

Lab 6 Part 6

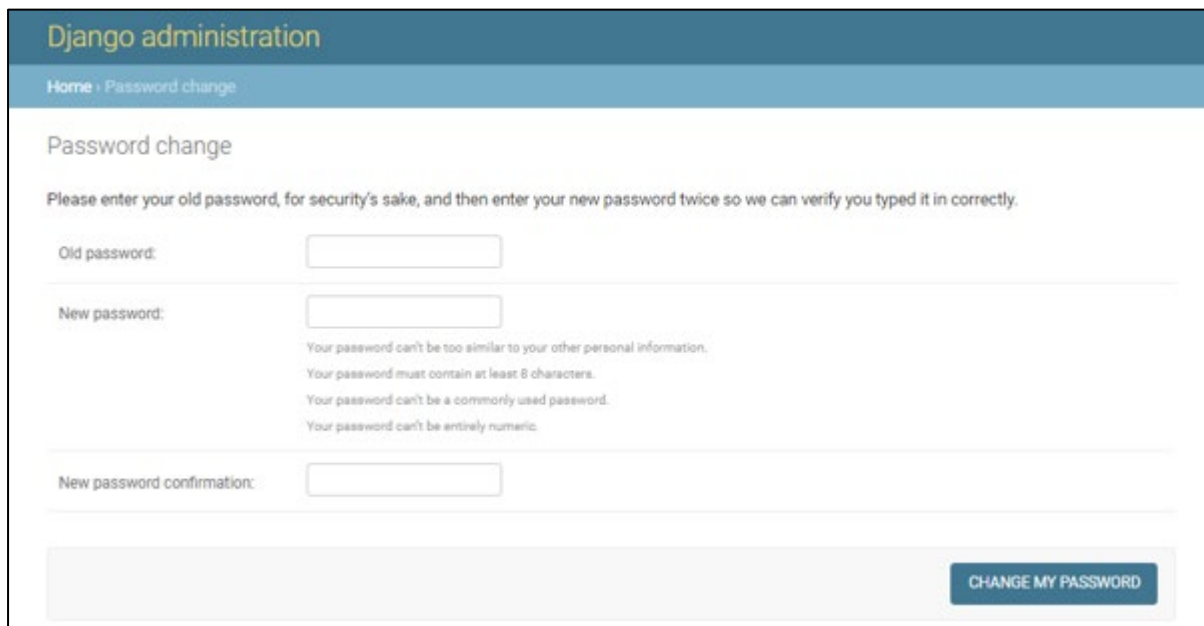
Password Change & Reset

In this exercise we will add new functionality to the newspaper project so that users will be able to change their current password or, if they've forgotten it, to reset it via email.

Initially we will implement Django's built-in views and URLs for both password change and password reset before then customizing them with our own Bootstrap-styled templates.

Step 1 - Password Change

Django provides a default implementation that already works at this stage. To try it out launch the server and click on the "Log In" button to make sure you are logged in. Then navigate to the "Password change" page at http://127.0.0.1:8080/accounts/password_change/.

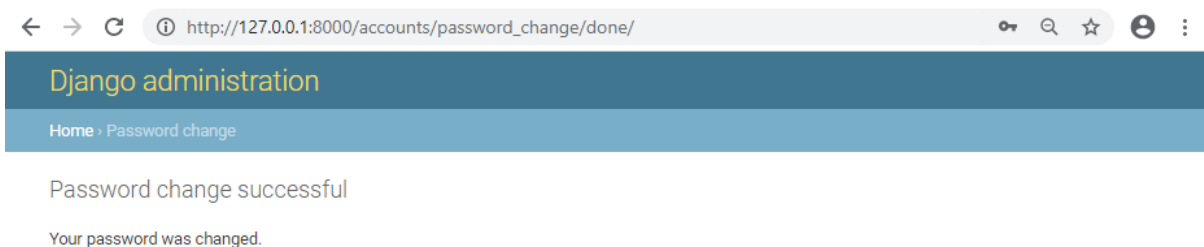


The screenshot shows the Django administration interface for password change. The header is 'Django administration' with a breadcrumb 'Home > Password change'. The main heading is 'Password change'. Below it, a message says: 'Please enter your old password, for security's sake, and then enter your new password twice so we can verify you typed it in correctly.' There are three input fields: 'Old password:', 'New password:', and 'New password confirmation:'. The 'New password:' field has four error messages: 'Your password can't be too similar to your other personal information.', 'Your password must contain at least 8 characters.', 'Your password can't be a commonly used password.', and 'Your password can't be entirely numeric.' At the bottom right is a blue button labeled 'CHANGE MY PASSWORD'.

