python -m django startproject HariOmJuiceBar

python manage.py runserver

Urls.py

Request comes to Urls.py in Projects, then it goes to apps url.py

Python manage.py

# this will create new app :-

Python manage.py startapp <appname> (home)

In urls.py in Main Project

from django.contrib import admin

from django.urls import path,  include

urlpatterns = [

    path('admin/', admin.site.urls),

    path('', include('home.urls')),   // added this

]

Also create Urls.py in home app

from django.contrib import admin

from django.urls import path

from home import views

urlpatterns = [

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

    path("about", views.about, name="about"),

    path("services", views.services, name="services"),

    path("contact", views.contact, name="contact"),

]

Views.py

from django.shortcuts import render, HttpResponse

# Create your views here.

def index(request):

    return HttpResponse("This is Home Page")

def about(request):

    return HttpResponse("This is About")

def services(request):

    return HttpResponse("This is services")

def contact(request):

    return HttpResponse("This is contact")

Static and Templates folder at project level

Settings.py

# Added Manually

STATICFILES\_DIRS = [

    os.path.join(BASE\_DIR, "static"),

    '/var/www/static/',

]

<http://127.0.0.1:8000/static/test.txt>

TEMPLATES = [

    {

        'BACKEND': 'django.template.backends.django.DjangoTemplates',

        'DIRS': [os.path.join(BASE\_DIR, "templates")],

        'APP\_DIRS': True,

Create index.html, or html pages in templates folder

<!doctype html>

<html lang="en">

  <head>

    <meta charset="utf-8">

    <meta name="viewport" content="width=device-width, initial-scale=1">

    <title>Bootstrap demo</title>

  </head>

  <body>

    <h1>Hello, world!</h1>

    <p>Variable value is {{variable1}}</p>

    <p>Variable value is {{variable2}}</p>

</body>

</html>

Views.py

from django.shortcuts import render, HttpResponse

# Create your views here.

def index(request):

    context = {

        "variable1" :"This is Yash",

        "variable2" :"This is Sunny"

    }

    return render(request, "index.html", context)

    # return render(request, "index.html")

    # return HttpResponse("This is Home Page")

Bootstrap imported in index.html

Index.html

<!doctype html>

<html lang="en">

  <head>

    <meta charset="utf-8">

    <meta name="viewport" content="width=device-width, initial-scale=1">

    <title>Hari Om Juice Bar</title>

    <link href="https://cdn.jsdelivr.net/npm/bootstrap@5.3.3/dist/css/bootstrap.min.css" rel="stylesheet" integrity="sha384-QWTKZyjpPEjISv5WaRU9OFeRpok6YctnYmDr5pNlyT2bRjXh0JMhjY6hW+ALEwIH" crossorigin="anonymous">

  </head>

  <body>

    {% comment %} <p>Variable value is {{variable1}}</p>

    <p>Variable value is {{variable2}}</p> {% endcomment %}

    <nav class="navbar navbar-expand-lg bg-body-tertiary">

        <div class="container-fluid">

          <a class="navbar-brand" href="#">Hari Om Juice Bar</a>

          <button class="navbar-toggler" type="button" data-bs-toggle="collapse" data-bs-target="#navbarSupportedContent" aria-controls="navbarSupportedContent" aria-expanded="false" aria-label="Toggle navigation">

            <span class="navbar-toggler-icon"></span>

          </button>

          <div class="collapse navbar-collapse" id="navbarSupportedContent">

            <ul class="navbar-nav me-auto mb-2 mb-lg-0">

              <li class="nav-item">

                <a class="nav-link active" aria-current="page" href="/">Home</a>

              </li>

              <li class="nav-item">

                <a class="nav-link" href="/about">About Us</a>

              </li>

              <li class="nav-item dropdown">

                <a class="nav-link dropdown-toggle" href="/services" role="button" data-bs-toggle="dropdown" aria-expanded="false">

                  Services

                </a>

                <ul class="dropdown-menu">

                  <li><a class="dropdown-item" href="/services">Papaya</a></li>

                  <li><a class="dropdown-item" href="#">Mango</a></li>

                  <li><hr class="dropdown-divider"></li>

                  <li><a class="dropdown-item" href="#">Family Pack</a></li>

                </ul>

              </li>

              <li class="nav-item">

                <a class="nav-link" href="/contact">Contact Us</a>

              </li>

            </ul>

            <form class="d-flex" role="search">

              <input class="form-control me-2" type="search" placeholder="Search" aria-label="Search">

              <button class="btn btn-outline-success" type="submit">Search</button>

            </form>

          </div>

        </div>

      </nav>

    <script src="https://cdn.jsdelivr.net/npm/bootstrap@5.3.3/dist/js/bootstrap.bundle.min.js" integrity="sha384-YvpcrYf0tY3lHB60NNkmXc5s9fDVZLESaAA55NDzOxhy9GkcIdslK1eN7N6jIeHz" crossorigin="anonymous"></script>

  </body>

</html>

/Admin

Login not working

python manage.py makemigrations

python manage.py migrate

python manage.py createsuperuser

to change Django admin page header title

use Urls.py

admin.site.site\_header = "Harim Om Juice Bar Admin"

admin.site.site\_title = "Hari Om Juice Bar Portal"

admin.site.index\_title = "Welcome to Hari Om Juice Bar"

d# Template Inheritance

Base.html

Header footer same and store at one place

Add block

As,

      {% block body %}

      {% endblock body %}

Base.html

<!doctype html>

<html lang="en">

  <head>

    <meta charset="utf-8">

    <meta name="viewport" content="width=device-width, initial-scale=1">

    <title> {% block title %}{% endblock title %} | Hari Om Juice Bar</title>

    <link href="https://cdn.jsdelivr.net/npm/bootstrap@5.3.3/dist/css/bootstrap.min.css" rel="stylesheet" integrity="sha384-QWTKZyjpPEjISv5WaRU9OFeRpok6YctnYmDr5pNlyT2bRjXh0JMhjY6hW+ALEwIH" crossorigin="anonymous">

