# MY DJANGO

- Django is Python Based Web-Framework.
- To install Django in Our Local Computer:

Go to Terminal > pip install django > {Downloading}

To check Version of Django

Go to Terminal > python -m django -version > Enter

#### Let's Begging the Django Project

Go to Terminal Write > **django-admin** > Run

➤ It shows some utilities which is you can use, and it is clear that Django are install Successfully in Our Local Computer.

### To start our project

Go to Terminal > django-admin startproject {project\_name} > Run

- > It creates an automatic Directories and some codes.
- 1) project name is our python package.
- 2) init.py in one blank python file.
- 3) setting.py is python file consist of our python project settings.
- 4) urls.py this consist of URL declarations and mappings. (URL ke konse end point pe kya hota hai vo declare krte hai)
- 5) wsgi.py(web server getaway interface) no need to understand this file as a beginner. It uses to Deployment.
- 6) manage.py is our main file to write a code.

## To Start the Development Server

## Go to Terminal > python manage.py runserver

- It shows the Development server link, copy it and open in Browser.
- We See like this In Screen..



The install worked successfully! Congratulations!

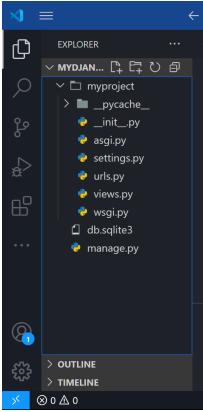
View release notes for Django 5.2

You are seeing this page because <u>DEBUG=True</u> is in your settings file and you have not configured any URLs.



# **Setting up Our Routes**

1) Go to folder and create views.py file



2) Go to urls.py and import statements and set Path

```
| Note | Mark | Note |
```

3) In views.py

```
| Secretary | Secr
```

- 4) Then Run the Server and see It Print Hello Nikhil also we can Print in <h1> tag
- 5) If we go to /about route then it will print Hello Nikhil from About.

#### Likewise, we can Create Our Routes......

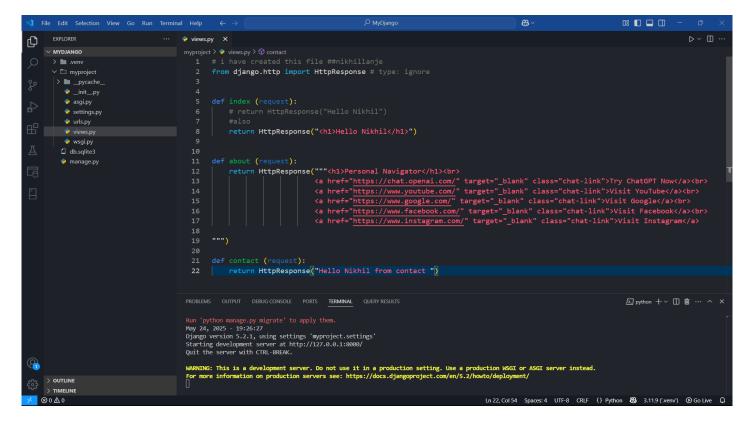
#### **Exercise 1: - Personal Navigator**

Create a Personal Navigator Webs

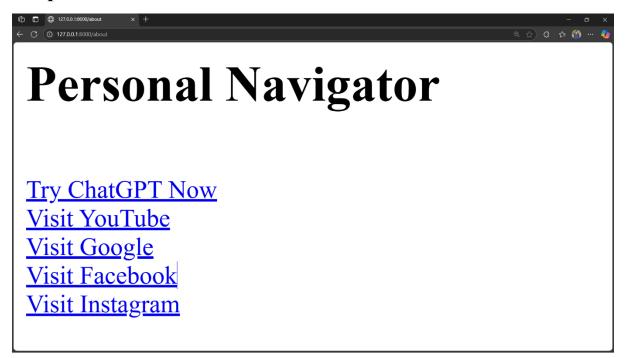
Take Any 5 Webs and Crate a Navigator After Clicking, they redirect to that URL.

