



College of Engineering, Construction and Living Sciences

Bachelor of Information Technology

IN608: Intermediate Application Development Concepts

Level 6, Credits 15

## Practical 10 Django 4: Template Inheritance, Static Files & CDNs

**Due Date:** 31/08/2021 at 5pm

In this practical, you will complete a series of tasks covering today's lecture. This practical is worth 2% of the final mark for the IN608: Intermediate Application Development Concepts course.

Before you start, in your practicals repository, create a new branch called **10-practical**.

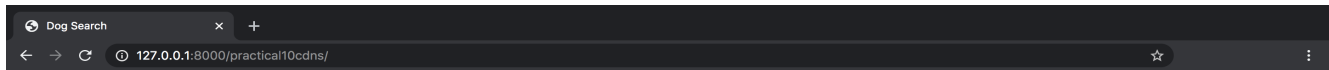
### Task

Create a Django project called `dog`. `cd` to `dog`, create a virtual environment & install Django. Create an app called `practical10cdns`. Please ensure you configure your app in `dog/settings.py` & `dog/urls.py`. In the `practical10cdns` directory, copy & paste `practical09dogsearch/models.py`, `practical09dogsearch/views.py`, `practical09dogsearch/urls.py` & `templates/practical09dogsearch` from the last practical. Please ensure you change all `practical09dogsearch` references to `practical10cdns`. In `practical10cdns`, create a directory called `static` & a sub-directory called `practical10cdns`. `static/practical10cdns` directory is where all your static files, i.e., CSS, JavaScript, images, etc are stored.

In `practical10cdns/models.py`, add a new field called `image`. `image` is an `ImageField` type. Please ensure you apply migrations by running the appropriate commands. In `fixtures`, update `dogs.json` to include an `image` key with an `image` value, i.e., `afghan-hound.jpg`. Images of dogs have been provided to you in the `10-django-4-template-inheritance-static-files-cdns/img` directory. Copy & paste the `img` directory into `static/practical10cdns`. In order to use the `ImageField`, the `Pillow` Python module must be installed. Run the command `pipenv install Pillow` to install the `Pillow` Python module. Also, `MEDIA_URL = '/img/'` must be declared in `settings.py`. This is the URL used for managing stored files, i.e., images.

In `templates/practical10cdns`, create an HTML file called `base.html`. This is the file which `index.html` & `results.html` will extend from. Include the `BootstrapCDN` link tag & three `script` tags. Style your `index.html` & `results.html` as you wish using `Bootstrap`.

Run the command `python manage.py runserver` then navigate to <http://127.0.0.1:8000/practical10cdns/>



## Dog Search

We'll help you choose the perfect dog...

Preferences

**Adaptability:**

☐ Low

☐ Medium

☐ High

**Friendliness:**

☐ Low

☐ Medium

☐ High

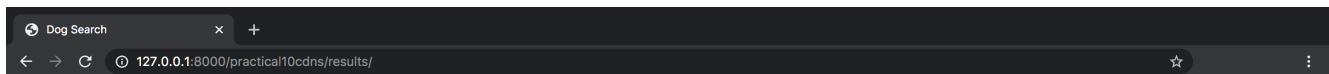
**Other Preferences:**

	Low	Medium	High
Grooming Needs	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Trainability	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

**Physical Needs:**

--- Please Select ---

[Find My Dog!](#)



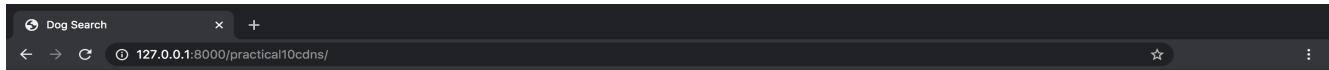
## Dog Search

Click on the image for more information.

2 dogs matched your search.

Breed	Adaptability	Friendliness	Grooming Needs	Trainability	Physical Needs
Afghand Hound	High	High	Low	Medium	High
American Pugabull	Medium	High	Medium	Medium	High

Click [here](#) to try another match.



## Dog Search

We'll help you choose the perfect dog...

Preferences

**Adaptability:**

☐ Low

☐ Medium

☐ High

**Friendliness:**

☐ Low

☒ Medium

☐ High

**Other Preferences:**

	Low	Medium	High
Grooming Needs	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Trainability	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

**Physical Needs:**

--- Please Select ---

**Find My Dog!**



## Dog Search

No dogs available.

Click [here](#) to try another match.

In `results.html`, for each `Dog` object in the `QuerySet`, add a `button` input to row of `Dog` data. When a `button` input is clicked, a modal should display the `Dog` object's `image`, `height`, `weight` & `life_span`.

Dog Search

127.0.0.1:8000/practical10cdns/

## Dog Search

We'll help you choose the perfect dog...

Preferences

Adaptability:

☐ Low

☐ Medium

☒ High

Friendliness:

☐ Low

☐ Medium

☐ High

Other Preferences:

	Low	Medium	High
Grooming Needs	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Trainability	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Physical Needs:

--- Please Select ---

Find My Dog!

Dog Search

127.0.0.1:8000/practical10cdns/results/

## Dog Search

Click on the image for more information.

1 dog matched your search.


Breed	Adaptability	Friendliness	Grooming Needs	Trainability	Physical Needs	Other Info
Afghand Hound	High	High	Low	Medium	High	<a href="#">Click Here</a>

Click [here](#) to try another match.

Dog Search

127.0.0.1:8000/practical10cdns/results/

Afghand Hound



Height: 25 inches  
Weight: 55 pounds  
Life Span: 11 years

Close

Breed	Adaptability	Physical Needs	Other Info
Afghand Hound	High	High	<a href="#">Click Here</a>

**Deployment link:** <https://int-app-dev-practical-10.herokuapp.com/practical10cdns/>

## Resources

- [Pillow](#)
- [Bootstrap](#)