  </head>

  <body>

    {% comment %} <p>Variable value is {{variable1}}</p>

    <p>Variable value is {{variable2}}</p> {% endcomment %}

    <nav class="navbar navbar-expand-lg bg-body-tertiary">

        <div class="container-fluid">

          <a class="navbar-brand" href="#">Hari Om Juice Bar</a>

          <button class="navbar-toggler" type="button" data-bs-toggle="collapse" data-bs-target="#navbarSupportedContent" aria-controls="navbarSupportedContent" aria-expanded="false" aria-label="Toggle navigation">

            <span class="navbar-toggler-icon"></span>

          </button>

          <div class="collapse navbar-collapse" id="navbarSupportedContent">

            <ul class="navbar-nav me-auto mb-2 mb-lg-0">

              <li class="nav-item">

                <a class="nav-link active" aria-current="page" href="/">Home</a>

              </li>

              <li class="nav-item">

                <a class="nav-link" href="/about">About Us</a>

              </li>

              <li class="nav-item dropdown">

                <a class="nav-link dropdown-toggle" href="/services" role="button" data-bs-toggle="dropdown" aria-expanded="false">

                  Services

                </a>

                <ul class="dropdown-menu">

                  <li><a class="dropdown-item" href="/services">Papaya</a></li>

                  <li><a class="dropdown-item" href="#">Mango</a></li>

                  <li><hr class="dropdown-divider"></li>

                  <li><a class="dropdown-item" href="#">Family Pack</a></li>

                </ul>

              </li>

              <li class="nav-item">

                <a class="nav-link" href="/contact">Contact Us</a>

              </li>

            </ul>

            <form class="d-flex" role="search">

              <input class="form-control me-2" type="search" placeholder="Search" aria-label="Search">

              <button class="btn btn-outline-success" type="submit">Search</button>

            </form>

          </div>

        </div>

      </nav>

      {% block body %}

      {% endblock body %}

      <script src="https://cdn.jsdelivr.net/npm/bootstrap@5.3.3/dist/js/bootstrap.bundle.min.js" integrity="sha384-YvpcrYf0tY3lHB60NNkmXc5s9fDVZLESaAA55NDzOxhy9GkcIdslK1eN7N6jIeHz" crossorigin="anonymous"></script>

    </body>

</html>

To render blocks in index.html

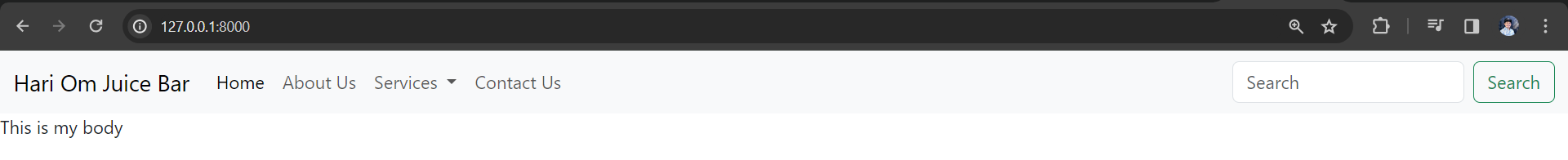
{% extends "base.html" %}

{% block title %}Home{% endblock title %}

{% block body %}

This is my body

{% endblock body %}



Create pages for about, index, services, contact

And connect to view to render pages

from django.shortcuts import render, HttpResponse

# Create your views here.

def index(request):

    context = {

        "variable1" :"This is Yash",

        "variable2" :"This is Sunny"

    }

    return render(request, "index.html", context)

    # return render(request, "index.html")

    # return HttpResponse("This is Home Page")

def about(request):

    # return HttpResponse("This is About")

    return render(request, "about.html")

def services(request):

    # return HttpResponse("This is services")

    return render(request, "services.html")

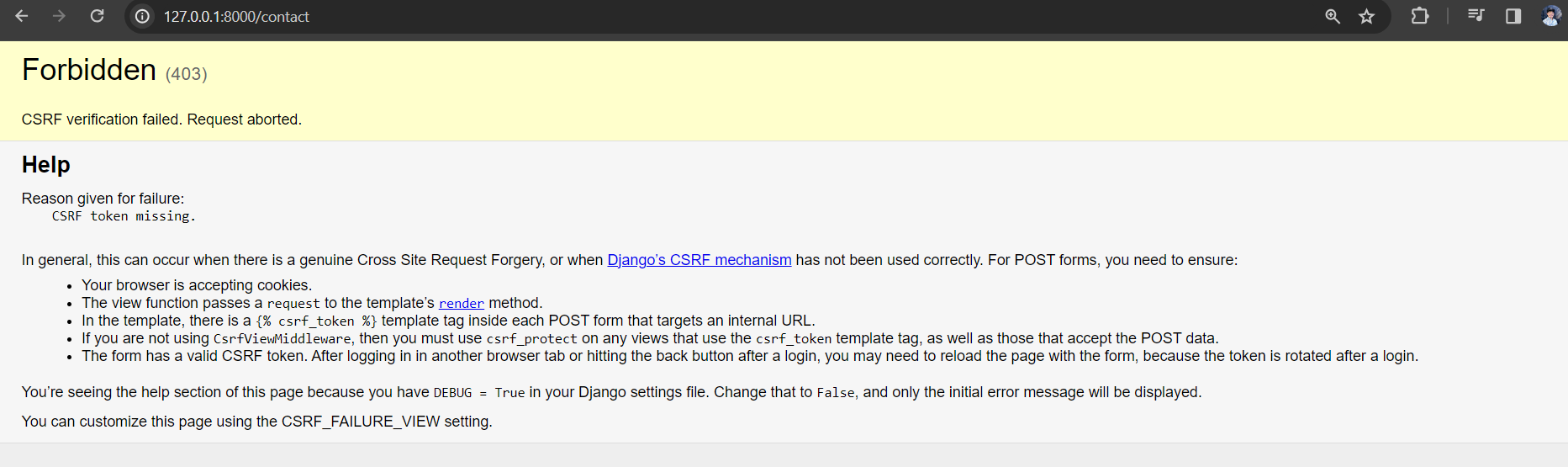
def contact(request):

