Setup Django in the system:

1. First, we need to see if python is there in the system:

D:\My-Projects\Django>python --version Python 3.12.8

2. Next we need to create the virtual environment

What is Virtual environment Why do we create it?

A **virtual environment** is an isolated environment created for Python projects. It allows you to have a dedicated workspace for your project's dependencies, libraries, and packages, independent of the global Python environment on your system.

```
D:\Mv-Projects\Django>pip install virtualenv
Defaulting to user installation because normal site-packages is
not writeable
Requirement already satisfied: virtualenv in c:\users\mchar\appd
ata\local\packages\pythonsoftwarefoundation.python.3.12_qbz5n2kf
ra8p0\localcache\local-packages\python312\site-packages (20.29.1
Requirement already satisfied: distlib<1,>=0.3.7 in c:\users\mch
ar\appdata\local\packages\pythonsoftwarefoundation.python.3.12_q
bz5n2kfra8p0\localcache\local-packages\python312\site-packages (
from virtualenv) (0.3.9)
Requirement already satisfied: filelock<4,>=3.12.2 in c:\users\m
char\appdata\local\packages\pythonsoftwarefoundation.python.3.12
_qbz5n2kfra8p0\localcache\local-packages\python312\site-packages
(from virtualenv) (3.16.1)
Requirement already satisfied: platformdirs<5,>=3.9.1 in c:\user
s\mchar\appdata\local\packages\pythonsoftwarefoundation.python.3
.12_gbz5n2kfra8p0\localcache\local-packages\python312\site-packa
ges (from virtualenv) (4.3.6)
```

```
D:\My-Projects\Django>python -m virtualenv env
created virtual environment CPython3.12.8.final.0-64 in 3463ms
creator Venv(dest=D:\My-Projects\Django\env, clear=False, no_vcs_ignore=F
alse, global=False, describe=CPython3Windows)
seeder FromAppData(download=False, pip=bundle, via=copy, app_data_dir=C:\
Users\mchar\AppData\Local\Packages\PythonSoftwareFoundation.Python.3.12_qbz
5n2kfra8p0\LocalCache\Local\pypa\virtualenv)
added seed packages: pip==24.3.1
activators BashActivator,BatchActivator,FishActivator,NushellActivator,Po
werShellActivator,PythonActivator
```

```
D:\My-Projects\Django>cd env/
```

D:\My-Projects\Django\env>cd Scripts

D:\My-Projects\Django\env\Scripts>activate

(env) D:\My-Projects\Django\env\Scripts>cd ..

3. To check the django is installed in the system

```
(env) D:\My-Projects\Django\env>python
Python 3.12.8 (tags/v3.12.8:2dc476b, Dec 3 2024, 19:30:04) [MSC v.1942 64
bit (AMD64)] on win32
Type "help", "copyright", "credits" or "license" for more information.
>>> import django
>>> django.__version__
'5.1.5'
>>> |
```

Now Start the project

Feedback System

1. Now in the same environment

```
(env) D:\My-Projects\Django>django-admin startproject feedback
(env) D:\My-Projects\Django>cd feedback
(env) D:\My-Projects\Django\feedback>python manage.py startapp home
(env) D:\My-Projects\Django\feedback>code .
```

2. Now it will open in VS code

Now here there are changes and models need to be added so

First go to settings.py

```
INSTALLED_APPS = [
    'django.contrib.admin',
    'django.contrib.auth',
    'django.contrib.contenttypes',
    'django.contrib.sessions',
    'django.contrib.messages',
    'django.contrib.staticfiles',
```

Find Installed Apps and add "home"

```
INSTALLED_APPS = [
    'django.contrib.admin',
    'django.contrib.auth',
    'django.contrib.contenttypes',
    'django.contrib.sessions',
    'django.contrib.messages',
    'django.contrib.staticfiles',
    'home'
]
```

