

django

STATIC FILES
HOSSEIN FORGHANI
MAKTAB SHARIF

Contents

- ► How to serve static files in Django
- ► How to serve uploaded files
- ▶ How to serve static files in production mode

Static Files

- ▶ We need to serve additional files such as images, JavaScript, or CSS
- We refer to these files as static files
- in bigger projects, dealing with the multiple sets of static files provided by each application starts to get tricky
- 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

App Static Folder

- Make sure that django.contrib.staticfiles is included in your INSTALLED_APPS
- Create a directory called static in your app directory
- Similar to templates directory
- Check the app is in INSTALLED_APPS
- In development mode, Django will serve static files automatically

```
myproject
    myapp
        templates
           myapp
               index.html
        static
           myapp
               CSS
               ima
        admin.py
        apps.py
        models.py
        urls.py
        views.py
```

CSS Example

```
polls/static/polls/style.css
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  generates the absolute
                                                                                                                                                                                                                                                                                     li a {
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             URL of static files
                                                                                                                                                                                                                                                                                                                          color: green;
                                                                                                                                                polls/templates/polls/index.html
Load static
at top of
                                                                                                                                                  {% load static %}
your
template
                                                                                                                                                k rel="stylesheet" type="text/css" href="{% static | stati
                                                                                                                                                  'polls/style.css' %}">
```

Adding a background-image

put your image in polls/static/polls/images/background.gif

```
polls/static/polls/style.css

body {
    background: white url("images/background.gif") no-
repeat;
}
```

static template tag is not available for use in static files

STATICFILES_DIRS

- For static assets that aren't tied to a particular app:
- In addition to using app static directories, you can define a list of directories (STATICFILES_DIRS) in your settings file
- By default, Django first looks at STATICFILES_DIRS then app static folders
- ▶ If multiple files with the same name are present, the first file that is found will be used

```
STATICFILES_DIRS = [
    BASE_DIR / "static",
    '/var/www/static/',
]
```

Uploaded Files (at Debug Mode)

- ▶ Define MEDIA_URL = '/media/' for example
- Define MEDIA_ROOT = BASE_DIR / 'media' for example
- Then add this to your urls.py:

```
from django.conf import settings
from django.conf.urls.static import static

urlpatterns = [
    # ... the rest of your URLconf goes here ...
] + static(settings.MEDIA_URL, document_root=settings.MEDIA_ROOT)
```

Production Mode

- All recently presented methods are suitable just during development (debug) mode
- But inefficient and probably insecure for production mode
- ► For production:
 - Set the STATIC_ROOT setting to the directory from which you'd like to serve these files
 - 2. Run the collectstatic management command to copy all files from your static folders into the STATIC_ROOT directory
 - 3. Use a web server of your choice to serve the files

Production Mode – cont.

- ▶ Step 1: STATIC_ROOT = "/var/www/example.com/static/"
- ▶ Step 2: \$ python manage.py collectstatic
- ► Step 3:
 - https://docs.djangoproject.com/en/3.1/howto/deployment/wsgi/modwsgi/#serving-files

References

- https://docs.djangoproject.com/en/3.1/intro/tutorial06/
- https://docs.djangoproject.com/en/3.1/howto/static-files/
- https://docs.djangoproject.com/en/3.1/howto/static-files/deployment/

Any Question?