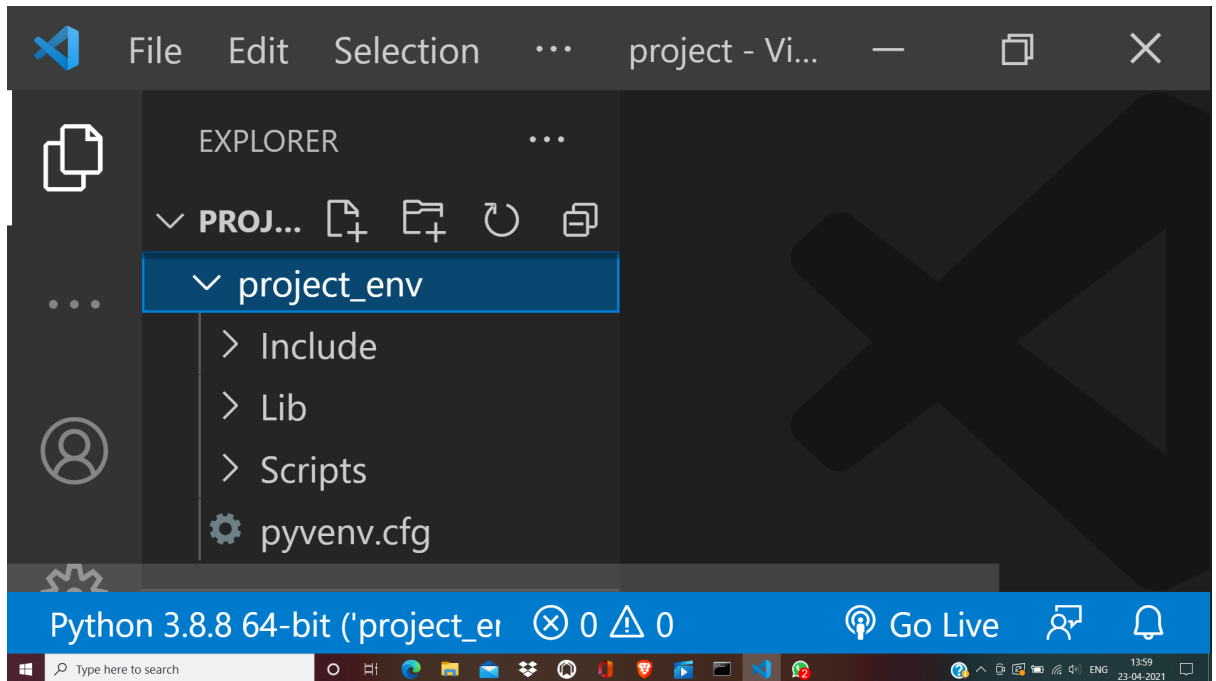
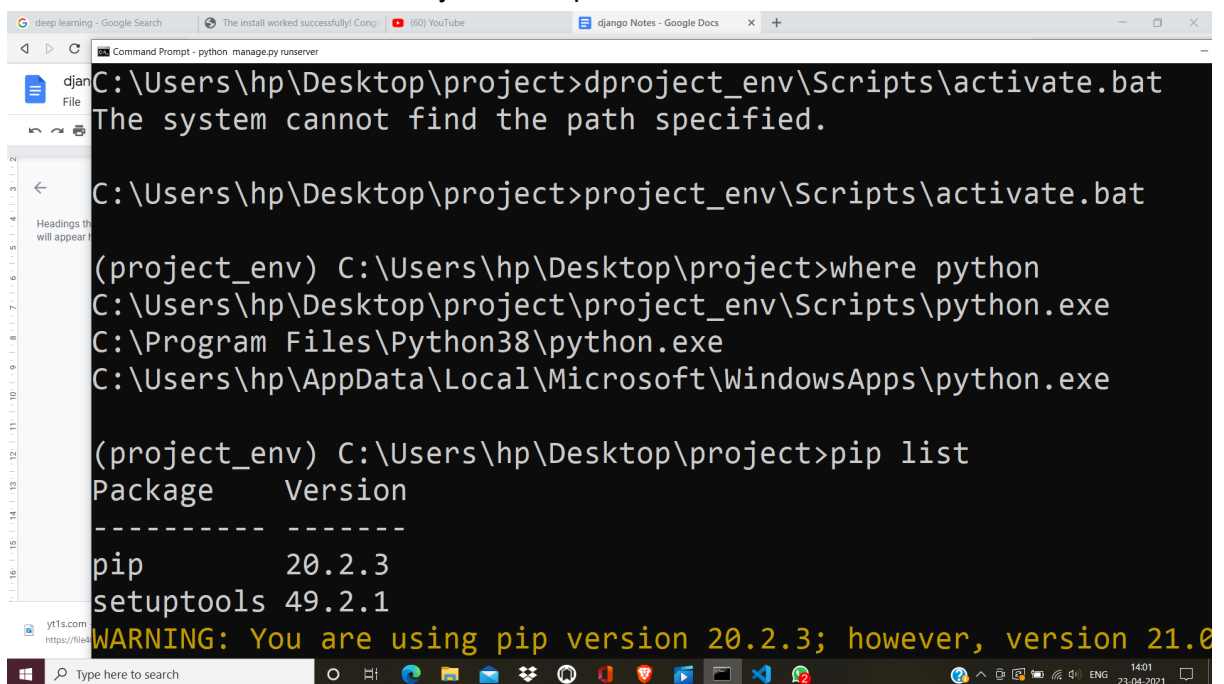


