1. First of all create the project
2. Run this command in cmd **“py -m venv <Django\_env\_name>”**
3. Now activate the Django environment
4. Just say **project\_name\scripts\activate.bat**
5. Create the Django Project using this command **django-admin startproject sampleapp**
6. Run the project once **py manage.py runserver**
7. Now Create the **views.py**

**from** django.http **import** HttpResponse  
  
**def** welcome(request):  
 **return** HttpResponse(**"Hello World"**)

1. In Urls.Py import function

**from** sampleapp.views **import** welcome

1. Now add RegEx

urlpatterns = [  
 path(**r'^admin/'**, admin.site.urls),  
 path(**r'welcome'**, welcome)  
 ]

1. Now change something in **urls.py**

**from** django.conf.urls **import** url, include

urlpatterns = [  
 url(**'^admin/'**, admin.site.urls),  
 url(**r'^$'**, welcome)  
]

**Apps, Modals, Migrations**

Migrations and Creating Super User

1. Show Migrations **py manage.py showmigrations**
2. Migrations Complete **py manage.py migrate**
3. Creating Super User **Py manage.py createsuperuser**

**Creating Apps**

1. Create app using this command **py manage.py startapp newapp**

**Creating Modals**

1. Create Class

**class** Student(models.Model):  
 name = models.CharField(max\_length=100, blank=**False**)  
 email = models.CharField(max\_length=100, blank=**False**)  
 Contact\_Number=models.CharField(max\_length=15, blank=**True**)

1. Do Migration
   1. py manage.py makemigrations
   2. py manage.py sqlmigrate newapp 0001
   3. py manage.py showmigrations
   4. py manage.py migrate

**Admin Site**

**Register your models for the admin panel**

1. Go to admin.py folder
2. Now add following code

**from** .models **import** Student  
  
admin.site.register(Student)

1. Add a student
2. Change the look you will write following code in student class

**def** \_\_str\_\_(self):  
 **return "{0} {1} {2}"**.format(  
 self.name,  
 self.email,  
 self.Contact\_Number  
 )

1. Now See again
2. Changing Header

~~admin.site.register(Student)~~

@admin.register(Student)  
**class** StudentAdmin(admin.ModelAdmin):  
 list\_display =(**'name'**,**'email'**,**'Contact\_Number'**)

**Model API**

1. py manage.py shell
2. from newapp.models import Student
3. Student.objects.all()
4. Student.objects.get(id=1)
5. s=Student.objects.get(pk=1)
6. s.name=”Sourabh”
7. s.save()
8. s=Student.objects.all()
9. for a in s:  
    print(a.name)
10. s.count()

**Template**

1. Add “templates” folder.
2. Create HTML file **Home.html**.
3. Create any Sample html content
4. Now in **views.py** folder

**def** home(request):  
 **return** render(request,**"Home.html"**)

1. Create **urls.py** file in your application folder.
2. Write this code

**from** .views **import** home  
  
urlpatterns = [  
 url(**r'^home$'**,home)  
]

1. Now in the main URL File include the file

url(**r'^newapp/'**,include(**'newapp.urls'**)),

1. Now check the URL.

**Sending Data Models to View**

**def** home(request):  
 **return** render(request,**"Home.html"**,  
 {**'Name'**:**'Sourabh Somani'**})

**Static Content Add**

1. Add folder with name “**static**”.
2. Add css folder and create a style.css file
3. And write style like as follows

<**link rel="stylesheet" href="**{% **static '/css/style.css'** %}**"**/>

**Base Layout**

1. Create base.html
2. Create block like as follows

{% **block content** %}  
  
{% **endblock** %}

1. Extends in the child page

{% **extends "base.html"** %}

1. Again, write the block code for the child page

**Creating Form**

1. Define a new method in views.py folder.
2. Create a **Form** with fields
3. Add **CSRF Token**
4. {% **csrf\_token** %}
5. Add View Code

**from** django.views.decorators.csrf **import** csrf\_exempt

**import** json  
@csrf\_exempt  
**def** RegisterStudent(request):  
 **if**(request.method==**'POST'**):  
 d=request.POST  
 Name = d.get(**"StudentName"**, **"0"**)  
 Email = d.get(**"StudentEmail"**, **"0"**)  
 contact\_number = d.get(**"StudentContactNumber"**, **"0"**)  
 Student.objects.create(name=Name,email=Email,Contact\_Number=contact\_number)  
 **return** home(request)  
 **return** render(request,**"RegisterStudent.html"**)