p-3 my-3">
        <div class="row">
            <div class="col-md-12">
                <nav class="navbar navbar-expand-md navbar-light " style="background-
color: #f0f5f5">
                    <a href="/" class="navbar-brand">Home</a>
                    <button type="button" class="navbar-toggler" data-toggle="collapse"
data-target="#navbarCollapse">
                        <span class="navbar-toggler-icon"></span>
                    </button>

```

```

        <div class="collapse navbar-collapse" id="navbarCollapse">
            <div class="navbar-nav ml-auto">
                {% if user.is_authenticated %}
                    <a href="{% url 'users-profile' %}" class="nav-item nav-
link">Profile</a>
                    <a href="{% url 'logout' %}" class="nav-item nav-
link">Logout</a>
                {% else %}
                    <a href="{% url 'login' %}" class="nav-item nav-link">Sign
in</a>
                {% endif %}
            </div>
        </div>
    </nav>
    <!--Any flash messages pop up in any page because this is the base
template-->
    {% if messages %}
        <div class="alert alert-dismissible" role="alert">
            {% for message in messages %}
                <div class="alert alert-{{ message.tags }}">{{ message }}</div>
            {% endfor %}
            <button type="button" class="close" data-dismiss="alert" aria-
label="Close">
                <span aria-hidden="true">&times;</span>
            </button>
        </div>
    {% endif %}
    {% block content %}{% endblock %}
</div>
</div>
</div>

    <!-- jQuery first, then Popper.js, then Bootstrap JS -->
    <script src="https://code.jquery.com/jquery-3.2.1.slim.min.js"
integrity="sha384-
KJ3o2DKtIkVYIK3UENzmM7KCKRr/rE9/Qpg6aAZGJwFDMVNA/GpGFF93hXpG5KkN"
crossorigin="anonymous"></script>
    <script
src="https://cdnjs.cloudflare.com/ajax/libs/popper.js/1.12.9/umd/popper.min.js"
integrity="sha384-
ApNbgH9B+Y1QKtv3Rn7W3mgPxhU9K/ScQsAP7hUibX39j7fakFPskvXusvfa0b4Q"
crossorigin="anonymous"></script>
    <script
src="https://maxcdn.bootstrapcdn.com/bootstrap/4.0.0/js/bootstrap.min.js"

```



```

                <div class="col-md-10 offset-md-1">
                    <div class="form-group">
                        <label class="small mb-1"
for="id_old_password">Old Password</label>
                        <input type="password"
name="old_password" autocomplete="new-password"
                        class="form-control"
required id="id_old_password"
                        placeholder="Enter Old
Password" />
                    <span>
                    </span>
                </div>
            </div>
            <div class="form-row">
                <div class="col-md-10 offset-md-1">
                    <div class="form-group">
                        <label class="small mb-1"
for="id_new_password1">New Password</label>
                        <input type="password"
name="new_password1" autocomplete="new-password"
                        class="form-control"
required id="id_new_password1"
                        placeholder="Enter New
Password" />
                    <span>
                    </span>
                </div>
            </div>
            <div class="form-row">
                <div class="col-md-10 offset-md-1">
                    <div class="form-group">
                        <label class="small mb-1"
for="id_new_password2">New Password Confirmation</label>
                        <input type="password"
name="new_password2" autocomplete="new-password"
                        required
id="id_new_password2" class="form-control"
                        placeholder="Confirm New
Password" />
                    </div>
                </div>
            </div>
        </div>

```



```
</div>
{% endblock content %}
```

Login.html file code :-

```
{% extends "users/base.html" %}
{% block title %} Login Page {% endblock title%}
{% block content %}
    <div class="form-content my-3 p-3">
        <div class="container">
            <div class="row justify-content-center">
                <div class="col-lg-5">
                    <div class="card shadow-lg border-0 rounded-lg mt-0 mb-3">
                        <div class="card-header justify-content-center">
                            <h3 class="font-weight-light my-1 text-center">Sign
In</h3>
                        </div>
                        {% if form.errors %}
                            <div class="alert alert-danger alert-dismissible"
role="alert">
                                <div id="form_errors">
                                    {% for key, value in form.errors.items %}
                                        <strong>{{ value }}</strong>
                                    {% endfor %}
                                </div>
                                <button type="button" class="close" data-
dismiss="alert" aria-label="Close">
                                    <span aria-hidden="true">&times;</span>
                                </button>
                            </div>
                        {% endif %}
                        <div class="card-body">
                            <form method="POST">
                                {% csrf_token %}
                                <div class="form-row">
                                    <div class="col-md-10 offset-md-1">
                                        <div class="form-group">
                                            <a href="{% url 'social:begin'
'github' %}"
                                                class="btn btn-link btn-lg
active btn-block">Sign in with GitHub</a>
                                            <a href="{% url 'social:begin'
'google-oauth2' %}"
```

