



Exercise 29: Getting a SendGrid Account

⌚ 45 to 60 minutes

SendGrid is an email service that provides a simple-to-use API for sending emails.

❖ E29.1. Getting Ready

You're about to sign up for a SendGrid account and get an API key. On production you will store that API key in an environment variable. You could do the same thing on development, but we're going to take a different approach. You will create a `local_settings.py` file to hold settings specific to development.

1. Open `djangojokes.com/djangojokes/settings.py`.
2. At the top of the file, above the line importing `Path`, import `os`:

```
import os
from pathlib import Path
```

3. At the very bottom of the file, add this:

```
# BOTTOM OF settings.py
if os.environ.get('ENVIRONMENT') != 'production':
    from .local_settings import *
# DON'T PUT ANYTHING BELOW THIS
```

4. Create a new file called `local_settings.py` in `djangojokes`. This file will host settings that you only want to use on development. You will not put this file on your production server.
5. Add the following line to `local_settings.py`:

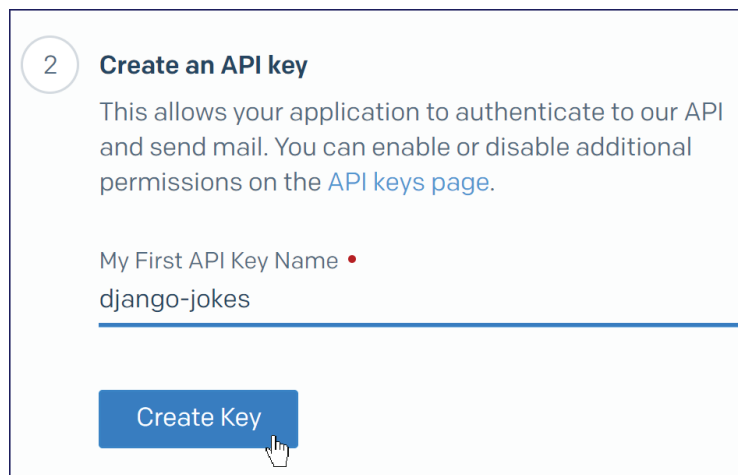
Exercise Code 29.1: `djangojokes/local_settings.py`

```
1. SENDGRID_API_KEY = 'sendgridapikey'
```

You will soon paste a real SendGrid API key over `sendgridapikey`.

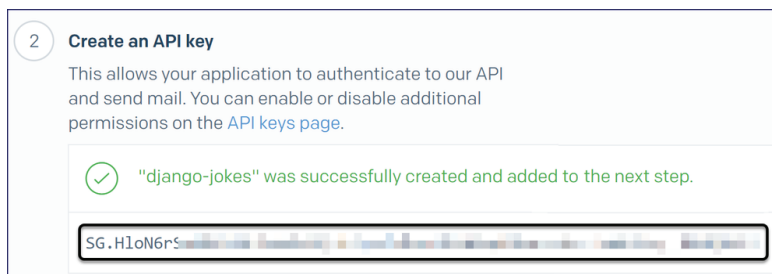
❖ E29.2. Getting the API Key

1. Go to <https://signup.sendgrid.com/> and register for an account.
2. After registering, go to <https://app.sendgrid.com/guide/integrate/langs/python>. This is SendGrid's Python Web API integration guide.
3. Skip to step 2 of the integration guide. This is the only step you need to do. Enter a name for your API key. This can be any name you want. You will not use the name in your code. Then, click **Create Key**:



A screenshot of the 'Create an API key' form in SendGrid. The form is titled '2 Create an API key'. Below the title, it says 'This allows your application to authenticate to our API and send mail. You can enable or disable additional permissions on the [API keys page](#).' There is a text input field labeled 'My First API Key Name' with a red dot indicating a required field. The input field contains the text 'django-jokes'. Below the input field is a blue button labeled 'Create Key' with a hand cursor icon pointing at it.

4. Copy the generated API key:



A screenshot of the 'Create an API key' form in SendGrid, showing the success message and the generated API key. The form is titled '2 Create an API key'. Below the title, it says 'This allows your application to authenticate to our API and send mail. You can enable or disable additional permissions on the [API keys page](#).' There is a green checkmark icon and a green message that says '"django-jokes" was successfully created and added to the next step.' Below the message is a text input field containing the generated API key: 'SG.H1oN6r5...'. The input field is highlighted with a black border.

