

## Notes

# Learn Django 2 for beginners

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## What will we cover?

1. Using pip
2. Creating a Virtual Environment
3. Activating Virtual Environment
4. Starting Django project
5. Creating an app
6. Different Model Fields
7. Making migrations
8. Creating a superuser
9. Jinja 2 Syntax
10. Including partials
11. Doing Search Queries

**Note:** I will be adding more notes always!

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## Using pip

To install packages

*pip install django*



To uninstall packages

*pip uninstall django*

**Note:** You can find more packages at <https://pypi.org/>

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## Creating Virtual Environment

On Unix or Mac OS

*python3 -m venv name-env*

On Windows


*python -m venv name-env*

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## Activating Virtual Environment

On Windows

*source name-env\Scripts\activate*



On Unix or Mac OS

*source name-env/bin/activate*

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## Starting Django Project

*django-admin startproject <name>*

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## Creating an app

*python manage.py startapp <name>*

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## Different ModelFields

*CharField(max\_length=None)*

*DateTimeField(auto\_now=False,auto\_now\_add=False)*

*EmailField(max\_length=None)*

*FileField(upload\_to=None,max\_length=100)*

*ImageField(upload\_to=None,max\_length=100)*

*IntegerField()*

*SlugField(max\_length=50)*

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*TextField(max\_length=1000)*

*URLField(max\_length=100)*

*ForeignKey(ModelName,on\_delete=models.CASCADE)*

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## Making Migrations

*python manage.py makemigrations*

*python manage.py migrate*

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## Creating a SuperUser

*python manage.py createsuperuser*

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## Jinja 2 Syntax

- *Accessing Value {{ name }}*
- *Setting url navigation {% url ' ' %}*
- *Loading static {% load static %}*

- 
- *Using Conditional:*

*{% if expression %}*

*...*

*{% elif expression %}*

*...*

*{% else %}*

*...*

*{% endif %}*

- *Looping using for loop*

*{% for item in items %}*

*...*

*{% endfor %}*

## Including partials

```
{% include 'path_to_partial' %}
```

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## Doing Search Queries

```
from django.db.models import Q
```

```
Q(ModelField__startswith='term')
```

```
Q(ModelField__icontains='term')
```

```
Q(ModelField__iexact='term')
```

```
Q(ModelField__lt=20) # less than
```

```
Q(ModelField__lte=20) # less than or equal to
```

```
Q(ModelField__gt=20) # greater than
```

```
Q(ModelField__gte=20) # greater than or equal to
```

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**Note:** More notes will be added in the future!