

```
(venv) D:\django\uvic>pip install Django
WARNING: Ignoring invalid distribution -ip (d:\django\uvic\venv\lib\site-packages)
WARNING: Ignoring invalid distribution -ip (d:\django\uvic\venv\lib\site-packages)
Collecting Django
  Downloading Django-4.1.5-py3-none-any.whl (8.1 MB)
    ----- 8.1/8.1 MB 14.8 MB/s eta 0:00:00
Collecting sqlparse>=0.2.2
  Downloading sqlparse-0.4.3-py3-none-any.whl (42 kB)
    ----- 42.8/42.8 kB 1.0 MB/s eta 0:00:00
Collecting backports.zoneinfo
  Downloading backports.zoneinfo-0.2.1-cp38-cp38-win32.whl (36 kB)
Collecting asgiref<4,>=3.5.2
  Downloading asgiref-3.6.0-py3-none-any.whl (23 kB)
Collecting tzdata
  Downloading tzdata-2022.7-py2.py3-none-any.whl (340 kB)
    ----- 340.1/340.1 kB 10.6 MB/s eta 0:00:00
WARNING: Ignoring invalid distribution -ip (d:\django\uvic\venv\lib\site-packages)
Installing collected packages: tzdata, sqlparse, backports.zoneinfo, asgiref, Django
WARNING: Ignoring invalid distribution -ip (d:\django\uvic\venv\lib\site-packages)
WARNING: Ignoring invalid distribution -ip (d:\django\uvic\venv\lib\site-packages)
WARNING: Ignoring invalid distribution -ip (d:\django\uvic\venv\lib\site-packages)
WARNING: Ignoring invalid distribution -ip (d:\django\uvic\venv\lib\site-packages)
WARNING: Ignoring invalid distribution -ip (d:\django\uvic\venv\lib\site-packages)
WARNING: Ignoring invalid distribution -ip (d:\django\uvic\venv\lib\site-packages)
Successfully installed Django-4.1.5 asgiref-3.6.0 backports.zoneinfo-0.2.1 sqlparse-0.4.3 tzdata-2022.7
WARNING: Ignoring invalid distribution -ip (d:\django\uvic\venv\lib\site-packages)
WARNING: Ignoring invalid distribution -ip (d:\django\uvic\venv\lib\site-packages)
WARNING: Ignoring invalid distribution -ip (d:\django\uvic\venv\lib\site-packages)
```

```
(venv) D:\django\uvic\kurs\lab_22>django-admin startproject mysite

(venv) D:\django\uvic\kurs\lab_22>cd mysite
Системе не удастся найти указанный путь.

(venv) D:\django\uvic\kurs\lab_22>cd mysite

(venv) D:\django\uvic\kurs\lab_22\mysite>python manage.py runserver
Watching for file changes with StatReloader
Performing system checks...

System check identified no issues (0 silenced).

You have 18 unapplied migration(s). Your project may not work properly until you apply the migrations for app(s): admin, auth, contenttypes, sessions.
Run 'python manage.py migrate' to apply them.
January 05, 2023 - 11:28:02
Django version 4.1.5, using settings 'mysite.settings'
Starting development server at http://127.0.0.1:8000/
Quit the server with CTRL-BREAK.
[05/Jan/2023 11:28:16] "GET / HTTP/1.1" 200 10681
[05/Jan/2023 11:28:16] "GET /static/admin/css/fonts.css HTTP/1.1" 200 423
[05/Jan/2023 11:28:16] "GET /static/admin/fonts/Roboto-Bold-webfont.woff HTTP/1.1" 200 86184
[05/Jan/2023 11:28:16] "GET /static/admin/fonts/Roboto-Regular-webfont.woff HTTP/1.1" 200 85876
[05/Jan/2023 11:28:16] "GET /static/admin/fonts/Roboto-Light-webfont.woff HTTP/1.1" 200 85692
Not Found: /favicon.ico
[05/Jan/2023 11:28:16] "GET /favicon.ico HTTP/1.1" 404 2110
```

```
(venv) D:\django\uvic\kurs\lab_22\mysite>python manage.py startapp polls

(venv) D:\django\uvic\kurs\lab_22\mysite>python manage.py runserver
Watching for file changes with StatReloader
Performing system checks...

System check identified no issues (0 silenced).

You have 18 unapplied migration(s). Your project may not work properly until you apply the migrations for app(s): admin, auth, contenttypes, sessions.
Run 'python manage.py migrate' to apply them.
January 05, 2023 - 11:52:57
Django version 4.1.5, using settings 'mysite.settings'
Starting development server at http://127.0.0.1:8000/
Quit the server with CTRL-BREAK.
[05/Jan/2023 11:53:03] "GET /polls/ HTTP/1.1" 200 40
Not Found: /favicon.ico
[05/Jan/2023 11:53:03] "GET /favicon.ico HTTP/1.1" 404 2216
```

```
(venv) D:\django\uvic\kurs\lab_22\mysite>python manage.py migrate
```