Enter in both your old password and then a new one. Then click the "Change My Password" button.

You will be redirected to the "Password change successful" page located at:

http://127.0.0.1:8000/accounts/password_change/done/.



The screenshot shows the Django administration interface for the 'Password change successful' page. The header is 'Django administration' with a breadcrumb 'Home > Password change'. The main heading is 'Password change successful'. Below it, a message says: 'Your password was changed.'

Customizing password change

Next, we will change these two password change pages so that they match the look and feel of our Newspaper site. Because Django already has created the views and URLs for us, we only need to add new templates.

In VS Code create a file **password_change_form.html** in the **registration** directory and update it with the following code:

```
{% extends 'base.html' %}

{% block title %}Password Change{% endblock title %}

{% block content %}

    <h1>Password change</h1>

    <p>Please enter your old password, for security's sake, and then enter your
    new password twice so we can verify you typed it in correctly.</p>

    <form method="POST">

        {% csrf_token %}

        {{ form.as_p }}

        <input class="btn btn-success" type="submit" value="Change my password">

    </form>

{% endblock content %}
```

At the top we extend **base.html** and set our page title. Because we used “block” titles in our **base.html** file we can override them here. The form uses POST since we are sending data and a csrf_token for security reasons. By using form.as_p we are simply displaying in paragraphs the content of the default password reset form. And finally, we include a submit button that uses Bootstrap’s btn btn-success styling to make it green.

Reload the page at http://127.0.0.1:8080/accounts/password_change/ to see our changes.

← → ↻ ⓘ 127.0.0.1:8000/accounts/password_change/ A 📌 📌 📌 📌 📌 ...

Newspaper pimagee ▾

Password change

Please enter your old password, for security's sake, and then enter your new password twice so we can verify you typed it in correctly.

Old password:

New password:

- Your password can't be too similar to your other personal information.
- Your password must contain at least 8 characters.
- Your password can't be a commonly used password.
- Your password can't be entirely numeric.

New password confirmation:

[Change my password](#)

In VS Code create a file **password_change_done.html** in the **registration** directory and update it with the following code:

```
{% extends 'base.html' %}

{% block title %}Password Change Successful{% endblock title %}

{% block content %}

    <h1>Password change successful</h1>

    <p>Your password was changed.</p>

{% endblock content %}
```

Now if you go ahead and change your password you should see the following page:

Newspaper pimagee ▾

Password change successful

Your password was changed.

Password Reset

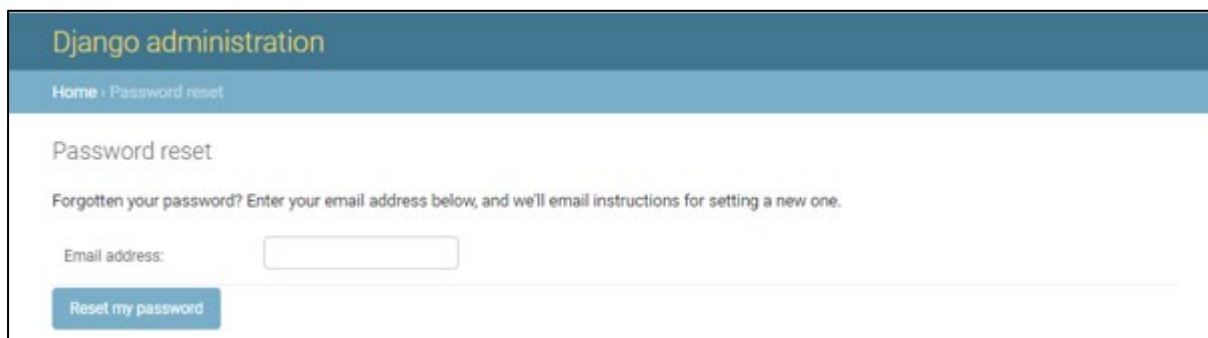
Password reset handles the common case of users forgetting their passwords. The steps are very similar to configuring password change, as we just did. Django already provides a default implementation that we will use and then customize the templates, so it matches the rest of our site.

