

Static Files

CSS files, Javascript Files, image files, video files etc are considered as static files in Django.

Django provides `django.contrib.staticfiles` to help you manage them.

`django.contrib.staticfiles` collects static files from each of your applications (and any other places you specify) into a single location that can easily be served in production.

How to Create Static Folder and Files

We create **static** folder inside Root Project Folder then inside **static** folder we create required folders which will contain all static files respectively like css folder will contain all css files, image folder will contain all images and so on.

geekyshows

static

css

style.css

custom.css

images

love.jpg

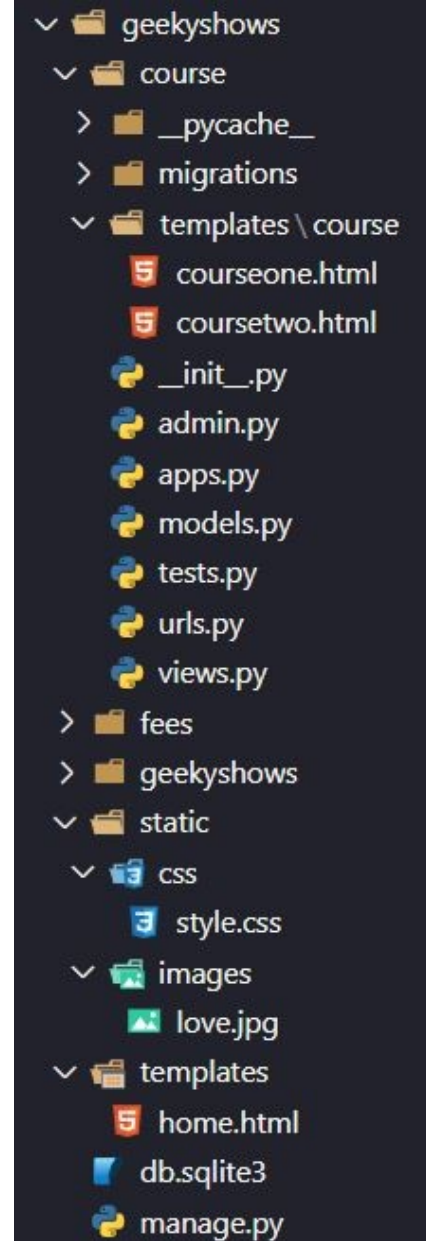
pic1.jpg

templates

geekyshows

manage.py

course



Add Static in settings.py

settings.py

Old Django Version 3.0

```
TEMPLATES_DIR = os.path.join(BASE_DIR, 'templates')  
STATIC_DIR = os.path.join(BASE_DIR, 'static')
```

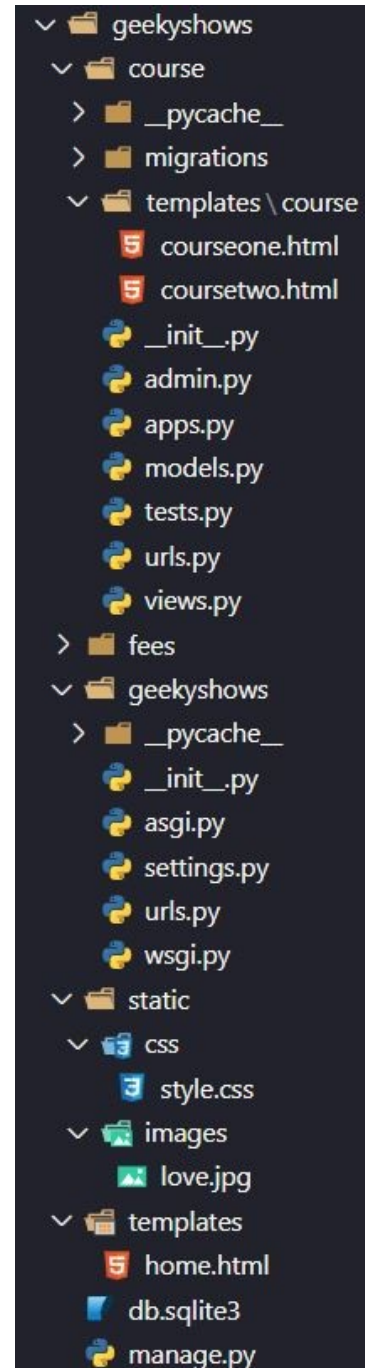
```
TEMPLATES_DIR = BASE_DIR / 'templates'  
STATIC_DIR = BASE_DIR / 'static'
```

