

To create a new app for generating PDFs and CSVs in your Django project, follow these steps:

1. **Create the App:** In the VS Code Terminal with your virtual environment activated, run:

```
python manage.py startapp generate
```

2. **Modify `views.py`:** Add the following code to `generate/views.py`:

```
python

from course_registration.models import Student
from django.http import HttpResponse
import csv
from io import BytesIO
from reportlab.lib.pagesizes import letter
from reportlab.pdfgen import canvas

def generate_csv(request):
    students = Student.objects.all()
    response = HttpResponse(content_type='text/csv')
    response['Content-Disposition'] = 'attachment;
filename="students.csv"'
    writer = csv.writer(response)
    writer.writerow(['ID', 'Name', 'Date of Birth', 'Email'])
    for student in students:
        writer.writerow([student.id, student.name,
student.date_of_birth, student.email])
    return response

def generate_pdf(request):
    students = Student.objects.all()
    buffer = BytesIO()
    p = canvas.Canvas(buffer, pagesize=letter)
    p.setFont("Helvetica-Bold", 16)
    p.drawString(100, 750, "Student List")
    y = 700
    for student in students:
        p.setFont("Helvetica", 12)
        p.drawString(100, y, f"ID: {student.id}, Name: {student.name},
DoB: {student.date_of_birth}, Email: {student.email}")
        y -= 20
    p.showPage()
    p.save()
    buffer.seek(0)
    response = HttpResponse(buffer.getvalue(),
content_type='application/pdf')
    response['Content-Disposition'] = 'attachment;
filename="students.pdf"'
    return response
```

3. **Update `urls.py`:** Create or modify `generate/urls.py`:

```
python

from django.urls import path
from . import views

urlpatterns = [
    path('generate_csv/', views.generate_csv, name='generate_csv'),
    path('generate_pdf/', views.generate_pdf, name='generate_pdf'),
]
```

4. **Update the Main `urls.py`:** Modify `myproject/urls.py` to include the new app's URLs:

```
python

from django.contrib import admin
from django.urls import path, include

urlpatterns = [
    path("admin/", admin.site.urls),
    path('', include('website_pages.urls')),
    path('fruits_and_students/', include('fruits_and_students.urls')),
    path('registration/', include('course_registration.urls')),
    path('', include('generate.urls')),
]
```

5. **Update `settings.py`:** Add `generate` to the `INSTALLED_APPS` list in `myproject/settings.py`:

```
python

INSTALLED_APPS = [
    # Other installed apps
    'generate',
]
```

6. **Save all modified files.**
7. **Run the Development Server:** In the VS Code Terminal, with the virtual environment activated, run:

```
python manage.py runserver
```

8. **Check the new URLs:** Open a browser and navigate to:
 - http://127.0.0.1:8000/generate_pdf
 - http://127.0.0.1:8000/generate_csv

This will allow you to download the student data as PDF and CSV files.