The only configuration required is telling Django how to send emails. After all, a user can only reset a password if they have access to the email linked to the account. For testing purposes, we can rely on Django's console backend setting which outputs the email text to our command line console.

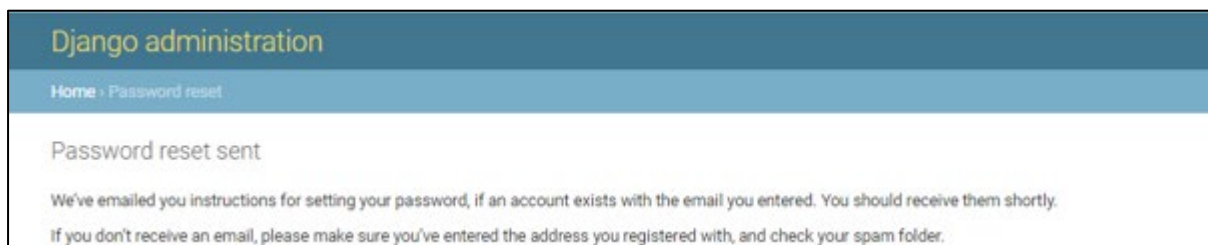
At the bottom of the **settings.py** file make the following one-line change.

```
135 EMAIL_BACKEND = 'django.core.mail.backends.console.EmailBackend'
```

Access the page at http://127.0.0.1:8080/accounts/password_reset/

The screenshot shows the Django administration interface for password reset. The header is "Django administration" in a blue bar. Below it, a breadcrumb trail reads "Home > Password reset". The main heading is "Password reset". A message says: "Forgotten your password? Enter your email address below, and we'll email instructions for setting a new one." There is a text input field labeled "Email address:" and a blue button labeled "Reset my password".

Make sure the email address you enter matches one of your Django user accounts. Upon submission you will then be redirected to the password reset done page at: http://127.0.0.1:8080/accounts/password_reset/done/.

The screenshot shows the Django administration interface for the password reset done page. The header is "Django administration" in a blue bar. Below it, a breadcrumb trail reads "Home > Password reset". The main heading is "Password reset sent". A message says: "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."

The message above says to check our email. Since we've told Django to send emails to the command line console, the email text will now be there – see below:

```

Quit the server with CTRL-BREAK.

[11/Oct/2023 17:36:33] "GET /accounts/password_reset/ HTTP/1.1" 200 3358
[11/Oct/2023 17:37:50] "POST /accounts/password_reset/ HTTP/1.1" 302 0
[11/Oct/2023 17:37:50] "GET /accounts/password_reset/done/ HTTP/1.1" 200 3014
Content-Type: text/plain; charset="utf-8"
MIME-Version: 1.0
Content-Transfer-Encoding: 8bit
Subject: Password reset on 127.0.0.1:8080
From: webmaster@localhost
To: s@s.com
Date: Wed, 11 Oct 2023 16:39:04 -0000
Message-ID: <169704234473.29940.9044588862887973077@TU-9MP4063.chello.ie>

You're receiving this email because you requested a password reset for your user account at 127.0.0.1:8080.
Please go to the following page and choose a new password:

http://127.0.0.1:8080/accounts/reset/Ng/bvx2d4-b3a76d27c7b9f416448200af0f476643/

Your username, in case you've forgotten: suser

Thanks for using our site!

The 127.0.0.1:8080 team

```

Your email text should be identical except for three lines:

- the “To” on the sixth line contains the email address of the user
- the URL link contains a secure token that Django randomly generates for us and can be used only once
- Django helpfully reminds us of our username

Copy the link you received which is like that shown below into your browser and you will be redirected to the “change password page”.