} Django Version 3.1

```
INSTALLED_APPS = [  
    'course'  
]
```

```
TEMPLATES = [  
    {  
        'DIRS': [TEMPLATES_DIR]  
    }  
]
```

```
STATIC_URL = '/static/'  
STATICFILES_DIRS = [ STATIC_DIR ]
```



Use Static Files in Template Files

- First Load Static Files
- Reference Static Files

templates/course

courseone.html

```
<!DOCTYPE html>
```

```
{% load static %}           // Loading Static Files
```

```
<html>
```

```
    <link href='{% static "css/style.css" %}'>
```

```
    <body>
```

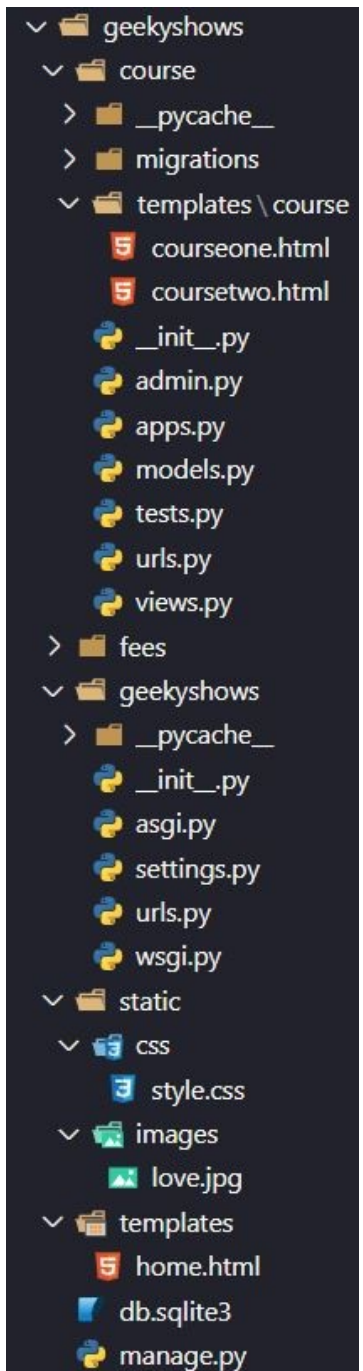
```
        <h1>Fees {{fe}} </h1>
```

```
        <img src='{% static "images/love.jpg" %}'>
```

```
    </body>
```

```
</html>
```

Referencing static files



load Template Tag

`{% load module_name %}` – It loads a custom template tag set.

Example:- `{% load emotags %}`

Example:- `{% load geek.mytags %}`

Example:- `{% load emotags geek.mytags %}`

Template would load all the tags and filters registered in emotags and mytags located in package geek.

You can also selectively load individual filters or tags from a library or module, using the from argument.

Example - `{% load cry lol from emotags %}`

The template tags/filters named cry and lol will be loaded from emotags.

static Template Tag

{% static filename %} – This tag is used to link to static files that are saved in STATIC_ROOT. If the django.contrib.staticfiles app is installed, the tag will serve files using url() method of the storage specified by STATICFILES_STORAGE.

Syntax:-

{% load static %}

{% static filename %}

{% static path/filename %}

{% static path/filename as variable %}

Example:-

```
<link rel="stylesheet" href="{% static 'style.css' %}" >
```

```
<link rel="stylesheet" href="{% static 'css/style.css' %}" >
```

```

```

```
{% static "images/love.jpg" as mylove %}
```

```

```

get_static_prefix Template Tag

`{% get_static_prefix %}` - We should prefer the static template tag, but if you need more control over exactly where and how `STATIC_URL` is injected into the template, you can use the `get_static_prefix` template tag.

Example:-

```
{% load static %}  

```

There's also a second form you can use to avoid extra processing if you need the value multiple times.

```
{% load static %}  
{% get_static_prefix as STATIC_PREFIX %}  
  

```

STATIC_URL – This is the URL to use when referring to static file located in `STATIC_ROOT`. It must end in a slash if set to a non-empty value.

Example:- “/static/”

Example:- “http://static.example.com/”

STATIC_ROOT – This is absolute path to the directory where *collectstatic* will collect static files for deployment. It is by default None.