Solution: - 1) Go to views.py or Your any route and Create like this

2) Go to that route and Click Links.....



#### **Output Is**



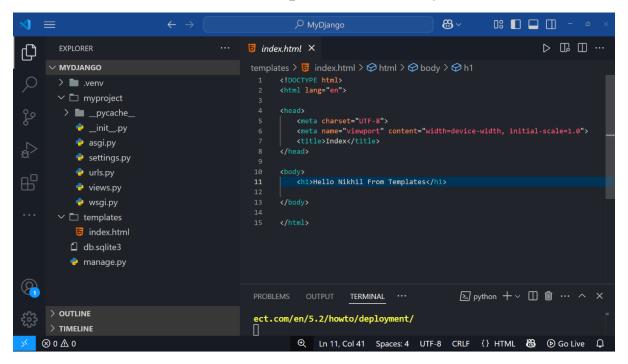
# **Django Templates**

1) Go to Settings.py file and Find Templates and add **templates in** 'DIRS'

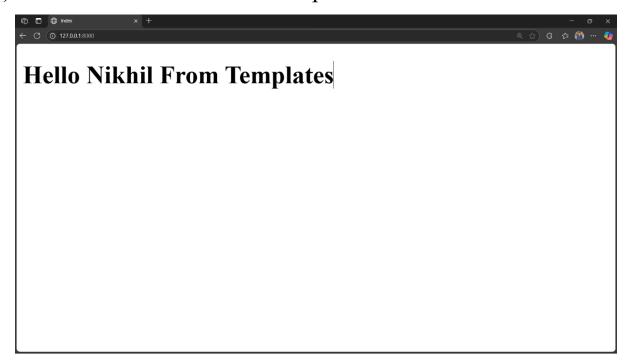
2) In views.py import statement and render the Templates

```
| Secretor | Vow | Go | Run | Immuno |
```

- 3) Also Create templates Directory in that Directory Where the manage.py is Present (ie. templates Directory and manage.py is in Same Directory).
- 4) Create index.html file in templates Directory.



5) Run the server and see our Output......



Also We Can Pass The Variables From our Python code to Templates.

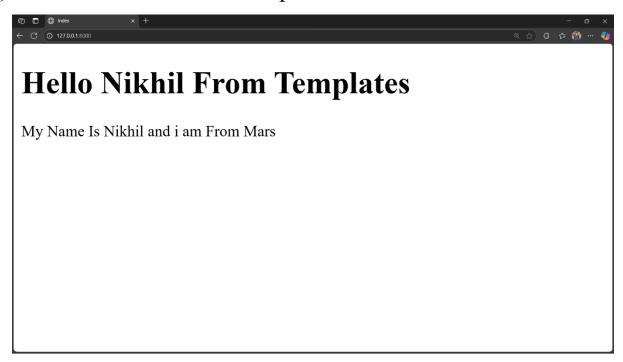
Lets See.....

1) Go to that route (Function) and pass variables in **params** and **pass params in return Statement also** 

```
| Substitute | Sub
```

2) Go to Our html file and and Write in {{variable\_name}} to Access this Variable in html file