```

class="btn btn-link btn-lg
active btn-block">Sign in with Google</a>
<hr>
<p class="text-
center"><strong>OR</strong></p>
<hr>
<label class="small mb-
1">Username</label>
{{ form.username }}
</div>
</div>
</div>
<div class="form-row">
<div class="col-md-10 offset-md-1">
<div class="form-group">
<label class="small mb-
1">Password</label>
{{ form.password }}
</div>
</div>
</div>
<div class="form-row">
<div class="col-md-10 offset-md-1">
<div class="form-group">
<!-- Add a Remember me functionality
-->
{{ form.remember_me }}
<label> Remember me</label>
</div>
</div>
</div>
<div class="form-row">
<div class="col-md-10 offset-md-1">
<div class="form-group mt-0 mb-1">
<button name="login" class="col-md-12
btn btn-dark" id="login">Sign in</button>
</div>
</div>
</div>
</div>
</form>
</div>
<div class="card-footer text-center">
<div class="small">
<a href="{% url 'users-register' %}">Don't have
an account yet? Go to signup</a><br>

```

```

                <a href="{% url 'password_reset' %}"><i>Forgot
Password?</i></a>
            </div>
        </div>
    </div>
</div>
</div>
</div>
{% endblock content %}

```

logout.html file code :-

```

{% extends "users/base.html" %}
{% block title %}Logout{% endblock title %}
{% block content %}
    <div class="card" style="width: 18rem;">
        <div class="card-body">
            <h5 class="card-title">You have been logged out</h5>
            <p class="card-text">
                Thanks for your time, contact me for any comments or suggestions
using my email address.
            </p>
            <br><hr><a href="{% url 'login' %}" class="btn btn-primary">Sign in
again</a>
        </div>
    </div>
{% endblock content %}

```

password\_reset\_complete.html file code :-

```

{% extends "users/base.html" %}
{% block content %}
    <div class="container my-3 p-3">
        <div class="row justify-content-center">
            <div class="col-lg-5">
                <div class="card shadow-lg border-0 rounded-lg mt-0 mb-3">
                    <div class="alert alert-info">
                        Your password has been set. You may go ahead and <a
href="{% url 'login' %}">Login Here</a>
                    </div>
                </div>
            </div>
        </div>
    </div>

```

```

        </div>
    </div>
</div>
{% endblock content %}

```

password\_reset\_confirm.html :-

```

{% extends "users/base.html" %}
{% block title %} Password Reset {% endblock title %}
{% block content %}
    <div class="form-content my-3 p-3">
        <div class="container">
            <div class="row justify-content-center">
                <div class="col-lg-5">
                    {% if validlink %}
                        <div class="card shadow-lg border-0 rounded-lg mt-0 mb-3">
                            <div class="card-header justify-content-center">
                                <h3 class="font-weight-light my-4 text-center">Reset Your Password</h3>
                            </div>
                            {% if form.errors %}
                                <div class="alert alert-danger alert-dismissible"
role="alert">
                                    <div id="form_errors">
                                        {% for key, value in form.errors.items %}
                                            <strong>{{ value }}</strong>
                                        {% endfor %}
                                    </div>
                                    <button type="button" class="close" data-
dismiss="alert" aria-label="Close">
                                        <span aria-hidden="true">&times;</span>
                                    </button>
                                </div>
                            {% endif %}

                            <div class="card-body">
                                <form method="POST">
                                    {% csrf_token %}
                                    <div class="form-row">
                                        <div class="col-md-10 offset-md-1">
                                            <div class="form-group">
                                                <label class="small mb-1"
for="id_new_password1">New Password</label>

```

```

                <input type="password"
name="new_password1" autocomplete="new-password"
                class="form-control"
required id="id_new_password1"
                placeholder="Enter
password"/>
                <span>
                </span>
            </div>
        </div>
    </div>
    <div class="form-row">
        <div class="col-md-10 offset-md-1">
            <div class="form-group">
                <label class="small mb-1"
for="id_new_password2">New Password Confirmation</label>
                <input type="password"
name="new_password2" autocomplete="new-password"
                required
id="id_new_password2" class="form-control"
                placeholder="Confirm
password"/>
            </div>
        </div>
    </div>
    <div class="form-row">
        <div class="col-md-10 offset-md-1">
            <div class="form-group mt-0 mb-1">
                <button type="submit" class="col-
md-12 btn btn-dark" id="reset">Reset Password</button>
            </div>
        </div>
    </div>
</form>
</div>
</div>
{% else %}
<div class="alert alert-warning">
    The password reset link was invalid, possibly because it
has already been used.
    Please request a new password reset.
</div>
{% endif %}
</div>
</div>

```

```
    </div>
  </div>
{% endblock content %}
```

password\_reset\_email.html file code:-

```
{% autoescape off %}
  To initiate the password reset process for your {{ user.email }} Django
  Registration/Login App Account,
  click the link below:

  {{ protocol }}://{{ domain }}{% url 'password_reset_confirm' uidb64=uid
  token=token %}

  If clicking the link above doesn't work, please copy and paste the URL in a new
  browser
  window instead.