Example:- “/var/www/example.com/static/”

Example:- `os.path.join(BASE_DIR, 'static/')`

STATICFILES_DIRS - This setting defines the additional locations the *staticfiles* app will traverse if the *FileSystemFinder* finder is enabled, e.g. if you use the *collectstatic* or *findstatic* management command or use the static file serving view. It is by default an empty list.

```
STATICFILES_DIRS = [  
    "/home/special.geek.com/geek/static",  
    "/home/geek.com/geek/static",  
    "/opt/webfiles/common",  
]
```

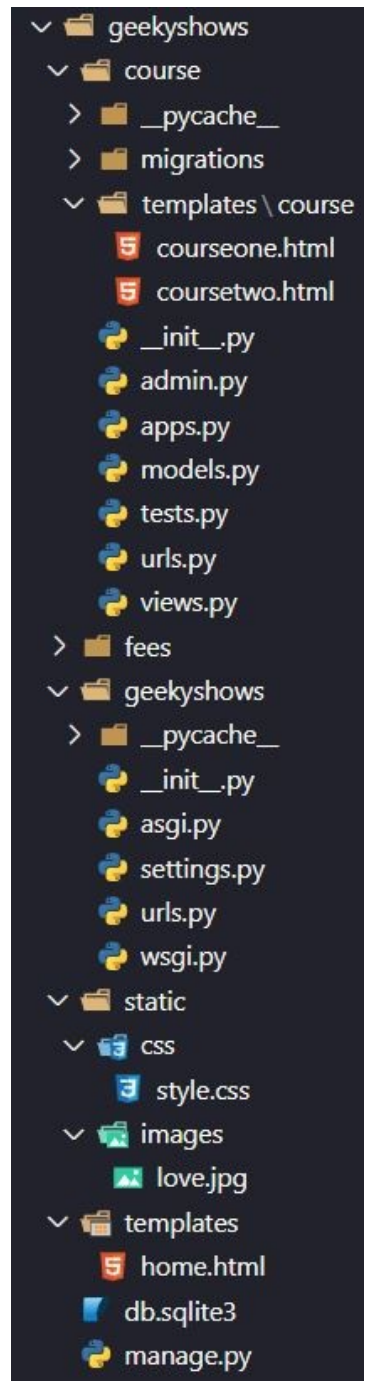

STATICFILES_STORAGE - The file storage engine to use when collecting static files with the `collectstatic` management command.

Default: *'django.contrib.staticfiles.storage.StaticFilesStorage'*

A ready-to-use instance of the storage backend defined in this setting can be found at *django.contrib.staticfiles.storage.staticfiles_storage*

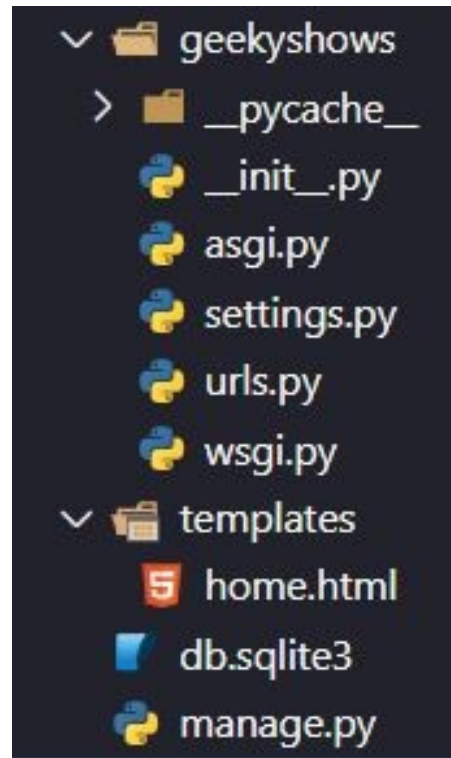
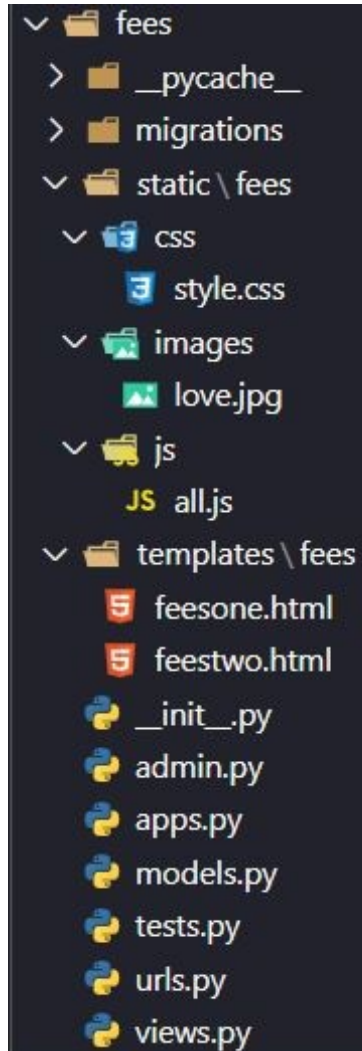
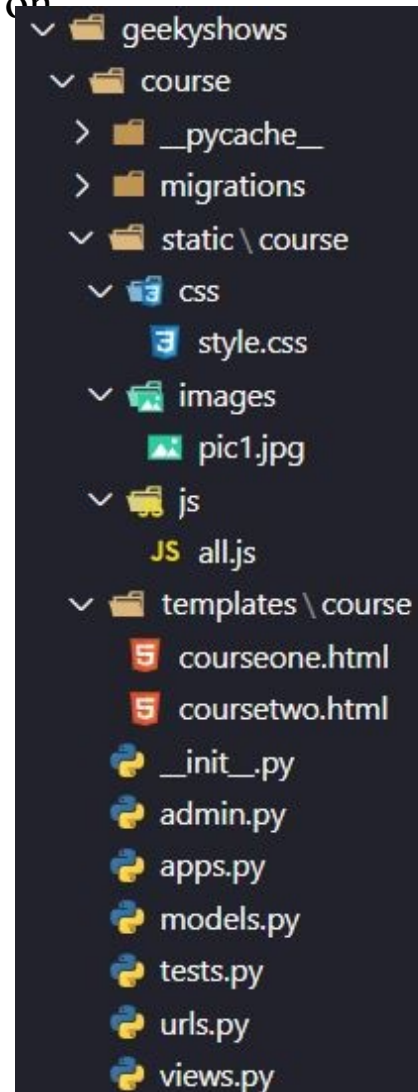
Geeky Steps