## 3) Run the Server and See Output

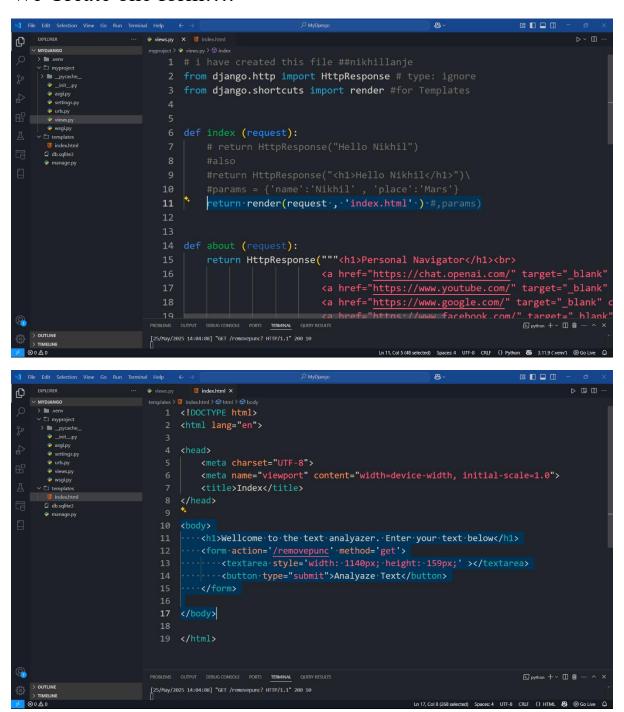


## **#DONE**

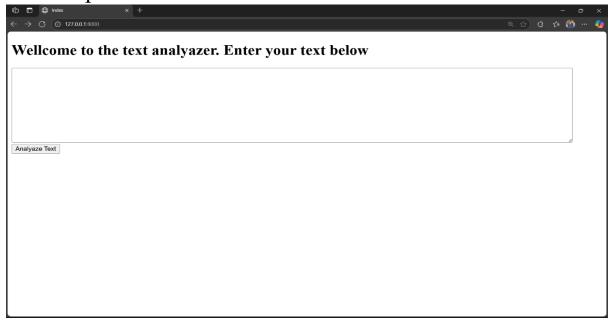
Now Let's Create Oue Project.....!

## **Creating Homepage of our TextUtils Website**

1) In our Index route We render index.html, in that index page We Create one form....



2) Our Output is



- 3) After clicking the Analyzer Text Button it go to the /removepunc Route....
- 4) Give a name to our textarea

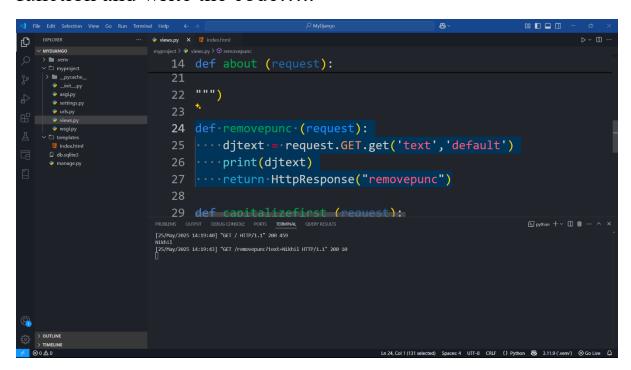
5) We see that that text pass to our server url



6) We can acess this data into /removepunc Route...

Let's see How....

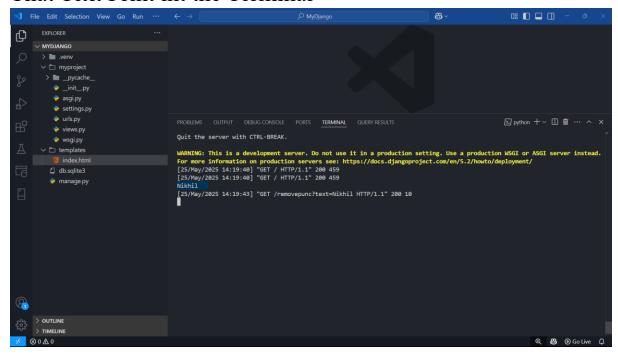
To Access This text Go to view.py > go to removepunc function and write the code.....



7) After Witting a code run Server Write some text And click Button,

## Then What Happen.....

That Text Print int the Terminal



#### Now We Edit our code

1) For Our Project We need only only one end point analyze

```
#endpoints
urlpatterns = [
path('admin/', admin.site.urls),
path('', views.index, name='index'),
path('about', views.about, name='about'),
path('analayze', views.analayze, name='analayze'),
# path('capitalizefirst', views.capitalizefirst, name='capitalizefirst'),
# path('newlineremove', views.newlineremove, name='newlineremove'),
# path('spaceremove', views.spaceremove, name='spaceremove'),
# path('charcount', views.charcount, name='charcount')
```

