Model

from django.db import models  
from django.contrib.auth.models import User  
  
# User -built-in model used  
  
# Create your models here.  
class Product(models.Model):  
 name=models.CharField(max\_length=50)  
 price=models.FloatField()  
 details=models.TextField(blank=True)  
  
 def \_\_str\_\_(self):  
 return self.name  
  
class CartItem(models.Model):  
 user=models.ForeignKey(User,on\_delete=models.CASCADE)  
 product=models.ForeignKey(Product,on\_delete=models.CASCADE)  
 quantity=models.PositiveIntegerField(default=1)

admin

from django.contrib import admin  
from .models import Product# Register your models here.  
admin.site.register(Product)

regn.html

<form method="post">{% csrf\_token %}  
 <input type="text" name="username" placeholder="Username"><br>  
 <input type="email" name="email" placeholder="email"><br>  
 <input type="password" name="password" placeholder="Password"><br>  
 <button type="submit">Register</button>  
</form>

userLogin

<form method="post">{% csrf\_token %}  
 <input type="text" name="username" placeholder="Username">  
 <input type="password" name="password" placeholder="Password">  
 <button type="submit">Login</button>  
</form>

Products

<h1>Product List</h1>  
  
  
 {% for product in products %}  
 <div style=" border: 2px solid; width: 200px;">  
 <h1>{{ product.name }}</h1> <br> <p>Price:</p>Rs.{{ product.price }}<br>  
 <a href="{% url 'add\_to\_cart' product.id %}">Add to Cart</a>  
  
 </div>  
 {% endfor %}  
  
  
<a href="{% url 'logout' %}">Logout</a>

Cart

<h1>Your Cart</h1>  
<ol>  
 {% for item in cart\_items %}  
  
 <li><h4>{{ item.product.name }}</h4> <br>  
 Price:Rs.{{ item.product.price }} <br>  
 Quantity: {{ item.quantity }}  
 <a href="{% url 'delete\_from\_cart' item.id %}">Remove</a>  
 </li>  
 {% endfor %}  
</ol>  
<a href="{% url 'product\_list' %}">Continue Shopping</a><br>  
<a href="{% url 'logout' %}">Logout</a>

Urls

from django.contrib import admin  
from django.urls import path  
from app1 import views  
  
urlpatterns = [  
 path(**'admin/'**, admin.site.urls),  
 path(**''**, views.register, name=**'register'**),  
 path(**'login/'**, views.user\_login, name=**'login'**),  
 path(**'logout/'**, views.user\_logout, name=**'logout'**),  
 path(**'product\_list/'**, views.product\_list, name=**'product\_list'**),  
 path(**'add\_to\_cart/<int:product\_id>/'**, views.add\_to\_cart, name=**'add\_to\_cart'**),  
 path(**'view\_cart/'**, views.view\_cart, name=**'view\_cart'**),  
 path(**'delete\_from\_cart/<int:cart\_item\_id>/'**, views.delete\_from\_cart, name=**'delete\_from\_cart'**),  
]

views

from django.shortcuts import render, redirect  
from django.http import HttpResponse  
from .models import Product,CartItem  
from django.contrib.auth.models import User  
from django.contrib import messages  
  
# Create your views here.  
def register(request):  
 if request.method == **'POST'**:  
 username = request.POST[**'username'**]  
 password = request.POST[**'password'**]  
 email=request.POST[**'email'**]  
  
 if User.objects.filter(username=username).exists():  
 return HttpResponse(**'user exists'**)  
 else:  
 user = User(username=username,email=email)  
 user.set\_password(password)  
 user.save()  
  
 messages.success(request, **"User registered successfully!"**)  
 return redirect(**"/login"**)  
  
 return render(request, **"registration.html"**)  
  
  
def user\_login(request):  
 if request.method == **'POST'**:  
  
 username = request.POST[**'username'**]  
 password = request.POST[**'password'**]  
  
 user=User.objects.get(username=username)  
  
 if user.check\_password(password):  
  
 request.session[**'my\_user'**] = username # 'my\_user'= scession variable  
 return redirect(**'product\_list'**)  
  
 else:  
  
 return HttpResponse(**'Invalid credentials.'**)  
 return render(request, **'userLogin.html'**)  
  
  
def user\_logout(request):  
 request.session.flush() # clear session  
 return redirect(**'login'**)  
  
def product\_list(request):  
 if **'my\_user'** not in request.session:  
 return redirect(**'login'**)  
 products = Product.objects.all()  
 return render(request, **'products\_page.html'**, {**'products'**: products})  
  
def add\_to\_cart(request, product\_id):  
  
 if **'my\_user'** not in request.session:  
 return redirect(**'login'**)  
  
 username = request.session[**'my\_user'**]  
 user = User.objects.get(username=username)  
 product = Product.objects.get(id=product\_id)  
 # print(username,user,product)  
 # Add the product to the cart  
 cart\_item = CartItem.objects.filter(user=user, product=product).first()  
 if cart\_item:  
 cart\_item.quantity += 1  
 cart\_item.save()  
 else:  
 CartItem.objects.create(user=user,product=product,quantity=1)  
  
 return redirect(**'view\_cart'**)  
  
def view\_cart(request):  
 if **'my\_user'** not in request.session:  
 return redirect(**'login'**)  
  
 username = request.session[**'my\_user'**]  
 user = User.objects.get(username=username)  
  
 cart\_items = CartItem.objects.filter(user=user)  
 return render(request, **'cart.html'**, {**'cart\_items'**: cart\_items})  
  
  
def delete\_from\_cart(request, cart\_item\_id):  
  
 cart\_item = CartItem.objects.get(id=cart\_item\_id)  
  
 # if cart\_item:  
 if cart\_item.quantity > 1:  
 cart\_item.quantity -= 1  
 cart\_item.save()  
  
 else:  
 cart\_item.delete()  
 return redirect(**'view\_cart'**)