Django Notes

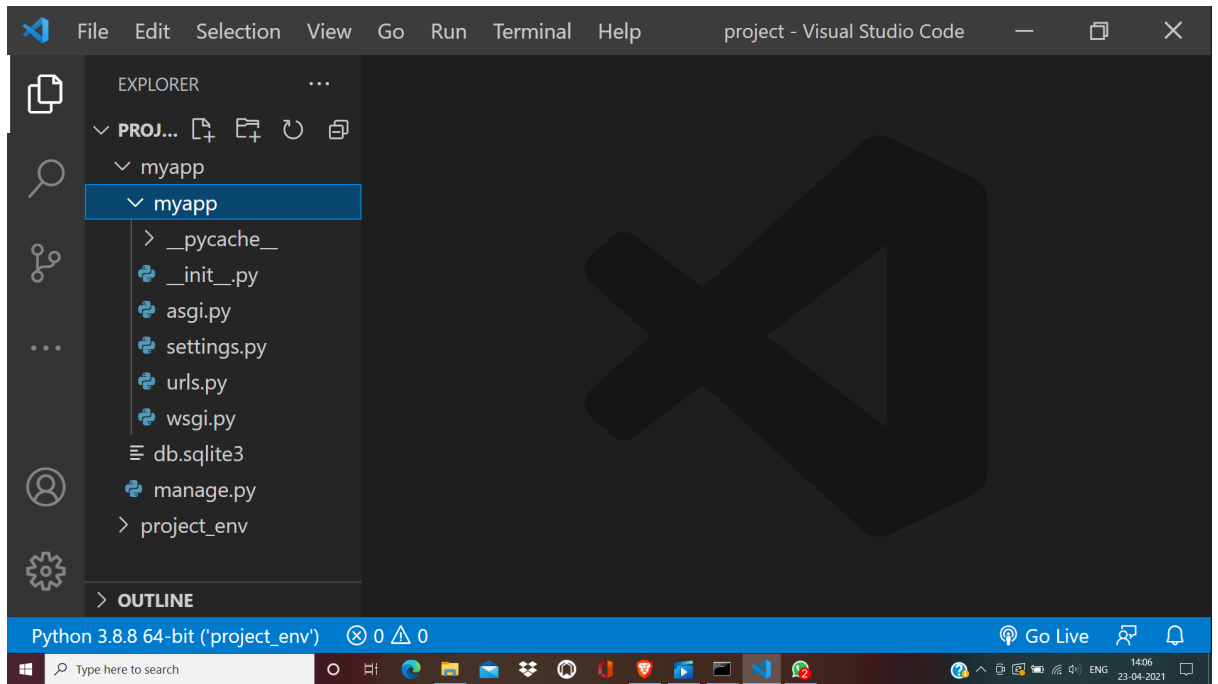
- First, create an environment in windows use command prompt
- `python -m venv myenv`