Save the file and then go to models.py file

Here we have to add the models that are going to run on the system

```
from django.db import models
# Create your models here.
class Questions(models.Model):
   QUESTION_CHOICES = (
        ("Text", "Text"),("BigText",
"BigText"),("Radio","Radio"),("Checkbox","Checkbox"))
    question = models.CharField(max_length=100)
    question_type = models.CharField(choices = QUESTION_CHOICES,
max length=50,default="Text")
   def str (self) -> str:
        return f"{self.question}, {self.question_type}"
class Options(models.Model):
    question = models.ForeignKey(Questions, related_name="options",
on_delete=models.CASCADE)
    option_name = models.CharField(max_length=100)
class CustomerFeedback(models.Model):
    question = models.ManyToManyField(Questions)
class CustomerResponse(models.Model):
    feedback =models.ForeignKey(CustomerFeedback, on_delete=models.CASCADE)
   question = models.ForeignKey(Questions, on_delete=models.CASCADE)
    reponse_text = models.TextField(null=True, blank=True)
    selected_options = models.ManyToManyField(Options, blank=True)
```

Add this code

Then now you have to save it and then go to the command prompt,

```
(env) D:\My-Projects\Django\feedback>python manage.py migrate
Operations to perform:
  Apply all migrations: admin, auth, contenttypes, home, 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 home.0001_initial... OK
  Applying sessions.0001_initial... OK
```

```
(env) D:\My-Projects\Django\feedback>python manage.py createsuperuser
Username (leave blank to use 'mchar'): admin
Email address: mcharipriyamc2002@gmail.com
Password:
Password (again):
This password is too common.
This password is entirely numeric.
Bypass password validation and create user anyway? [y/N]: y
Superuser created successfully.
```

Username: admin

Password: 12345678

Now add this in models.py class options

```
def __str__(self) -> str:
    return f"{self.option_name} {self.question.question}"
```

Then go to views.py

Add this in views.py

```
from django.shortcuts import admin

# Create your views here.
from .models import *

admin.site.register(Questions)
admin.site.register(Options)
admin.site.register(CustomerFeedback)
admin.site.register(CustomerResponse)
```

Now go to urls.py and add

```
from django.contrib import admin
from django.urls import path

urlpatterns = [
    # Home URL for testing
    path('admin/', admin.site.urls), # Admin portal
]
```

Now go to admin.py and add

```
from django.contrib import admin
from .models import Questions, Options, CustomerFeedback, CustomerResponse

admin.site.register(Questions)
admin.site.register(Options)
admin.site.register(CustomerFeedback)
admin.site.register(CustomerFeedback)
```

Then go to Cmd and run the server

The code is

python manage.py runserver

```
(env) D:\My-Projects\Django\feedback>python manage.py runserver
Watching for file changes with StatReloader
Performing system checks...

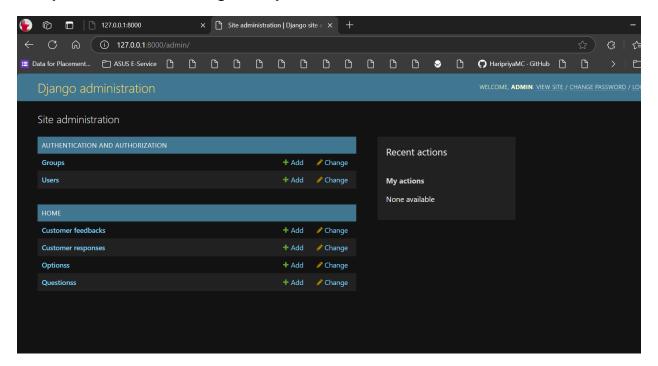
System check identified no issues (0 silenced).
January 23, 2025 - 12:20:44
Django version 5.1.5, using settings 'feedback.settings'
Starting development server at http://127.0.0.1:8000/
Quit the server with CTRL-BREAK.
```

Now Click on server link

Open this link

http://127.0.0.1:8000/admin/

Now you can see all the changes that you have made



Now you can add all the questions and options for the system

Now to add UI design refer my templates file add everything in the system make changes in view.py and urls.py

Final Results