    # return HttpResponse("This is contact")

    return render(request, "contact.html")

modified index.html and contact.html page

when click on submit button of form in contact.html page getting this



    <form class="row g-3" method="post" action="/contact">

        {% csrf\_token %}

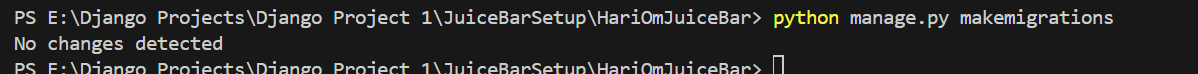
Add csrf token for this

    <form class="row g-3" method="post" action="/contact">

Models.py

python manage.py makemigrations

//this make file of changes we made



We need to register model

Admin.py

from django.contrib import admin

from home.models import Contact

# Register your models here.

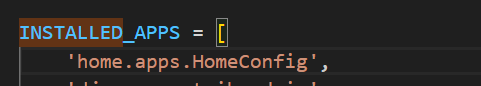
admin.site.register(Contact)

open apps.py



Copy HomeConfig name from apps.py to

add it in settings.py



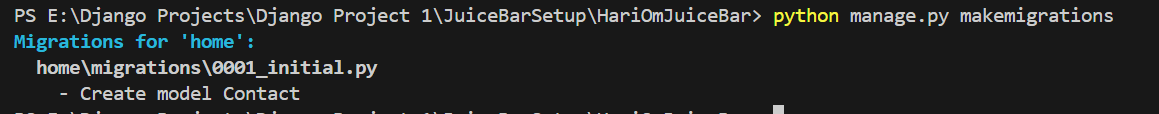
Now run migration

**python manage.py makemigrations**

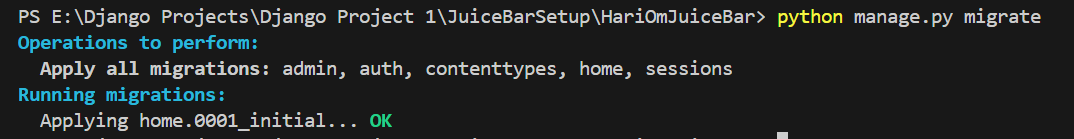
//make migrations = create changes and store in file

Migrate – apply pending changes created by make migrations

//changes information will we save and when we make migrate we apply those changes



**python manage.py migrate**



Now can open admin section from server and we can see Contact model registered

Contact.html

{% extends "base.html" %}

{% block title %}Contact{% endblock title %}

{% block body %}

{% comment %} This is my Contact {% endcomment %}

<div class="container-fluid px-0 mb-3">

    <img src="static/img/contact.jpg" class="d-block w-100 mx-0" alt="...">

</div>

<div class="container mb-3 py-4">

    <h1 class='text-center'>

        Contact Us

    </h1>

    <form class="row g-3" method="post" action="/contact">

        {% csrf\_token %}

        <div class="col-12">

            <label for="name" class="form-label">Name</label>

            <input type="text" class="form-control" id="name" name="name" placeholder="Enter your Name">

        </div>

        <div class="col-md-6">

            <label for="email" class="form-label">Email</label>

            <input type="email" class="form-control" id="email" name="email" placeholder="Enter your Email">

        </div>

        <div class="col-12">

            <label for="inputPassword4" class="form-label">Phone Number</label>

            <input type="phone" class="form-control" id="phone" name="phone" placeholder="Enter your Phone Number">

        </div>

        <div class="col-12">

            <label for="inputAddress" class="form-label">Address</label>

            <input type="text" class="form-control" id="inputAddress" placeholder="1234 Main St">

        </div>

        <div class="col-12">

            <label for="inputAddress2" class="form-label">Address 2</label>

            <input type="text" class="form-control" id="inputAddress2" placeholder="Apartment, studio, or floor">

        </div>

        <div class="col-md-6">

            <label for="inputCity" class="form-label">City</label>

            <input type="text" class="form-control" id="inputCity">

        </div>

        <div class="col-md-4">

            <label for="inputState" class="form-label">State</label>

            <select id="inputState" class="form-select">

                <option selected>Choose...</option>

                <option>...</option>

            </select>

        </div>

        <div class="col-md-2">

            <label for="inputZip" class="form-label">Zip</label>

            <input type="text" class="form-control" id="inputZip">

        </div>

        <div class="col-12">

            <label for="desc" class="form-label">Tell me why you want to contact me</label>

            <input class="form-control" id="desc" rows="3" name="desc" placeholder="">

        </div>

        <div class="col-12">

            <div class="form-check">

                <input class="form-check-input" type="checkbox" id="gridCheck">

                <label class="form-check-label" for="gridCheck">

                    Check me out

                </label>

            </div>

        </div>

        <div class="col-12">

            <button type="submit" class="btn btn-primary">Sign in</button>

        </div>

    </form>

</div>

{% endblock body %}

Views.py

from django.shortcuts import render, HttpResponse

from datetime import datetime

from home.models import Contact

def contact(request):

    # return HttpResponse("This is contact")

    if request.method == 'POST':

        name = request.POST.get('name')

        email = request.POST.get('email')

        phone = request.POST.get('phone')

        desc = request.POST.get('desc')