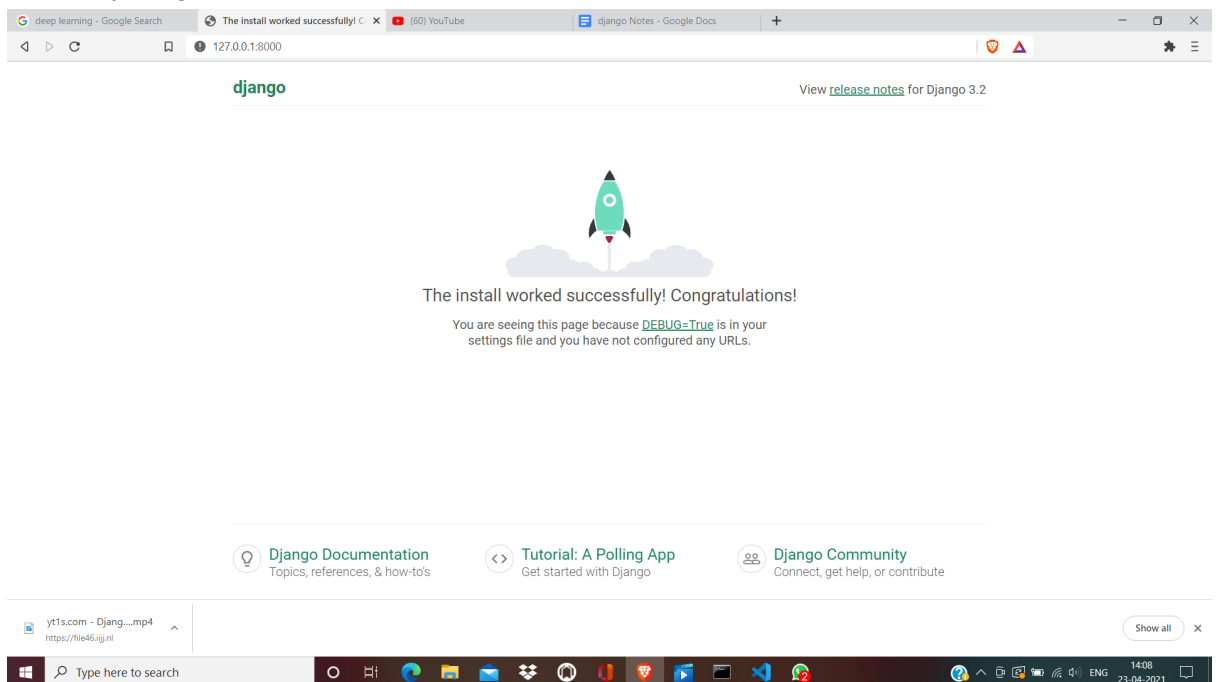
- Now to activate use command- `myenv\Scripts\activate.bat`



- Now install django inside environment using pip - `pip install django`
- Now create django file by running command- `django-admin startproject myapp`



- Run `python manage.py runserver`
- And copy url given in command prompt and paste in browser it will look like-



URLs & Views

- Make a file named `views.py` and add following syntax
 1. `from django.http import HttpResponse`
 2. `def index():`
 3. `Return HttpResponse("hello")`
- Now open urls and `from myapp import views`
- And add `path(' ',views.index,name="index")in urlpatterns`

- For new path there be a little bit changes like
`path('about', views.about, name="about")` in `urlpatterns`
- And ofcourse add function for about in views by repeating step 2 in first point.

Templates

- Create folder named templates outside the project where manage.py file is there
- Create file named index.html
- Now open settings and write templates under the templates dictionary
- Next to open file and import package named `from django.shortcuts import render`

```

• para={"name":"Jacson",
•       "place":"Austria"}
•     return render(request, 'index.html', para)

```

- In index's body if you write the variable name inside two curly braces it will give you the parameters in the website page

```

• <body>
• anything to anybody involves things to body
• <p>
• {{name}} is very cute lived in {{place}}
• </p>
• </body>

```

- anything to anybody involves things to body

Jacson is very cute lived in Austria

- Creating text area inside form with button for analyzing text, however putting action in form gives the direction to move further i.e. to removepunc

```

<h1> Welcome to text analyzer. Enter your text below</h1>

<form action='/removepunc' method='get'>

    <textarea name='text' style= 'margin:0px ; width:721px ;
height :93px;'></textarea>

    <button type='submit'>Analyze text</button>

</form>

```

- Making new template called analyze for the page remove punctuation so that it can print text without punctuation

```

<body>

<h1> Your Analyzed Text - {{purpose}}</h1><br>

<p>

    {{analyzed_text}}

</p>

</body>

```

- `<form action='/analyze' method='get'>`

- Above picture represent how from index page changes to analyze html page just write with the form in index.html

- `urlpatterns = [`
- `path('admin/', admin.site.urls),`
- `path('', views.index, name="index"),`
- `path('analyze/', views.analyze, name="analyze")`
- `]`

- This is the path it will follow as shown it will find views and check analyze

- `return render(request, 'analyze.html', params)`

- This will accept the request and follow what is written in the analyze.html and params is the parameters that is going to pass by function

- `return HttpResponse("Error")`

- It will print on the analyze.html page

- `djtext = request.GET.get('text', 'default')`
- `removepunc = request.GET.get('removepunc', 'off')`

- `request.GET.get` fetch the data that user had entered and save it into the variable `djtext`.

```
for index, char in enumerate(djtext):

    if not(djtext[index] == " " and djtext[index+1] == " "):

        analyzed=analyzed+char
```