- Create Django Project: *django-admin startproject geekyshows*
- Create Django Application1: *python manage.py startapp course*
- Create Django Application2: *python manage.py startapp fees*
- Add/Install Applications to Django Project (course and fees to geekyshows) using settings.py INSTALLED_APPS
- Create **templates** folder inside each application and inside Root Project Folder
- Check 'APP_DIRS' : True in settings.py
- Add **templates** directory which is inside Root Project Folder, in settings.py
- Create **folder** inside **app/templates** directory for template files
- Create template files inside **app/templates/folder**
- Create template files inside templates folder which is inside Root Project Folder
- Create **static** folder inside Root Project Folder
- Create css, js, images, video etc folder inside **static** folder
- Create static files inside css, js, images, video etc folder.
- Write View Function inside views.py file
- Define url for view function of application using urls.py file
- Write Template files code
- Write Static file code



How to Create Static Folder and Files inside Application

We create **static** folder inside Application Folder then inside **static** folder we create required folders which will contain all static files respectively like css folder will contain all css files, image folder will contain all images and so on



Add Static in settings.py

settings.py

Old Django Version 3.0

```
TEMPLATES_DIR = os.path.join(BASE_DIR, 'templates')
```

```
STATIC_DIR = os.path.join(BASE_DIR, 'static')
```

```
TEMPLATES_DIR = BASE_DIR / 'templates'
```

```
STATIC_DIR = BASE_DIR / 'static'
```