Operations to perform:

Apply all migrations: admin, auth, contenttypes, sessions

Running migrations:

```
Applying contenttypes.0001_initial... OK
Applying auth.0001_initial... OK
Applying admin.0001_initial... OK
Applying admin.0002_logentry_remove_auto_add... OK
Applying admin.0003_logentry_add_action_flag_choices... OK
Applying contenttypes.0002_remove_content_type_name... OK
Applying auth.0002_alter_permission_name_max_length... OK
Applying auth.0003_alter_user_email_max_length... OK
Applying auth.0004_alter_user_username_opts... OK
Applying auth.0005_alter_user_last_login_null... OK
Applying auth.0006_require_contenttypes_0002... OK
Applying auth.0007_alter_validators_add_error_messages... OK
Applying auth.0008_alter_user_username_max_length... OK
Applying auth.0009_alter_user_last_name_max_length... OK
Applying auth.0010_alter_group_name_max_length... OK
Applying auth.0011_update_proxy_permissions... OK
Applying auth.0012_alter_user_first_name_max_length... OK
Applying sessions.0001_initial... OK
```

```
(venv) D:\django\uvic\kurs\lab_22\mysite>python manage.py makemigrations polls
```

Migrations for 'polls':

polls\migrations\0001_initial.py

- Create model Question
- Create model Choice

```
(venv) D:\django\uvic\kurs\lab_22\mysite>python manage.py sqlmigrate polls 0001
BEGIN;
--
-- Create model Question
--
CREATE TABLE "polls_question" ("id" integer NOT NULL PRIMARY KEY AUTOINCREMENT, "question_text" varchar(200) NOT NULL, "pub_date" datetime NOT NULL);
--
-- Create model Choice
--
CREATE TABLE "polls_choice" ("id" integer NOT NULL PRIMARY KEY AUTOINCREMENT, "choice_text" varchar(200) NOT NULL, "votes" integer NOT NULL, "question_id" bigint NOT NULL REFERENCES "polls_question" ("id") DEFERRABLE INITIALLY DEFERRED);
CREATE INDEX "polls_choice_question_id_c5b4b260" ON "polls_choice" ("question_id");
COMMIT;

(venv) D:\django\uvic\kurs\lab_22\mysite>manage.py migrate

(venv) D:\django\uvic\kurs\lab_22\mysite>python manage.py migrate
Operations to perform:
  Apply all migrations: admin, auth, contenttypes, polls, sessions
Running migrations:
  Applying polls.0001_initial... OK
```

```
(venv) D:\django\uvic\kurs\lab_22\mysite>python manage.py shell
Python 3.8.1 (tags/v3.8.1:1b293b6, Dec 18 2019, 22:39:24) [MSC v.1916 32 bit (Intel)] on win32
Type "help", "copyright", "credits" or "license" for more information.
(InteractiveConsole)
>>> from polls.models import Choice, Question
>>> Question.objects.all()
<QuerySet []>
>>> from django.utils import timezone