  Sincerely,
  The Developer
{% endautoescape %}
```

password\_reset.html file code :-

```
{% extends "users/base.html" %}
{% block content %}
  <div class="form-content my-3 p-3">
    <div class="container">
      <div class="row justify-content-center">
        <div class="col-lg-5">
          <div class="card shadow-lg border-0 rounded-lg mt-0 mb-3">
            <div class="card-header justify-content-center">
              <div id="error_div"></div>
              <h3 class="font-weight-light my-4 text-center">Forgot
  Password?</h3>
            </div>
            {% if form.errors %}
              <div class="alert alert-danger alert-dismissible"
  role="alert">
                <div id="form_errors">
                  {% for key, value in form.errors.items %}
                    <strong>{{ value }}</strong>
                  {% endfor %}
                </div>
              </div>
            </div>
          </div>
        </div>
      </div>
    </div>
  </div>
```

```

        <button type="button" class="close" data-
dismiss="alert" aria-label="Close">
            <span aria-hidden="true">&times;</span>
        </button>
    </div>
{% endif %}
<div class="card-body">
    <form method="POST">
        {% csrf_token %}
        <div class="form-row">
            <div class="col-md-10 offset-md-1">
                <div class="form-group">
                    <label class="small mb-1"
for="id_email">Email</label>
                    <input type="email"
name="email" class="form-control"
autocomplete="email"
maxlength="254" required id="id_email"
placeholder="Enter email">
                </div>
            </div>
        </div>
        <div class="form-row">
            <div class="col-md-10 offset-md-1">
                <div class="form-group mt-0 mb-1">
                    <button type="submit" class="col-md-12
btn btn-dark">Submit
                    </button>
                </div>
            </div>
        </div>
    </form>
</div>
<div class="card-footer text-center">
    <div class="small">
        <a href="{% url 'users-register' %}">Create A New
Account</a><br><br>
        <a href="{% url 'login' %}">Back To Login</a><br>
    </div>
</div>
</div>
</div>
</div>
</div>

```

```
</div>
{% endblock content %}
```

Profile.html file code :-

```
{% extends "users/base.html" %}
{% block title %}Profile Page{% endblock title %}
{% block content %}
    <div class="row my-3 p-3">
        
    </div>
    {% if user_form.errors %}
        <div class="alert alert-danger alert-dismissible" role="alert">
            <div id="form_errors">
                {% for key, value in user_form.errors.items %}
                    <strong>{{ value }}</strong>
                {% endfor %}
            </div>
            <button type="button" class="close" data-dismiss="alert" aria-
label="Close">
                <span aria-hidden="true">&times;</span>
            </button>
        </div>
    {% endif %}
    <div class="form-content">
        <form method="post" enctype="multipart/form-data">
            {% csrf_token %}
            <div class="form-row">
                <div class="col-md-5">
                    <div class="form-group">
                        <label class="small mb-1">Username:</label>
                        {{ user_form.username }}
                        <label class="small mb-1">Email:</label>
                        {{ user_form.email }}
                    </div>
                    <div class="form-group">
                        <a href="{% url 'password_change' %}">Change Password</a>
                        <hr>
                        <label class="small mb-1">Change Avatar:</label>
                        {{ profile_form.avatar }}
                    </div>
                    <label class="small mb-1">Bio:</label> {{ profile_form.bio }}
                </div>
            </div>
        </form>
    </div>
```



```

        <div class="form-group">
            <label class="small mb-1">First
Name</label>
            {{ form.first_name }}
        </div>
    </div>
    <div class="col-md-6">
        <div class="form-group">
            <label class="small mb-1">Last
Name</label>
            {{ form.last_name }}
        </div>
    </div>
</div>
<div class="form-row">
    <div class="col-md-6">
        <div class="form-group">
            <label class="small mb-
1">Username</label>
            {{ form.username }}
        </div>
    </div>
    <div class="col-md-6">
        <div class="form-group">
            <label class="small mb-
1">Email</label>
            {{ form.email }}
        </div>
    </div>
</div>
<div class="form-row">
    <div class="col-md-6">
        <div class="form-group">
            <label class="small mb-
1">Password</label>
            {{ form.password1 }}
            {{ form.errors.password }}
        </div>
    </div>
    <div class="col-md-6">
        <div class="form-group">
            <label class="small mb-1">Confirm
Password</label>
            {{ form.password2 }}

```