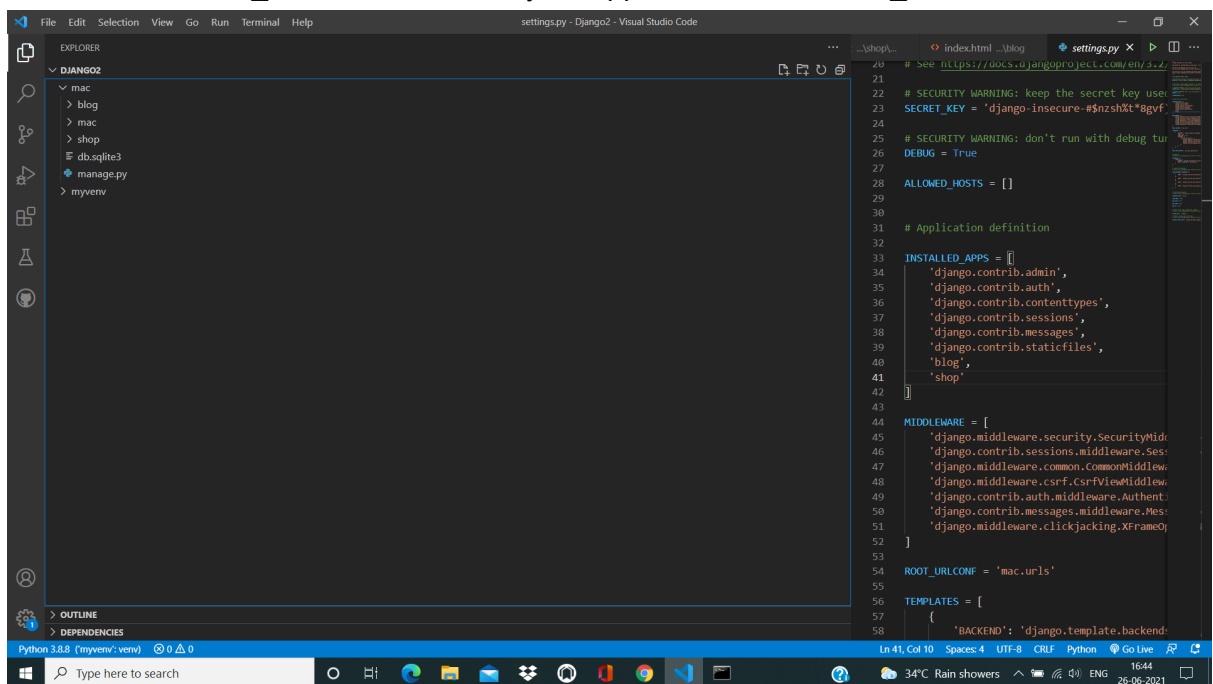
- Enumerate gives the index of each and every character as a result.
- <https://www.geeksforgeeks.org/enumerate-in-python/>

CSRF token and POST

- Cross Site Request Forgery
-

Adding apps in project

- Run python manage.py startapp name_of_your_app
- Open your project and open your file name settings.py
- And in INSTALLED_APPS add name of your app inside INSTALLED_APPS



- Mac is your project and blog and shop is your apps that you have created
- Create urls.py in your apps as it does not contain this file by default as in your project.

Creating pipeline for your app to connect apps to project

- In urls.py of your **project** write address of your apps as in shop and blog written below

```
from django.contrib import admin

from django.urls import path,include

urlpatterns = [

    path('admin/', admin.site.urls),

    path('shop/',include('shop.shopurls')),

    path('blog/',include('blog.blogurls')),

]
```

- Now in urls.py of your **apps** write

```
from django.contrib import admin

from django.urls import path

from. import views

urlpatterns = [

    path("", views.index,name="ShopHome"),

]
```

- Now create templates directory for your apps and inside templates create another directory and name it as apps and now create index.html
- In index.html create whatever you want you can use html css javascript or bootstrap

- Now in views.py of your apps write

```
from django.shortcuts import render

# Create your views here.

from django.http import HttpResponse


def index(request):

    return render(request, "shop/index.html")
```

Shop is your directory and index.html is your file to be access

Accessing static files in your website

- Create static folder and create another directory inside static directory and name it as of the app and create txt file named mystatic.txt and write any thing
- Now open index.html of your app and write

```
{% load static %}

<a href="{% static 'blog/mystatic.txt' %}"> Click me</a>
```

Models in Django

- python manage.py migrate
- This command create tables for sqlite3
- python manage.py makemigrations
- python manage.py migrate
- And change 'shop' to 'shop.apps.ShopConfig' in INSTALLED_APPS of settings.py of mac project.

Admin and Super User

- `python manage.py createsuperuser`
- Now put down your data.
-