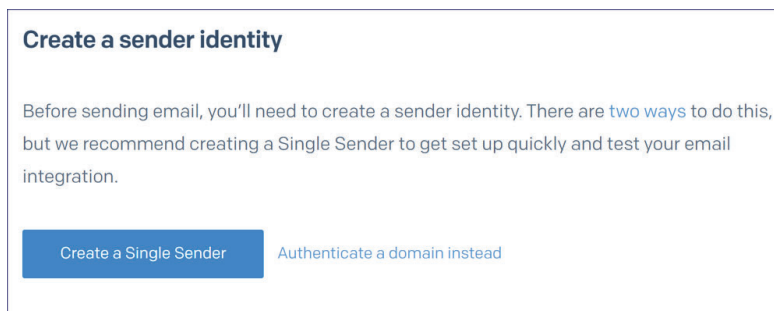
5. Paste the key in `local_settings.py` as the value for `SENDGRID_API_KEY`. This will look something like:

```
SENDGRID_API_KEY = 'SG.H1oN6rASKCjX6yDkk1GyQ...'
```

❖ E29.3. Create Sender Identity

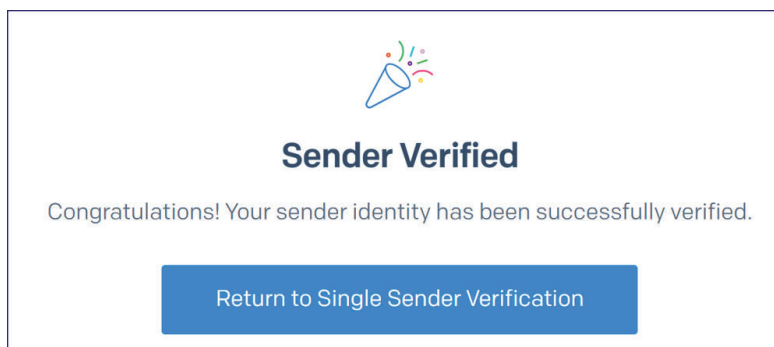
You will now need to create a sender identity.

1. Go to <https://app.sendgrid.com/guide>.
2. You should see a **Create a Single Sender** button:



Click the button.

3. Fill out the form to create your sender identity. If you use a free email address (like gmail.com), you may get a warning telling you that using a free email address domain is not recommended. For our purposes, it is fine, as you are just learning to use SendGrid, but if you are going to use it in practice, you are better off emailing from a custom domain as transactional emails from free domains are often filtered as spam.
4. Check your email. You should receive an email asking you to verify the email you used. Click the button to verify the email address. This should take you to a **Sender Verified** page:



❖ E29.4. Install SendGrid

Install SendGrid with pip:

```
(.venv) ~/projects/djangojokes.com> pip install sendgrid
```

❖ E29.5. Try It Out

1. With `djangojokes.com` open in the terminal, run the following to open the shell:

```
(.venv) ~/projects/djangojokes.com> python manage.py shell
```

2. Import `sendgrid`, its `To` and `Mail` helpers, and `settings`:

```
>>> import sendgrid
>>> from sendgrid.helpers.mail import To, Mail
>>> from django.conf import settings
```

3. Create your variables. Replace both instances of `'you@example.com'` with the email you verified with SendGrid:

```
>>> from_email = 'you@example.com'
>>> to_emails = 'you@example.com'
>>> subject = 'SendGrid Test'
>>> html_content = '<h1>Hello, from SendGrid!</h1>'
```

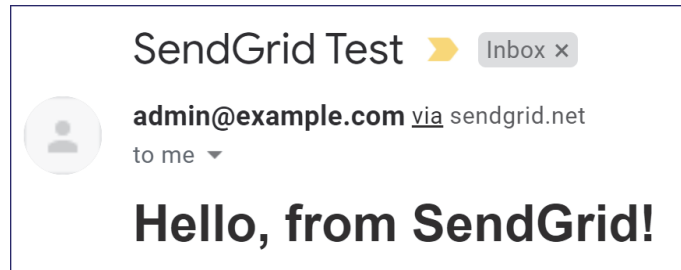
4. Prepare and send the email:

```
>>> mail = Mail(
...     from_email=from_email,
...     to_emails=to_emails,
...     subject=subject,
...     html_content=html_content
... )
>>> sg = sendgrid.SendGridAPIClient(settings.SENDGRID_API_KEY)
>>> sg.send(mail)
```

You should get a response similar to this:

```
<python_http_client.client.Response object at 0x012A51A8>
```

5. Check your email. You should receive an email similar to this one:



Git Commit

Commit your code to Git.