

THE CHALLENGE

Build an online service for generating CSV files with fake (dummy) data using Python and Django:

- Any user can log in to the system with a username and password. You can use generic views provided by Django to implement these features. Registering new users via the admin interface is enough. Note, that you do **not** need to implement a user profile interface to support password change or similar functionality.
- Any logged-in user can create any number of data schemas to create datasets with fake data.
- Each such data schema has a name and a list of columns with names and specified data types.
- You need to implement different types of data (at least 5 different types):
 - Full name (a combination of first name and last name)
 - Job
 - Email
 - Domain name
 - Phone number
 - Company name
 - Text (with a specified range for a number of sentences)
 - Integer (with specified range)
 - Address
 - Date
- Users can build the data schema with any number of columns of any type described above. Some types support extra arguments (like a range), while others do not.
- Each column also has its own name (which will be a column header in the CSV file) and order (just a number to manage column order).
- After creating the schema, the user should be able to input the number of records he/she needs to generate and press the "Generate data" button.
- After pressing the button, the frontend should send an AJAX request to the server to generate the data. When the CSV file of the specified structure is ready, the file can be saved to the "media" directory.
- The interface should show a colored label of generation status for each dataset (processing/ready).
- Add a "Download" button for datasets available for download.
- The completed application should be deployed to PythonAnywhere (<https://www.pythonanywhere.com/>) and be available online. Please, create a test user and provide us with the credentials.
- The source code should be committed to the repository on GitHub, Bitbucket, or GitLab. Please, send us the link to the repo as well.

TECHNOLOGY STACK

- Python 3
- Django
- Bootstrap, Bulma, UIKit, or any other similar framework for UI

Use PEP8 for your Python code.

NOTE: Due to the free PythonAnywhere hosting limitation, you cannot use Celery or Redis. Please, use regular Django view (with AJAX request) for generating the CSV file.

MOCKUP

The page structure can be seen here:

<https://www.figma.com/file/GLah5wCMHlyw7hJl4Gekns/CSV-fake-data-generator?node-id=24278%3A2>