

Installation

```
pip install django
```

Create project and lightweight development server

```
django-admin startproject
<projectname>
python manage.py runserver
```

Create an app

```
python manage.py startapp
<appname>
```

Creating views and URL mapping

```
#
<projectname>/<appname>/views.py
from django.http import HttpRe -
sponse
def index( req uest):
    return HttpRe spo nse -
("Hello world")
# <pr oje ctn ame >/< app nam -
e>/ urls.py
from django.urls import path
from . import views
urlpatterns = [ path(' app',
views.i ndex, name=' ind ex'), ]
# <pr oje ctn ame >/u rls.py
from django.urls import include,
path
urlpatterns = [
    pat h(' app/', includ -
e(' app.ur ls'),
    pat h(' adm in/',
admin.s it e.u rls),
]
```

Database Setup / APPLY changes to database

```
python manage.py migrate
```

migrate synchronizes changes made to your models with the schema in the database.
Django tracks which migrations have already been applied with a table called `django_migrations` in the database

Creating models

```
from django.db import models
class A(mode ls.M odel):
    name = models.ch arF -
iel d(m ax_ len gth =200)
    age = models.In teg erF -
iel d(d efa ult=0)
    bir thday = models.Da -
teT ime Fie ld( 'bi rth day')
class B(mode ls.M odel):
    a = models.Fo rei gnK -
ey(A, on_del ete =mo del s.C -
ASCADE)
    height = models.In teg -
erF iel d(d efa ult=0)
```

Activating models

```
# <projectname>/settings.py
...
INSTAL LED _APPS = [
    'ap pNa me.a pp s.A -
ppN ame Con fig',
    'dj ang o.c ont rib.ad -
min',
...
]
```

MAKE migrations for changes to models

```
python manage.py makemigrations
<appname>
```

Run a sample migration

```
python manage.py sqlmigrate
<appname> 0001
```

Run a check on the project

```
python manage.py check
```

Invoke Python shell

```
python manage.py shell
```

Create admin

```
python manage.py createsuperuse
# enter username and password
for admin user
```

Register model in admin

```
#
<projectname>/<appname>/admin.py
from django.co ntrib import
admin
from .models import A
admin.s it e.r egi ster(A)
```