2) We also create a analyze route and comment out other routes

```
def analayze (request):
    djtext = request.GET.get('text','default')
    print(djtext)
    return HttpResponse("analayze")
```

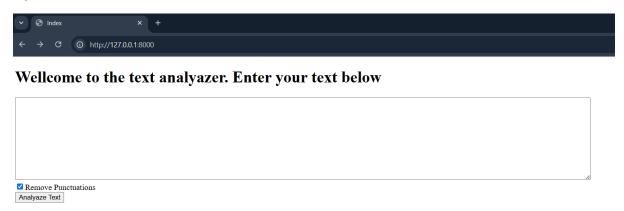
3) Our Index route is like this

```
init_py
    asgi.py
    asgi.py
    settings.py
    urls.py
    urls.py
    wsgi.py
    wsgi.py
    industry
    indu
```

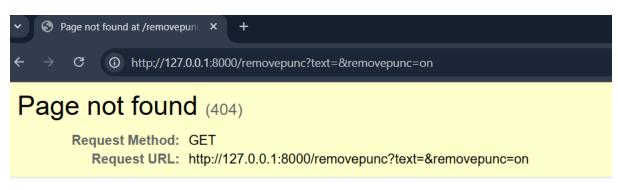
4) In Html filr add checkbox, and form Submit to analayze Route

```
views.py
                                                     MYDJ... [♣ 🗗 ひ 🗊 templates > 🥫 analayze.html > 🛠 html
                1 <!DOCTYPE html>
2 <html lang="en">
> 🖿 .venv
/ 🗀 myproject
> 🖿 _pycache_
  __init__.py
                      <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  asgi.py
  e settings.py
                         <title>Index</title>
  🔷 urls.py
  views.py
  🔷 wsgi.py
 templates
                        <h1>Wellcome to the text analyazer. Enter your text below</h1>
                          ☐ db.salite3
 manage.py
                             <input type="checkbox" name="removepunc">Remove Punctuations <br>
                              <button type="submit">Analyaze Text</button>
```

5) Now Run Code and See

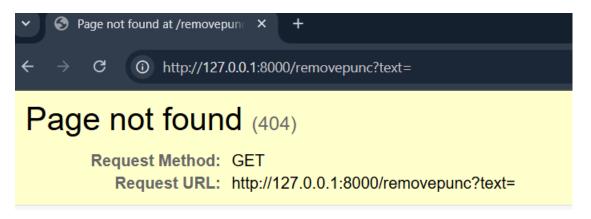


If We check the checkbox and Click analayze button then see in url



removepunc = on

6) removepunc is name of Checkbox and if we not check and click on Button then see



Now,

1) we go to analayze route

- 2) Write Something in box and check box and click button
- 3) We see that analayse is print and in Terminal

```
WARNING: This is a development server. Do not use it in a production setting. Userver instead.

For more information on production servers see: https://docs.djangoproject.com/[27/May/2025 23:21:47] "GET / HTTP/1.1" 200 535
[27/May/2025 23:21:47] "GET / HTTP/1.1" 200 535
asas
on
200 8
[27/May/2025 23:52:42] "GET / HTTP/1.1" 200 535
```

This Print in Terminal.

4) If We not Check the checkbox then it print Default and off in Terminal..

So We take Default value is off, when removepunc value id on then it is on otherwise it is off.

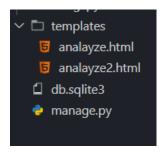
5) Take Default Value off

```
def analayze (request):
    djtext = request.GET.get('text','default')
    removepunc = request.GET.get('removepunc','off')
    print(djtext)
    print(removepunc)
    return HttpResponse("analayze")
```