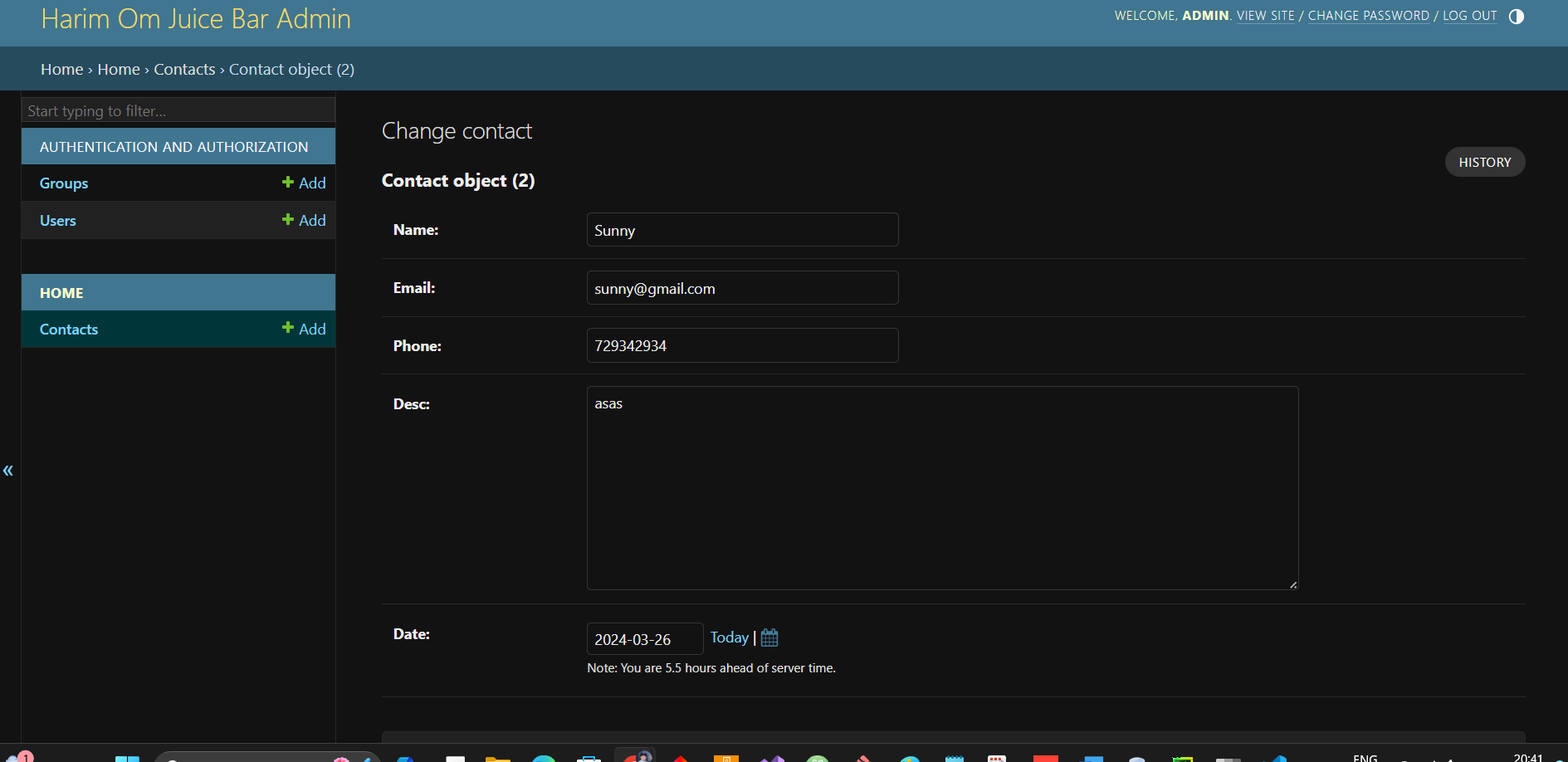
        contact = Contact(name=name, email=email, phone=phone, desc=desc,date=datetime.today())

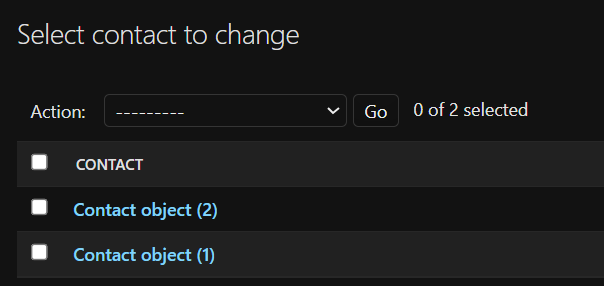
        contact.save()

    return render(request, "contact.html")

now when we fill the form and submit,

in admin section se can see user feedback details





Here we are able to see Contact.obj but I need name of user

So use

In models.py

from django.db import models

# Create your models here.

class Contact(models.Model):

    name = models.CharField(max\_length=122)

    email = models.EmailField()

    phone = models.CharField(max\_length=122)

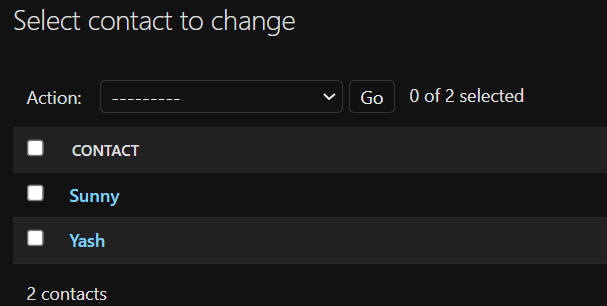
    desc = models.TextField()

    date = models.DateField()

    def \_\_str\_\_(self):

        # return self.name+" " + self.email

        return self.name



When I submit the form the message should popup so we use,

In setting.py and views .py import this

from django.contrib import messages

in views.py

def contact(request):

    # return HttpResponse("This is contact")

    if request.method == 'POST':

        name = request.POST.get('name')

        email = request.POST.get('email')

        phone = request.POST.get('phone')

        desc = request.POST.get('desc')

        contact = Contact(name=name, email=email, phone=phone, desc=desc,date=datetime.today())

        contact.save()

        messages.SUCCESS(request, "Cheers!!! Youe message has been sent to admin.")