Django administration

Home > Password reset confirmation

Enter new password

Please enter your new password twice so we can verify you typed it in correctly.

New password:

Confirm password:

[Change my password](#)

Now enter in a new password and click on the “Change my password” button. The final step is you will be redirected to the “Password reset complete” page.

Now enter in a new password and click on the “Change my password” button. The final step is you will be redirected to the “Password reset complete” page.



To confirm everything worked, click on the “Log in” link and use your new password. It should work.

Custom Templates

As with “Password change” we only need to create new templates to customize the look and feel of password reset.

In VS Code create a file **password_reset_form.html** in the **registration** directory and update it with the following code:

```
{% extends 'base.html' %}

{% load crispy_forms_tags %}

{% block title %}Forgot Your Password?{% endblock title %}


{% block content %}

<h1>Forgot your password?</h1>

<p>Enter your email address below, and we'll email instructions for setting
a new one.</p>


<form method="POST">

  {% csrf_token %}

  {{ form | crispy }}

  <input class="btn btn-success" type="submit" value="Send me instructions!">

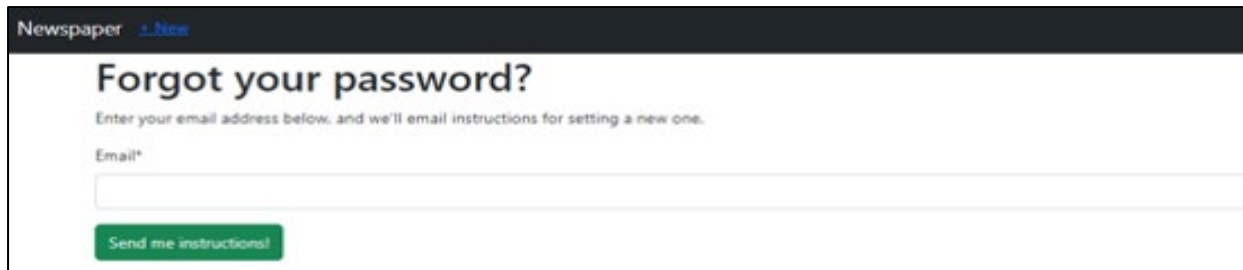
</form>

{% endblock content %}
```

Start up the server again with `python manage.py runserver`. Navigate to:

`http://127.0.0.1:8080/accounts/password_reset/`.

Refresh the page you can see our new page.



The screenshot shows a web form titled "Forgot your password?" with a subtitle "Enter your email address below, and we'll email instructions for setting a new one." Below the subtitle is a text input field labeled "Email*" and a green button labeled "Send me instructions!". The form is part of a page with a dark header containing the text "Newspaper" and a "+ New" link.

Now we can update the other three pages. Each takes the same form of extending `base.html`, a new title, new content text, and for `password_reset_confirm.html` an updated form as well.

In VS Code create a file `password_reset_done.html` in the **registration** directory and update it with the following code:

```
{% extends 'base.html' %}

{% block title %}Email Sent{% endblock title %}

{% block content %}

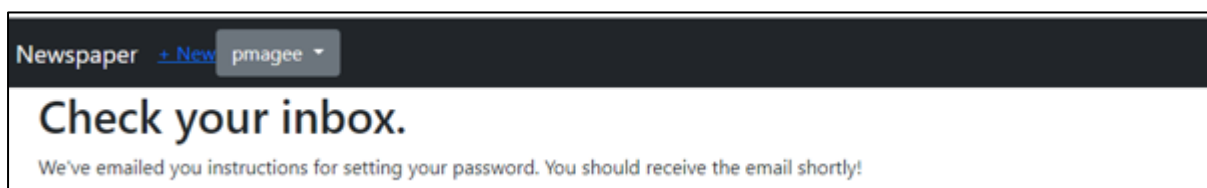
    <h1>Check your inbox.</h1>

    <p>We've emailed you instructions for setting your password.

    You should receive the email shortly!</p>

{% endblock content %}
```

When you click the “Send me instructions” button you should see the following screen:



The screenshot shows a web page titled "Check your inbox." with a subtitle "We've emailed you instructions for setting your password. You should receive the email shortly!". The page is part of a page with a dark header containing the text "Newspaper", a "+ New" link, and a "pmagee" dropdown menu.