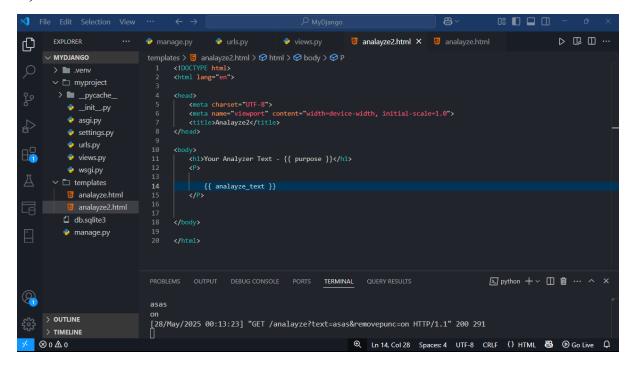
### 6) Now in analayze we render html file

```
def analayze (request):
    djtext = request.GET.get('text','default')
    removepunc = request.GET.get('removepunc','off')
    print(djtext)
    print(removepunc)
    analayze = djtext
    params = {'purpose':'Remove Punctuations', 'analayze_text':analayze}
    # return HttpResponse("analayze")
    return render(request, 'analayze2.html', params)
```

#### 7) Create analayze2.html



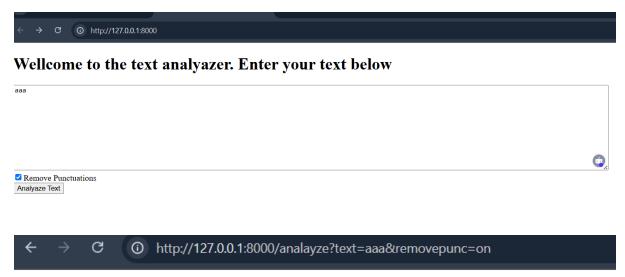
#### 8) And this looks like this



### 9) Output is

We enter anything in box and checkboc tick or not it print on analayze2.html file as it is.....

- 10) Remember the, In params there is No ' 'in analayze variable
- 11) Output is



## Your Analyzer Text - Remove Punctuations

aaa

12) Now We Remove the Punctuations Using Pyhton Logic

Update our analayze Route

```
🔷 __init__.py
                              def analayze (request):
                               output = request.GET.get('text','default')
   💡 asgi.py
                               removepunc = request.GET.get('removepunc','off')
   ettings.py
                               print(djtext)
   urls.py
                               print(removepunc)
   💡 views.py
                               punctuation = ''' !"#$%&'()*+,-./:;<=>?@[\]^_`{|}~'''
                               ···analayze·=·""
   🔷 wsgi.py
                               for char in djtext :

∨ □ templates

                               ··· if char not in punctuation :
   analayze.html
                               ····analayze = analayze + char
                               overparams = {'purpose':'Remove Punctuations', 'analayze_text':analayze}
   analayze2.html
  db.sqlite3
                               return render(request , 'analayze2.html' , params)
  🔷 manage.py
```

- 13) Write Anything with punctuation in boc checkboc check and click button
- 14) We see Correct Output.....
- 15) But our check box is not work Properly

What's why we edit our analayze Route

if removepunc = 'on' then only it work correctly otherwise it prints the "Error, Please check the Box"

And

**DONE** 

#### Similarly We add For Uppercase

1) We go to analayze.html which is index file and add 1 more checkbox

```
views.py
views.py
visus.py
visus.p
```

- 2) No change in analayze2.html file
- 3) Change our Route like this

```
def analayze (request):
    djtext = request.GET.get('text','default')
    removepunc = request.GET.get('removepunc','off')
    fullcaps = request.GET.get('fullcaps','off')
   print(djtext)
   print(removepunc)
    if removepunc == 'on':
       punctuation = ''' !"#$%&'()*+,-./:;<=>?@[\]^_`{|}~'''
       analayze = ""
       for char in djtext:
           if char not in punctuation :
               analayze = analayze + char
       params = {'purpose':'Remove Punctuations' , 'analayze_text':analayze}
       return render(request , 'analayze2.html' , params)
   elif(fullcaps=='on'):
   ····analayze·=·djtext.capitalize()··#·Capitalize·only·the·first·letter
    ····params·=-{'purpose': 'Change·to·UpperCase', 'analayze_text': analayze}
    ···return render(request, 'analayze2.html', params)
        return HttpResponse("Error , Please check the Box")
```

- 4) Add on elif statement and Logic for UpperCase...
- 5) Also fillcaps define upper.