    return render(request, "contact.html")

//to display this message in template add it in views as below

in base.py

we need to add alerts

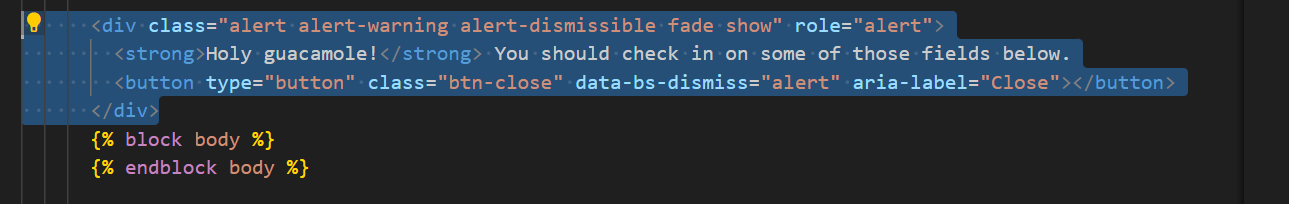
copy from bootstrap

      <div class="alert alert-warning alert-dismissible fade show" role="alert">

        <strong>Holy guacamole!</strong> You should check in on some of those fields below.

        <button type="button" class="btn-close" data-bs-dismiss="alert" aria-label="Close"></button>

      </div>

Below nav bar at last 

Add in base.html

      {% if messages%}

      {% for message in messages%}

      <div class="alert alert-{{message.tags}} alert-dismissible fade show my-0" role="alert">

        {{message}}

        <button type="button" class="btn-close" data-bs-dismiss="alert" aria-label="Close">

        <span aria-hidden="true">&times;</span>

        </button>

      </div>

      {%endfor%}

      {%endif%}

Base.html

<!doctype html>

<html lang="en">

  <head>

    <meta charset="utf-8">

    <meta name="viewport" content="width=device-width, initial-scale=1">

    <title> {% block title %}{% endblock title %} | Hari Om Juice Bar</title>

    <link href="https://cdn.jsdelivr.net/npm/bootstrap@5.3.3/dist/css/bootstrap.min.css" rel="stylesheet" integrity="sha384-QWTKZyjpPEjISv5WaRU9OFeRpok6YctnYmDr5pNlyT2bRjXh0JMhjY6hW+ALEwIH" crossorigin="anonymous">

  </head>

  <body>

    {% comment %} <p>Variable value is {{variable1}}</p>

    <p>Variable value is {{variable2}}</p> {% endcomment %}

    <nav class="navbar navbar-expand-lg bg-body-tertiary">

        <div class="container-fluid">

          <a class="navbar-brand" href="#">Jay Ganesh Juice Bar</a>

          <button class="navbar-toggler" type="button" data-bs-toggle="collapse" data-bs-target="#navbarSupportedContent" aria-controls="navbarSupportedContent" aria-expanded="false" aria-label="Toggle navigation">

            <span class="navbar-toggler-icon"></span>

          </button>

          <div class="collapse navbar-collapse" id="navbarSupportedContent">

            <ul class="navbar-nav me-auto mb-2 mb-lg-0">

              <li class="nav-item">

                <a class="nav-link active" aria-current="page" href="/">Home</a>

              </li>

              <li class="nav-item">

                <a class="nav-link" href="/about">About Us</a>

              </li>

              <li class="nav-item dropdown">

                <a class="nav-link dropdown-toggle" href="/services" role="button" data-bs-toggle="dropdown" aria-expanded="false">

                  Services

                </a>

                <ul class="dropdown-menu">

                  <li><a class="dropdown-item" href="/services">Papaya</a></li>

                  <li><a class="dropdown-item" href="#">Mango</a></li>

                  <li><hr class="dropdown-divider"></li>

                  <li><a class="dropdown-item" href="#">Family Pack</a></li>

                </ul>

              </li>

              <li class="nav-item">

                <a class="nav-link" href="/contact">Contact Us</a>

              </li>

            </ul>

            <form class="d-flex" role="search">

              <input class="form-control me-2" type="search" placeholder="Search" aria-label="Search">

              <button class="btn btn-outline-success" type="submit">Search</button>

            </form>

          </div>

        </div>

      </nav>

      {% if messages%}

      {% for message in messages%}

      <div class="alert alert-{{message.tags}} alert-dismissible fade show my-0" role="alert">

        {{message}}

        <button type="button" class="btn-close" data-bs-dismiss="alert" aria-label="Close">

        <span aria-hidden="true">&times;</span>

        </button>

      </div>

      {%endfor%}

      {%endif%}

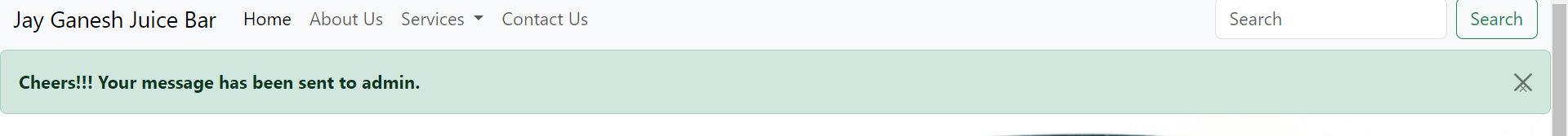
      {% block body %}

      {% endblock body %}

      <script src="https://cdn.jsdelivr.net/npm/bootstrap@5.3.3/dist/js/bootstrap.bundle.min.js" integrity="sha384-YvpcrYf0tY3lHB60NNkmXc5s9fDVZLESaAA55NDzOxhy9GkcIdslK1eN7N6jIeHz" crossorigin="anonymous"></script>