In VS Code create a file **password_reset_confirm.html** in the **registration** directory and update it with the following code:

```
{% extends 'base.html' %}

{% load crispy_forms_tags %}

{% block title %}Enter new password{% endblock title %}

{% block content %}

<h1>Set a new password!</h1>

<form method="POST">

    {% csrf_token %}

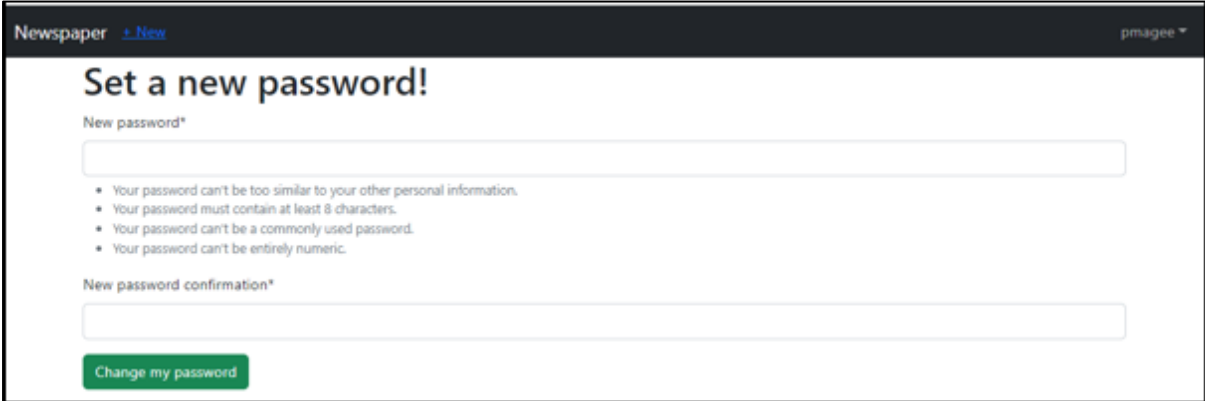
    {{ form|crispy }}

    <input class="btn btn-success" type="submit" value="Change my password">

</form>

{% endblock content %}
```

In the command line grab the URL link from the email outputted to the console and paste it into the address bar of the browser and you will see the following.



Newspaper [New](#) pmagee

Set a new password!

New password*

- Your password can't be too similar to your other personal information.
- Your password must contain at least 8 characters.
- Your password can't be a commonly used password.
- Your password can't be entirely numeric.

New password confirmation*

[Change my password](#)

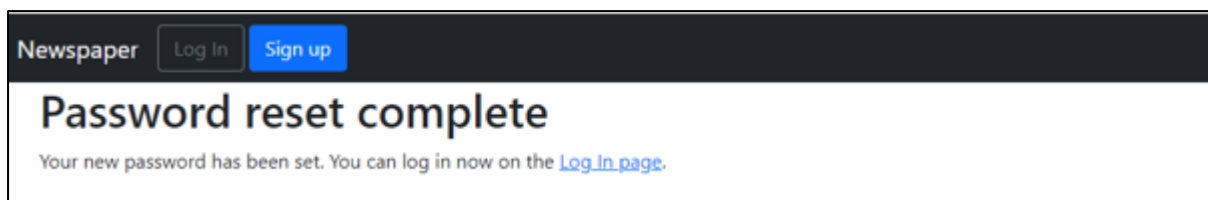
In VS Code create a file **password_reset_complete.html** in the **registration** directory and update it with the following code:

```
{% extends 'base.html' %}

{% block title %}Password reset complete{% endblock title %}

{% block content %}
<h1>Password reset complete</h1>
<p>Your new password has been set. You can log in now on the
<a href="{% url 'login' %}">Log In page</a>.</p>
{% endblock content %}
```

You can view it at <http://127.0.0.1:8080/accounts/reset/done/>.



Run the following git commands to update the local and remote repositories:

git add -A

git commit -m "lab 6 part 6"

git push -u origin main