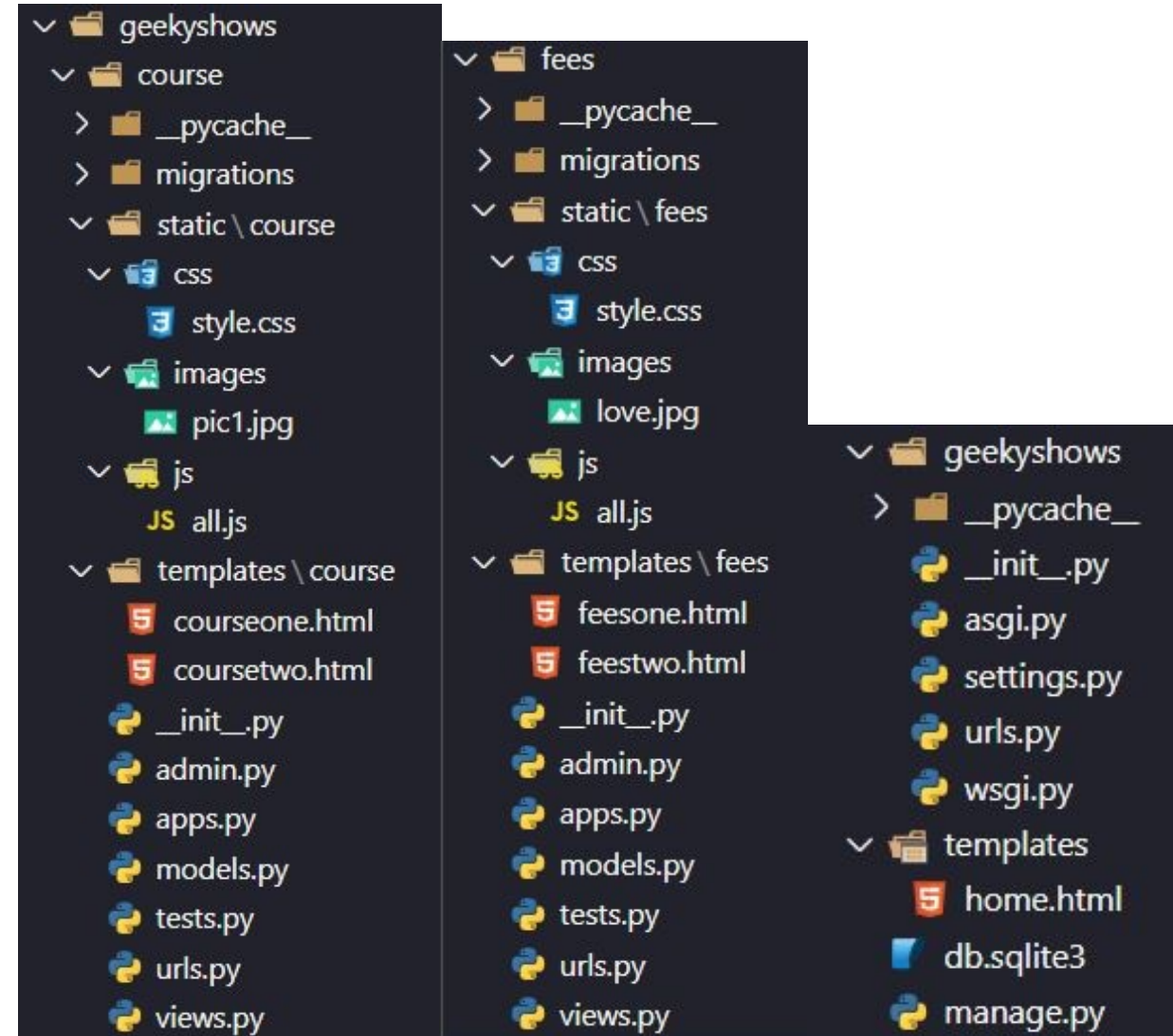
```
INSTALLED_APPS = [  
    'course'  
]
```

```
TEMPLATES = [  
    {  
        'DIRS': [TEMPLATES_DIR]  
    }  
]
```

```
STATIC_URL = '/static/'
```

```
STATICFILES_DIRS = [ STATIC_DIR ]
```

Django Version 3.1



Use Static Files in Template Files

- First Load Static Files
- Reference Static Files

templates/course

courseone.html

```
<!DOCTYPE html>
```

```
{%load static %}           // Loading Static Files
```

```
<html>
```

```
<link href='{%static "course/css/style.css"'>
```

```
<body>
```