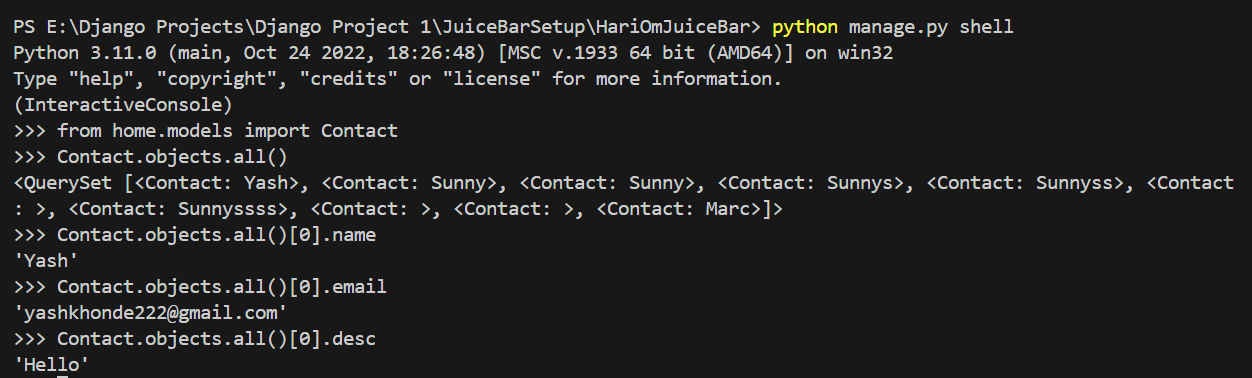
    </body>

</html>



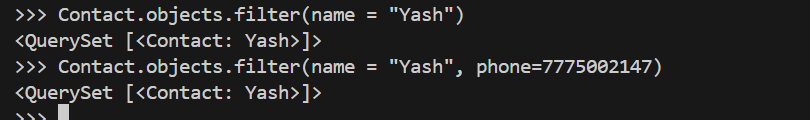
Python manage.py shell

//we can access data from database using it



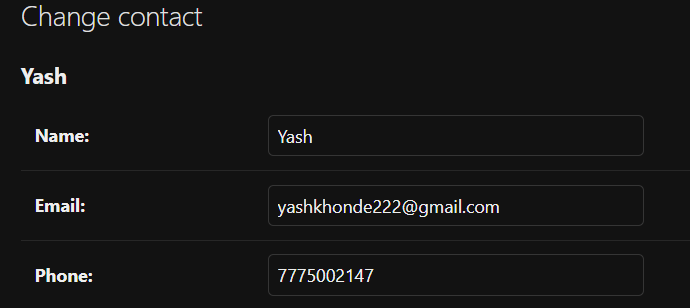
//what if I want to filter specific contacts

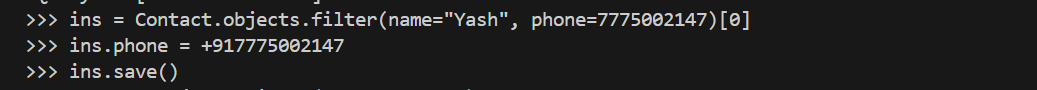
e.g: - where name =”Yash”



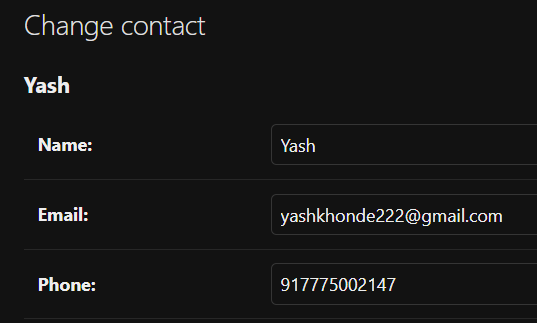
<https://docs.djangoproject.com/en/5.0/topics/db/queries/>

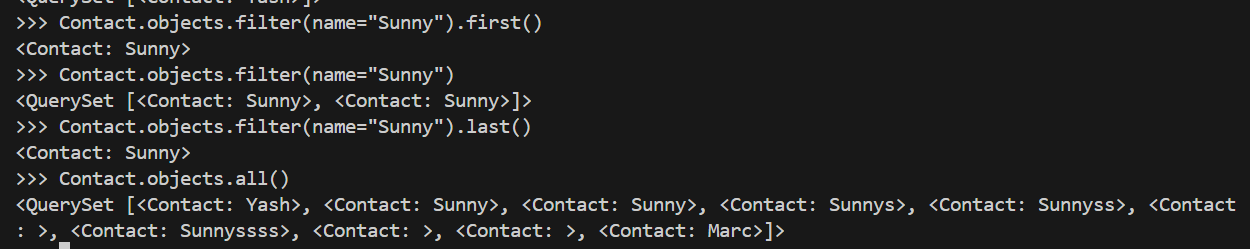
before:





After this: when we save instance



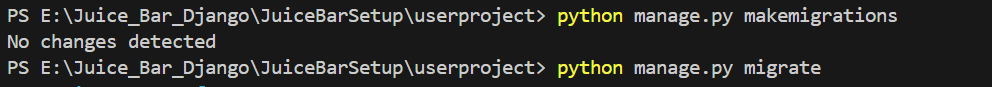






App2 – Login User

python -m django startproject userproject





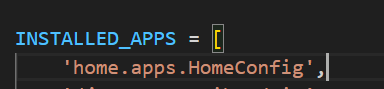
Now register new app we created in settings.py

Goto apps.py and copy name HomeConfig and paste it in settings.py in main project

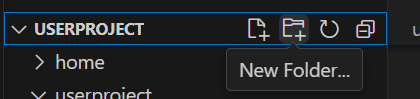
Apps.py



Settings.py



Create static and templates folder at project level



Now set static dirs. In settings.py file

Settings.py

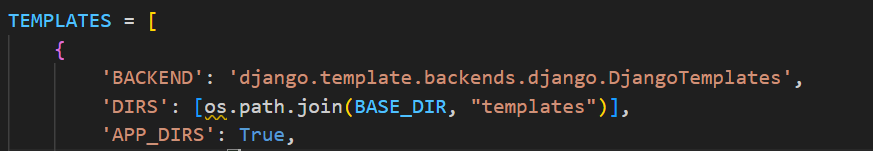
# Added Manually

STATICFILES\_DIRS = [

    os.path.join(BASE\_DIR, "static"),

]

