Workshop: Petstagram

This document contains the fifth and final part of the Petstagram Workshop. First, we will add a functionality to send each newly registered user a greeting email. Then, we will add pagination on the profile details page. Next, we will test the app. And finally, we will deploy using Docker and Amazon.

The full project description can be found in the Workshop Description Document.

You can directly dive into the app here: https://softuni-petstagram.azurewebsites.net/

1. Workshop - Part 5.1

Send "Registration greetings" Email

When new user is registered on the site, we want them to receive an automatic greetings email. We have the template in this workshop resources. It is an email template and we should only change the username (of the receiver) on it:













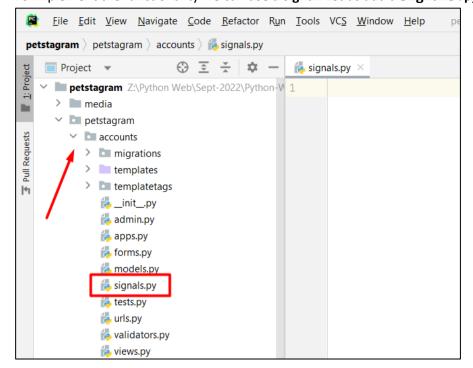








To implement the functionality we can **use a signal**. Let us add a **signals.py** file in our **accounts** app:



We want to invoke the signal just after the profile is saved. The signal checks if the user is created, and if so creates the email with the given template and sends it to them:

```
from django.core.mail import send_mail
from django.db.models.signals import post save
from django.dispatch import receiver
from django.template.loader import render_to_string
from django.utils.html import strip tags
from petstagram import settings
from petstagram.accounts.models import PetstagramUser
@receiver(signal=post save, sender=PetstagramUser)
def send greeting email(sender, instance, created, **kwargs):
    if created:
        subject = "Registration greetings"
        html_message = render_to_string('email-greeting.html', {'profile': instance})
        plain_message = strip_tags(html_message)
        to = instance.email
        send mail(
            subject=subject,
            message=plain_message,
            from_email=settings.EMAIL_HOST_USER,
            recipient_list=[to], html_message=html_message
        )
```

In the **setting.py** file, we should add the **email credentials**. In this workshop, we will be using **Gmail account**. To use it we need to set that the email uses TLS, the host is "smtp.gmail.com", the Gmail port SMTP port is 587, the email host user is our email address, the password is an automatically generated password by Gmail when we add











a "third-party apps with account access":

```
settings.pv ×
                    Tamary Neg jacea egpe
128
        # https://docs.djangoproject.com/en/4.1/ref/settings/#default-auto-field
129
        DEFAULT_AUTO_FIELD = 'django.db.models.BigAutoField'
131
        MEDIA_URL = 'media/'
132
        MEDIA_ROOT = os.path.join(BASE_DIR, 'media')
133
134
135
        AUTH_USER_MODEL = 'accounts.PetstagramUser'
136
137
        EMAIL_USE_TLS = True
138
        EMAIL_HOST = 'smtp.gmail.com'
139
        EMAIL_HOST_USER = 'no.reply.petstagram@gmail.com'
        EMAIL_HOST_PASSWORD = "gqhidvelyurzdxcfvghbn"
140
        EMAIL_PORT = 587
```

Add Pagination

The next thing we want to add to our app is a pagination on the profile details page. We want to show only 2 images per page. Open the account/views.py file and we can add the pagination to our context:

```
v petstagram
                                                                                                                                  from django.core.paginator import Paginator
             > media
                                                                                                                                  from django.urls import reverse_lazy
petstagram
                                                                                                                                 from django.views import generic as views
                  accounts
                                                                                                                                 from django.contrib.auth import views as auth_views
                       > migrations
                        > templates
                                                                                                                                 from \ petstagram.accounts.forms \ import \ Petstagram User Create Form, \ Login Form, \ Petstagram User Edit Form \ petstagram User Create Form, \ Login Form, \ Petstagram User Create Form, \ Petstagram User Creat
                        > 🖿 templatetags
                                                                                                                                 from petstagram.accounts.models import PetstagramUser
                              _init_.py
                               admin.pv
                               apps.pv
                               🚣 forms.py
                                                                                                                                class UserDetailsView(views.DetailView):
                               models.py
                                                                                                                                            model = PetstagramUser
                               12 🟭 📬
                                                                                                                                            template_name = 'accounts/profile-details-page.html'
                               ု tests.py
                               🐌 urls.py
                                                                                                                                            def get_context_data(self, **kwargs):
                               💪 validators.py
                                                                                                                                                     context = super().qet_context_data(**kwarqs)
                             🐌 views.py
                                                                                                                                                        total likes count = sum(p.like set.count() for p in self.object.photo_set.all())
                        common
                                                                                                                                                     photos = self.object.photo set.all()
                          migrations
                                                                                                                                                      paginator = Paginator(photos, 2)
                          > templates
                                                                                                                                                     page_number = self.request.GET.get('page') or 1
                               init .pv
                               [ admin.py
                                                                                                                                                     page_obj = paginator.get_page(page_number)
                               forms.py
                                                                                                                                                      context.update({
                               🛵 models.py
                                                                                                                                                                'total_likes_count': total_likes_count,
                              🀔 tests.py
                                                                                                                                                                  'paginator': paginator.
                               arls.py
                                                                                                                                                                  'page_number': page_number,
                              views.pv
                                                                                                                                                                  'page_obj': page_obj,
                   > pets

∨ Imphotos

                        > migrations
                                                                                                                                                      return context
                        > templates
```















Now, let us open the **profile-page-page.html** template and **add the pagination code**:

```
<!-- Start Last Uploaded Photos Section -->
<div class="pet-photos">
    <!-- Link to Last Uploaded Pet Photo -->
    {% for photo in page obj.object list %}
        <a href="{% url 'photo-details' photo.id %}">
            <!-- Pet Photo -->
            <img src="{{ photo.photo.url }}"</pre>
                 alt="pet img">
        </a>
    {% endfor %}
    <div class="pagination">
            <span class="step-links">
                {% if page obj.has previous %}
                    <a href="?page=1">&laquo; first</a>
                    <a href="?page={{ page obj.previous page number }}">previous</a>
                {% endif %}
                <span class="current">
                    Page {{ page_obj.number }} of {{ page_obj.paginator.num_pages
}}.
                </span>
                {% if page_obj.has_next %}
                    <a href="?page={{ page_obj.next_page_number }}">next</a>
                    <a href="?page={{ page_obj.paginator.num_pages }}">last
»</a>
                {% endif %}
            </span>
    </div>
</div>
```

2. Workshop - Part 5.2

Testing

Test the forms, models and views in the petstagram/photos app (but not any libraries or functionality provided as part of Python or Django).

3. Workshop - Part 5.3

Deploy

Deploy the project using AWS and Docker.