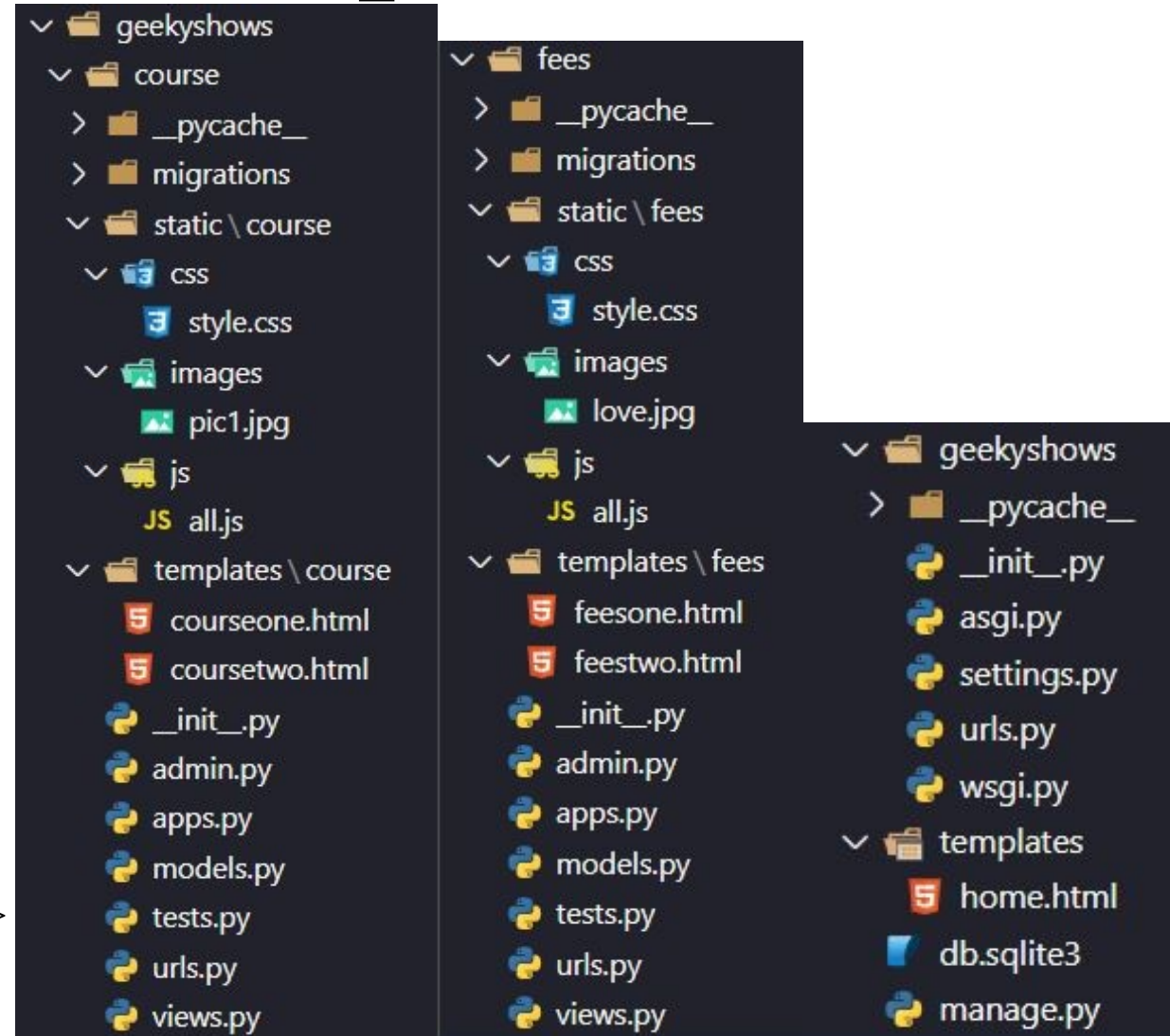
```
<h1>Fees {{fe}} </h1>
```

```
<img src='{%static "course/images/pic1.jpg"'>
```

```
</body>
```

```
</html>
```

Referencing
static files



How to Create Static Folder and Files inside Project & Application

```

✓ geekyshows
  ✓ course
    > __pycache__
    > migrations
  ✓ static \ course
    ✓ css
      style.css
    ✓ images
      pic1.jpg
    ✓ js
      JS all.js
  ✓ templates \ course
    courseone.html
    coursetwo.html
    __init__.py
    admin.py
    apps.py
    models.py
    tests.py
    urls.py
    views.py

```

```

✓ fees
  > __pycache__
  > migrations
  ✓ static \ fees
    ✓ css
      style.css
    ✓ images
      love.jpg
    ✓ js
      JS all.js
  ✓ templates \ fees
    feesone.html
    feestwo.html
    __init__.py
    admin.py
    apps.py
    models.py
    tests.py
    urls.py
    views.py

```

```

✓ geekyshows
  > __pycache__
  __init__.py
  asgi.py
  settings.py
  urls.py
  wsgi.py
  ✓ static
    ✓ css
      some.css
    ✓ images
      some.jpg
    ✓ js
      JS some.js
  ✓ templates
    home.html
    db.sqlite3
    manage.py

```

Add Static in settings.py

settings.py

Old Django Version 3.0

```
TEMPLATES_DIR = os.path.join(BASE_DIR, 'templates')
```

```
STATIC_DIR = os.path.join(BASE_DIR, 'static')
```

```
TEMPLATES_DIR = BASE_DIR / 'templates'
```

```
STATIC_DIR = BASE_DIR / 'static'
```