Also set templates dir



Now create templates in templates folder

Like index.html, login.html

In main project urls.py

Add paths

from django.contrib import admin

from django.urls import path, include

urlpatterns = [

    path('admin/', admin.site.urls),

    path('', include('home.urls')),

]

Now create urls.py in home app that we created

from django.contrib import admin

from django.urls import path, include

from home import views

urlpatterns = [

    path('', views.index, name = "home"),

    path('login', views.login, name = "login"),

    path('logout', views.logout, name = "logout"),

]

Now create functions in view with same name that is views.function name

from django.shortcuts import render, redirect

# Create your views here.

def index(request):

    render(request, "index.html")

def login(request):

    render(request, "login.html")

def logout(request):

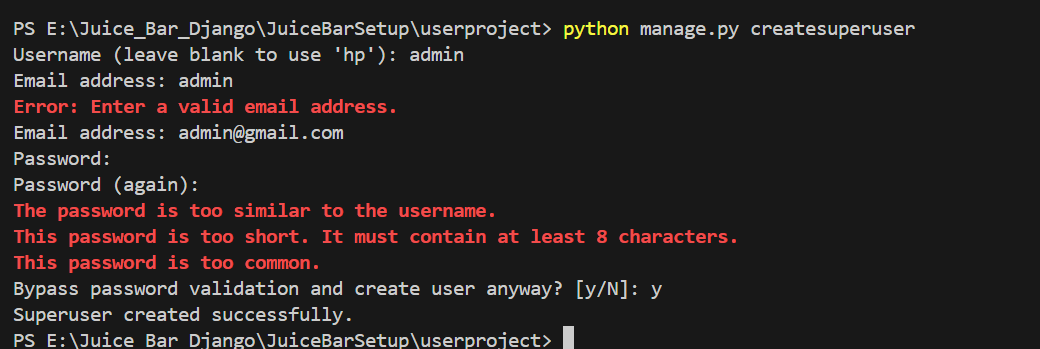
    render(request, "logout.html")

Now we need to create User

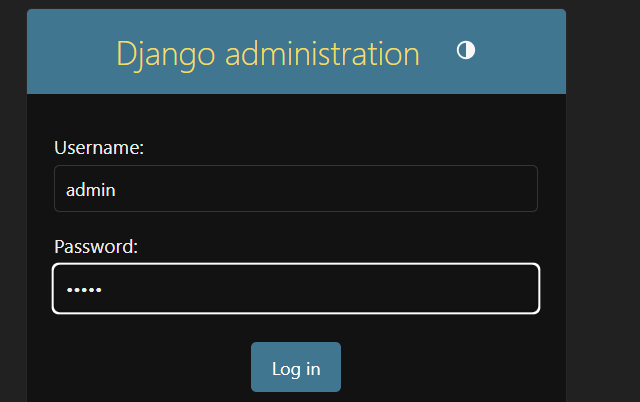
Will create it porgramatically

First will create super user

python manage.py create superuser

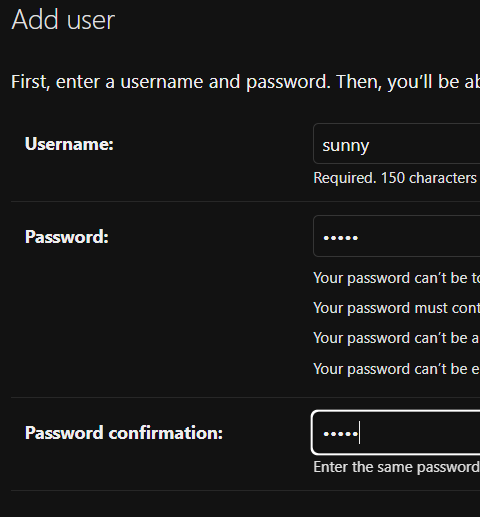


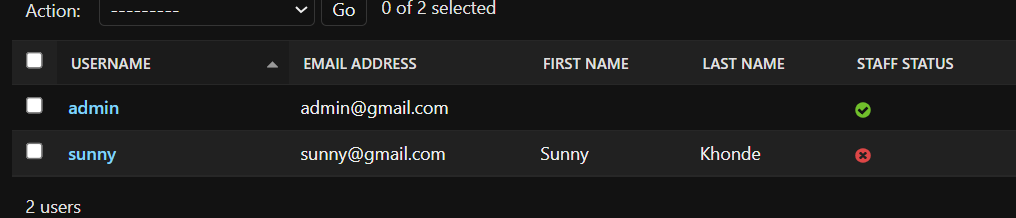
Now login as admin



Now add user in users







Now sunny is user

Now will create UI for login.html

//copy starter template from bootstrap

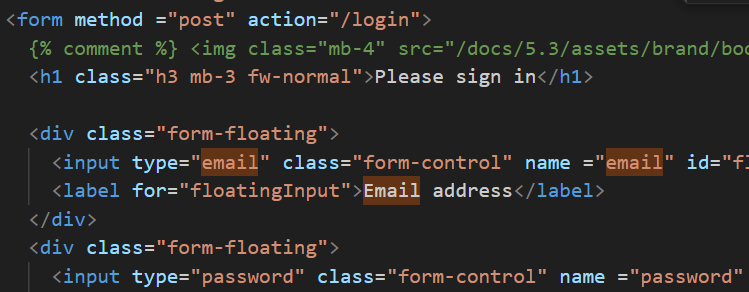
Also copy login page template in index.html

