

How to

Create
CSV File
In Django
Framework



Intro

In this particular post, we are going to create csv files of the models data, and to store to database.



Let's define models

In first step we will create a Student models to store the students data and StudentCSV model to store the csv students data

```
from django.db import models

class Student(models.Model):
    name = models.CharField(max_length=100)
    email = models.EmailField(max_length=200)
```

```
class StudentCSV(models.Model):
    csv = models.FileField(upload_to="student/csv")
```

Create models

Hit these commands to successfully
create database models

```
python manage.py makemigrations
```

```
python manage.py migrate
```

Just go to admin panel and populate
or add few data on student model

Write CSV logic

Next, just create a **helpers.py** file in app folder,

and here we are going to write the logic to generate a csv file.

```
import csv
from io import StringIO
from django.core.files.base import ContentFile ← import required files
from .models import StudentCSV, Student ←

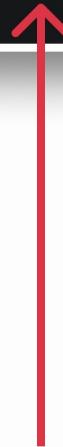
def generate_csv( ): ← create a function
    header_row = [
        "#",
        "name", ← define the header rows
        "email",
    ]
    file_name = "student.csv" ← set the file name
    with StringIO() as csv_buffer: ← Create a CSV buffer
        csv_writer = csv.writer(csv_buffer) ←
        csv_writer.writerow(header_row) ← write header row to the CSV file
        Students = Student.objects.all() ← retrieve students data
        for stu in Students:
            csv_writer.writerow(
                [
                    stu.id,
                    stu.name, ←
                    stu.email,
                ]
            )
    csv_file = ContentFile( ← create content file from the CSV data
        csv_buffer.getvalue().encode("utf-8"))
    student_csv = StudentCSV.objects.create() ←
    student_csv.csv.save(file_name, csv_file) ← here we save the csv file to StudentCSV model
```

Use Signals

Let's create a signal that will call this generate_csv() function when new student instance create

```
from django.db.models.signals import post_save
from django.dispatch import receiver
from .models import Student
from .helpers import generate_csv

@receiver(post_save, sender=Student)
def generate_csv_data_on_save(sender, instance, created, **kwargs):
    if created:
        generate_csv()
```



here will call generate_csv(), same thing you can do delete signal, and for update you can simply call this function after you update the object

Add the media settings

just configure the media settings

```
# settings.py

MEDIA_URL = "media/"
MEDIA_ROOT = BASE_DIR / "media"

# urls.py
from django.contrib import admin
from django.urls import path
from django.conf import settings
from django.conf.urls.static import static

urlpatterns = [
    path("admin/", admin.site.urls),
] + static(settings.MEDIA_URL, document_root=settings.MEDIA_ROOT)
```

csv file store in media folder

- ▼ media/student/csv
 - █ student_h5pouBX.csv
 - █ student_PREBi4e.csv
 - █ student_yHqkZUb.csv
 - █ student.csv

Conclusion

That's it, this how we can generate a csv file in django framework, instead of storing the files locally we can use django storage package to store the data in s3 bucket, azure blob.

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