#### DONE

Similarly We do for Remove New Line..

```
djtext = request.GET.get('text','default')
            removepunc = request.GET.get('removepunc','off')
fullcaps = request.GET.get('fullcaps','off')
            newlineremover = request.GET.get('newlineremover', 'off')
            if removepunc == 'on':
    # analayze = djtext
               punctuation = ''' !"#$%&'()*+,-./:;<=>?@[\]^ `{|}~'''
               analayze = ""
               for char in djtext:
                  params = {'purpose':'Remove Punctuations' , 'analayze_text':analayze}
               return render(request , 'analayze2.html' , params)
            elif(fullcaps=='on'):
    analayze = djtext.capitalize() # Capitalize only the first letter
    params = {'purpose': 'Change to UpperCase', 'analayze_text': analayze}
                 return render(request, 'analayze2.html', params)
            elif(newlineremover=='on'):
                 analayze=''
                 for char in djtext :
                      if char !="\n":
                           analayze = analayze + char.upper()
                 params = {'purpose': 'Remove New Lines', 'analayze_text': analayze}
return render[(request, 'analayze2.html', params)
45
                 return HttpResponse("Error , Please check the Box")
```

#### **Create This**

- Create, Extra Space Remover
- Count Characters

```
elif(extraspaceremover=="on"):
    analyzed = ""
    for index, char in enumerate(djtext):
        if not(djtext[index] == " " and djtext[index+1]==" "):
            analyzed = analyzed + char

params = {'purpose': 'Removed NewLines', 'analyzed_text': analyzed}
# Analyze the text
return render(request, 'analyze.html', params)
```

#### DONE....

#### **Exercise 2: - Revamping TextUtils**

Wellcome to the text analyazer. Enter your text below

```
Remove Punctuations
UpperCase
New Line Remover
Extra Space Remover
Analyaze Text
```

In this output which option we are checked that only perform, if two option checked then that two only chek.....

#### **Solution:-** Update your route

```
djtext = request.GET.get('text', 'default')
            removepunc = request.GET.get('removepunc', 'off')
          ---fullcaps = request.GET.get('fullcaps', 'off')
---newlineremover = request.GET.get('newlineremover', 'off')
          ---extraspaceremover = request.GET.get('extraspaceremover', 'off')
           operations_done = []
          analyzed = djtext
            if removepunc == 'on':
....punctuation == '''!"#$%&'()*+,-./:;<=>?@[\]^_`{|}~'''
....analyzed == '''.join(char for char in analyzed if char not in punctuation)
               · · · operations_done.append('Removed Punctuations')
            if fullcaps == 'on':
             ····analyzed -- analyzed.upper()
            ····operations_done.append('Changed-to-Uppercase')
            -if newlineremover -- 'on':
             ----analyzed---analyzed.replace('\n',.'').replace('\r',.'')
----operations_done.append('Removed-New-Lines')
82
83
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87
88
            if extraspaceremover == 'on':
                analyzed = ' '.join(analyzed.split())
               ···operations_done.append('Removed Extra Spaces')
            if not operations_done:
            · · · · return · HttpResponse("Error: · Please · select · at · least · one · operation.")
               'purpose': ', '.join(operations_done),
               ···'analayze_text': analyzed
            return render(request, 'analayze2.html', params)
```

❖ We See that our Next line Remover Work Automatically It is Because of our html, html not print New line when we give input as New Line

That's why we use tag

## **Django CSRF Tokens & Post Request**

• **CSRF** Means Cross Side Request Forgery.

It conforms that, Jo Request aa rhi hai vo apki hi hai...

Do we use {% csrf token %} this with forms

#### Also we Use POST

Because all the data which we can pass in text box it transfer through our url that's why our url some time not work properly so use POST request...

Here, We Finish our Small Web app Completely......