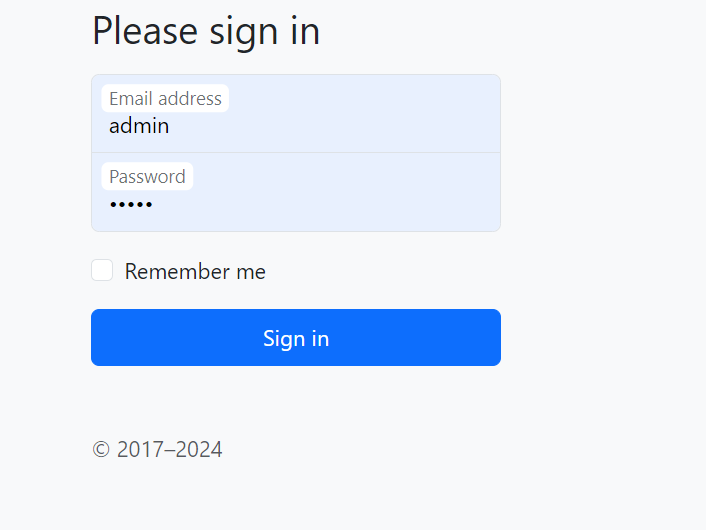
<https://getbootstrap.com/docs/5.3/getting-started/introduction/>

<https://getbootstrap.com/docs/5.3/examples/sign-in/>

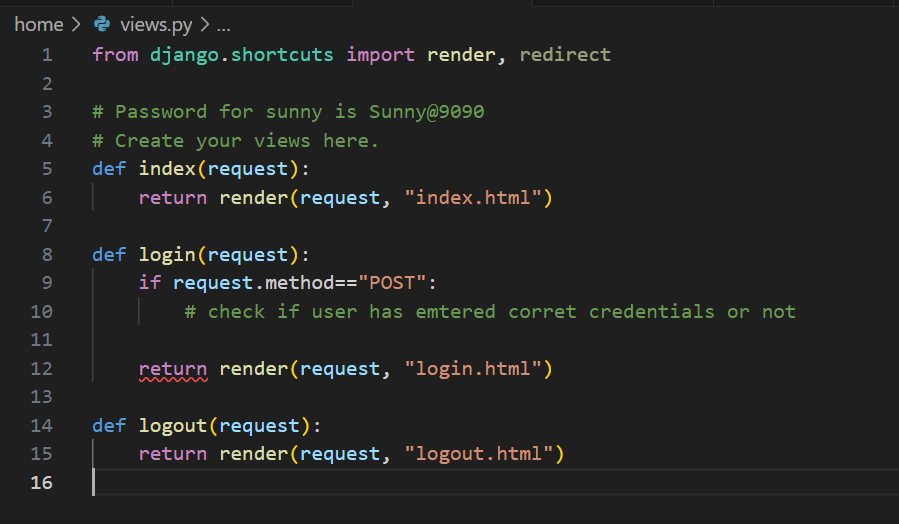
rc- view page source

add name, action also and method as post





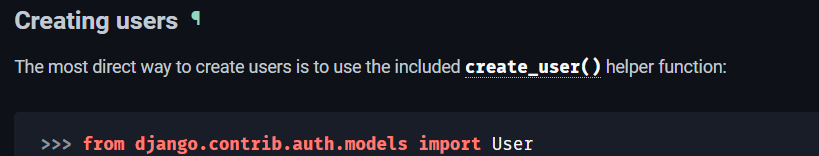
Views.py



Type Django auth in browser

<https://docs.djangoproject.com/en/5.0/topics/auth/>

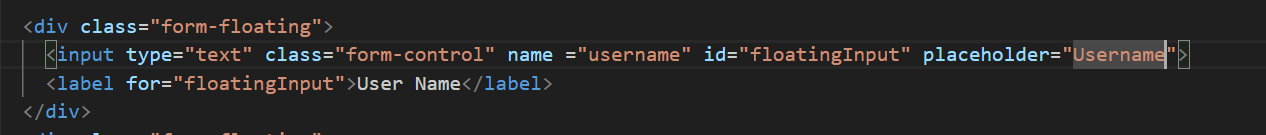
import it in views.py



from django.contrib.auth.models import User

will take user name not email for login in login.html

so change it to username



In Urls.py change it to LogoutUser, loginUser

from django.contrib import admin

from django.urls import path, include

from home import views

urlpatterns = [

    path('', views.index, name = "home"),

    path('login', views.loginUser, name = "login"),

    path('logout', views.logoutUser, name = "logout"),

]

Urls.py

from django.contrib import admin

from django.urls import path, include

from home import views

urlpatterns = [

    path('', views.index, name = "home"),

    path('login', views.loginUser, name = "login"),

    path('logout', views.logoutUser, name = "logout"),

]

Views.py

from django.shortcuts import render, redirect

from django.contrib.auth.models import User

from django.contrib.auth import logout, authenticate, login

# Password for sunny is Sunny@9090

# Create your views here.

def index(request):

    if request.user.is\_anonymous:

        return redirect("/login")

    return render(request, "index.html")

def loginUser(request):

    if request.method=="POST":

        username = request.POST.get("username")

        password = request.POST.get("password")

        # check if user has emtered corret credentials or not

        user = authenticate(username=username, password=password)

        if user is not None:

        # A backend authenticated the credentials

            login(request, user)

            return redirect("/")

        else:

            # No backend authenticated the credentials

            return render(request, "login.html")

    return render(request, "login.html")

def logoutUser(request):

    logout(request)

    return redirect("/login")

Index.html

<!doctype html>

<html lang="en">

  <head>

    <meta charset="utf-8">

    <meta name="viewport" content="width=device-width, initial-scale=1">

    <title>Logged in User</title>

  </head>

  <body>

      welcome {{request.user}}

      <p>This is Juice Bar HUB</p>

      <a href="/logout">Logout</a>

  </body>

</html>

Open index.html will redirected to login page

Check login using wrong password

Its done