>>> q = Question(question_text="What's new?", pub_date=timezone.now())
>>> q.save()
>>> q.id
1
>>> q.question_text
'What's new?'
>>> q.pub_date
datetime.datetime(2023, 1, 5, 10, 40, 31, 643150, tzinfo=datetime.timezone.utc)
>>> q.question_text = "What's up?"
>>> q.save()
>>> Question.objects.all()
<QuerySet [<Question: Question object (1)>]>
>>> █
```



```

(venv) D:\django\uvic\kurs\lab_22\mysite>python manage.py shell
Python 3.8.1 (tags/v3.8.1:1b293b6, Dec 18 2019, 22:39:24) [MSC v.1916 32 bit (Intel)] on win32
Type "help", "copyright", "credits" or "license" for more information.
(InteractiveConsole)
>>> from polls.models import Choice, Question
>>> Question.objects.all()
<QuerySet [<Question: What's up?>]>
>>> Question.objects.filter(id=1)
<QuerySet [<Question: What's up?>]>
>>> Question.objects.filter(question_text__startswith='What')
<QuerySet [<Question: What's up?>]>
>>> from django.utils import timezone
>>> current_year = timezone.now().year
>>> Question.objects.get(pub_date__year=current_year)
<Question: What's up?>
>>> Question.objects.get(id=2)
Traceback (most recent call last):
  File "<console>", line 1, in <module>
  File "D:\django\uvic\venv\lib\site-packages\django\db\models\manager.py", line 85, in manager_method
    return getattr(self.get_queryset(), name)(*args, **kwargs)
  File "D:\django\uvic\venv\lib\site-packages\django\db\models\query.py", line 650, in get
    raise self.model.DoesNotExist(
polls.models.Question.DoesNotExist: Question matching query does not exist.
>>> Question.objects.get(pk=1)
<Question: What's up?>
>>> q = Question.objects.get(pk=1)
>>> q.was_published_recently()
True

```

```

>>> q.was_published_recently()
True
>>> q = Question.objects.get(pk=1)
>>> q.choice_set.all()
<QuerySet []>
>>> q.choice_set.create(choice_text='Not much', votes=0)
<Choice: Not much>
>>> q.choice_set.create(choice_text='The sky', votes=0)
<Choice: The sky>
>>> c = q.choice_set.create(choice_text='Just hacking again', votes=0)
>>> c.question
<Question: What's up?>
>>> q.choice_set.all()
<QuerySet [<Choice: Not much>, <Choice: The sky>, <Choice: Just hacking again>]>
>>> q.choice_set.count()
3
>>> Choice.objects.filter(question__pub_date__year=current_year)
<QuerySet [<Choice: Not much>, <Choice: The sky>, <Choice: Just hacking again>]>
>>> c = q.choice_set.filter(choice_text__startswith='Just hacking')
>>> c.delete()
(1, {'polls.Choice': 1})
>>> q.choice_set.all()
<QuerySet [<Choice: Not much>, <Choice: The sky>]>
>>> exit()