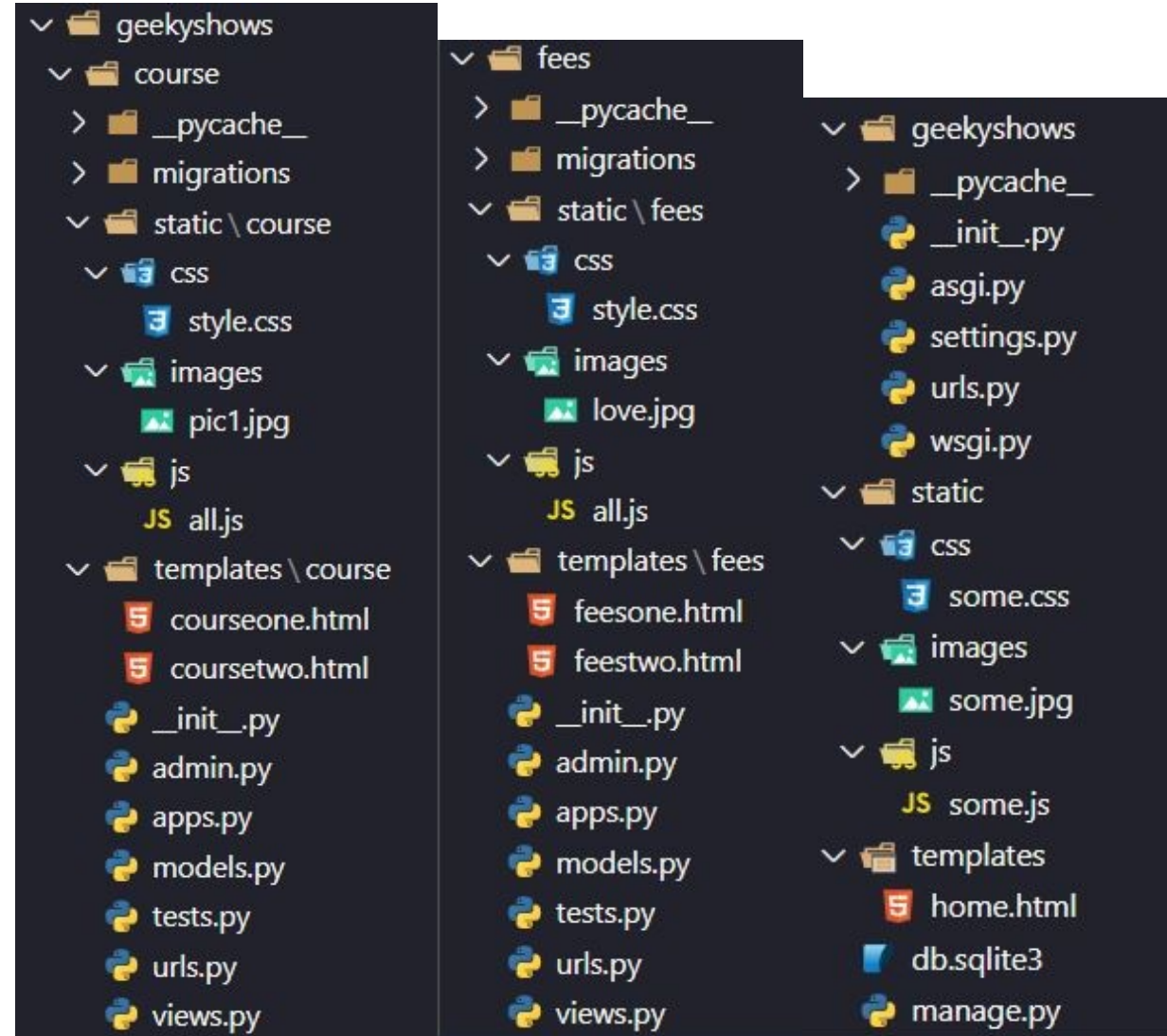
```
INSTALLED_APPS = [  
    'course'  
]
```

```
TEMPLATES = [  
    {  
        'DIRS': [TEMPLATES_DIR]  
    }  
]
```

```
STATIC_URL = '/static/'
```

```
STATICFILES_DIRS = [ STATIC_DIR ]
```

Django Version 3.1



Use Static Files in Template Files

- First Load Static Files
- Reference Static Files

```
<!DOCTYPE html>
```

```
{%load static %}           // Loading Static Files
```

```
<html>
```

```
<link href='{%static "css/some.css" %}'>
```