```

```

(venv) D:\django\uvic\kurs\lab_22\mysite>

```

```
(venv) D:\django\uvic\kurs\lab_22\mysite>python manage.py createsuperuser
Username: admin
Email address: admin@example.com
Password:
Password (again):
This password is too short. It must contain at least 8 characters.
This password is too common.
This password is entirely numeric.
Bypass password validation and create user anyway? [y/N]: y
Superuser created successfully.
```

```
(venv) D:\django\uvic\kurs\lab_22\mysite>python manage.py runserver
Watching for file changes with StatReloader
Performing system checks...

System check identified no issues (0 silenced).
January 05, 2023 - 13:04:08
Django version 4.1.5, using settings 'mysite.settings'
Starting development server at http://127.0.0.1:8000/
Quit the server with CTRL-BREAK.
[05/Jan/2023 13:04:16] "GET /admin/ HTTP/1.1" 302 0
[05/Jan/2023 13:04:17] "GET /admin/login/?next=/admin/ HTTP/1.1" 200 2218
[05/Jan/2023 13:04:18] "GET /static/admin/css/dark_mode.css HTTP/1.1" 200 796
[05/Jan/2023 13:04:18] "GET /static/admin/css/nav_sidebar.css HTTP/1.1" 200 2619
[05/Jan/2023 13:04:18] "GET /static/admin/css/login.css HTTP/1.1" 200 958
[05/Jan/2023 13:04:18] "GET /static/admin/css/base.css HTTP/1.1" 200 20344
[05/Jan/2023 13:04:18] "GET /static/admin/js/nav_sidebar.js HTTP/1.1" 200 3763
[05/Jan/2023 13:04:18] "GET /static/admin/css/responsive.css HTTP/1.1" 200 18854
[05/Jan/2023 13:04:21] "GET /static/admin/css/fonts.css HTTP/1.1" 304 0
[05/Jan/2023 13:04:21] "GET /static/admin/fonts/Roboto-Regular-webfont.woff HTTP/1.1" 304 0
[05/Jan/2023 13:04:21] "GET /static/admin/fonts/Roboto-Light-webfont.woff HTTP/1.1" 304 0
[05/Jan/2023 13:04:29] "POST /admin/login/?next=/admin/ HTTP/1.1" 302 0
[05/Jan/2023 13:04:29] "GET /admin/ HTTP/1.1" 200 3580
[05/Jan/2023 13:04:29] "GET /static/admin/css/dashboard.css HTTP/1.1" 200 380
[05/Jan/2023 13:04:29] "GET /static/admin/img/icon-addlink.svg HTTP/1.1" 200 331
[05/Jan/2023 13:04:29] "GET /static/admin/img/icon-changelink.svg HTTP/1.1" 200 380
[05/Jan/2023 13:04:29] "GET /static/admin/fonts/Roboto-Bold-webfont.woff HTTP/1.1" 304 0
```


D:\django\uvic\kurs\lab_22\mysite\polls\admin.py changed, reloading.

Watching for file changes with StatReloader

Performing system checks...

System check identified no issues (0 silenced).

January 05, 2023 - 13:07:54

Django version 4.1.5, using settings 'mysite.settings'

Starting development server at <http://127.0.0.1:8000/>

Quit the server with CTRL-BREAK.

[05/Jan/2023 13:08:07] "GET /admin/ HTTP/1.1" 200 4231

[05/Jan/2023 13:08:10] "GET /admin/polls/question/ HTTP/1.1" 200 6556

[05/Jan/2023 13:08:10] "GET /static/admin/css/changelists.css HTTP/1.1" 200 6395

[05/Jan/2023 13:08:10] "GET /static/admin/js/actions.js HTTP/1.1" 200 7872

[05/Jan/2023 13:08:10] "GET /static/admin/js/jquery.init.js HTTP/1.1" 200 347

[05/Jan/2023 13:08:10] "GET /static/admin/js/core.js HTTP/1.1" 200 5698

[05/Jan/2023 13:08:10] "GET /static/admin/js/admin/RelatedObjectLookups.js HTTP/1.1" 200 8985

[05/Jan/2023 13:08:10] "GET /admin/jsi18n/ HTTP/1.1" 200 3343

[05/Jan/2023 13:08:10] "GET /static/admin/js/urlify.js HTTP/1.1" 200 7902

[05/Jan/2023 13:08:10] "GET /static/admin/js/vendor/jquery/jquery.js HTTP/1.1" 200 288580

[05/Jan/2023 13:08:10] "GET /static/admin/js/prepopulate.js HTTP/1.1" 200 1531

[05/Jan/2023 13:08:10] "GET /static/admin/js/vendor/xregexp/xregexp.js HTTP/1.1" 200 232381

[05/Jan/2023 13:08:10] "GET /static/admin/js/filters.js HTTP/1.1" 200 966

[05/Jan/2023 13:08:10] "GET /static/admin/img/tooltag-add.svg HTTP/1.1" 200 331

(venv) D:\django\uvic\kurs\lab_22\mysite>