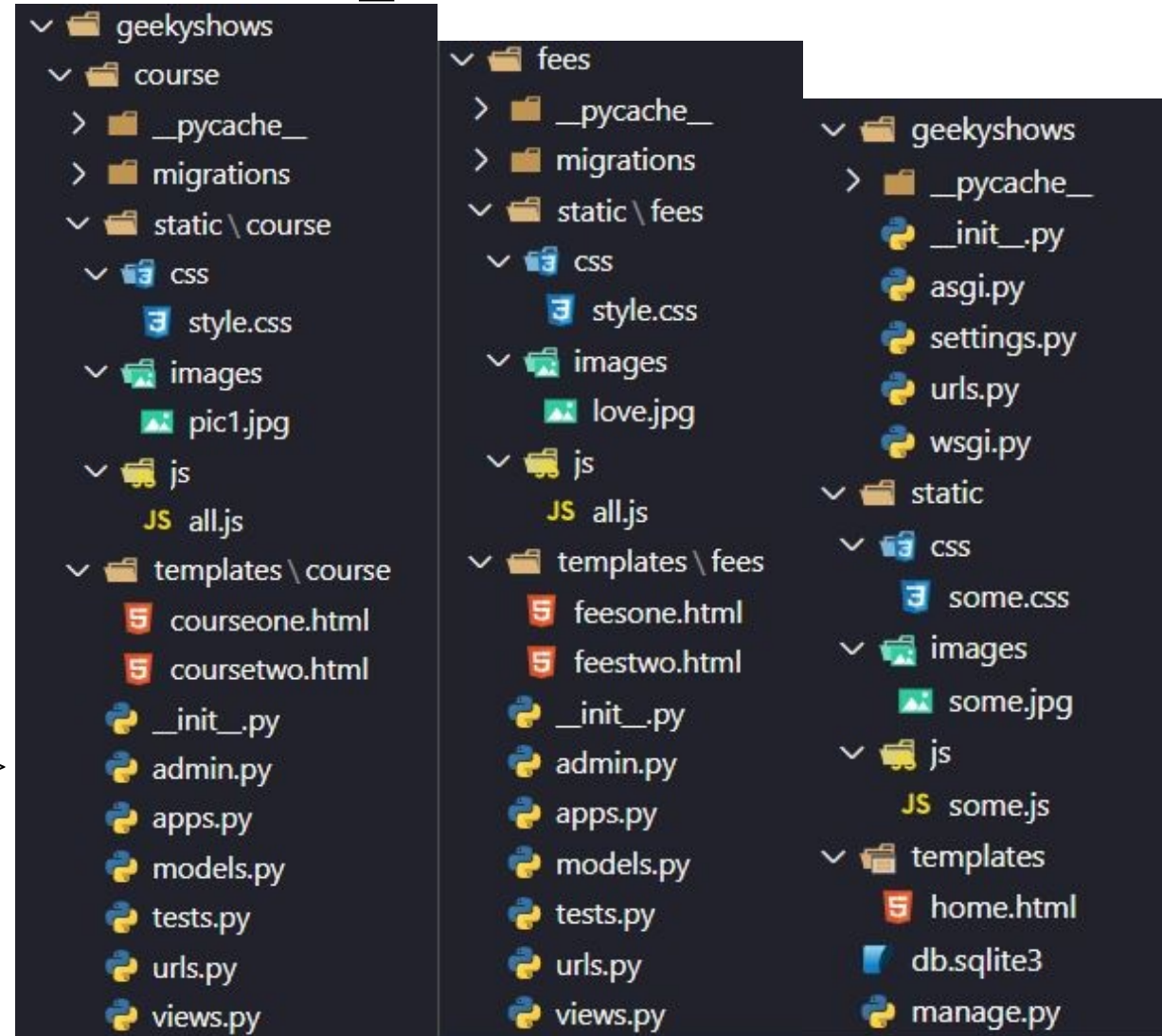
```
<body>
```

```
<h1>Fees {{fe}} </h1>
```

```
<img src='{%static "course/images/pic1.jpg" %}'>
```

```
</body>
```

```
</html>
```



static Template Tag

get_media_prefix - Similar to the get_static_prefix, get_media_prefix populates a template variable with the media prefix MEDIA_URL, e.g.:

```
{% load static %}
```

```
<body data-media-url="{% get_media_prefix %}">
```

By storing the value in a data attribute, we ensure it's escaped appropriately if we want to use it in a JavaScript context.