Views.py:

```python
from django.contrib.auth import authenticate, login, logout
from django.contrib.auth.decorators import login_required
from django import forms
from django.shortcuts import render, redirect
from django.http import HttpResponseRedirect, HttpResponse
from django.urls import reverse
from datetime import datetime

class NewDataForm(forms.Form):
    def for_edit_product(self, nam, pric, quant, *args, **kwargs):
        super().__init__(*args, **kwargs)
        self.fields['name'].initial = nam
        self.fields['price'].initial = pric
        self.fields['quantity'].initial = quant

    name = forms.CharField(
        widget=forms.TextInput(attrs={
            'id': 'id_name',
            'placeholder': 'Enter product name',
            'class': 'form-control',
            'style': 'width: 100%; padding: 10px; margin-bottom: 10px;'
        })
    )
    price = forms.IntegerField(
        widget=forms.NumberInput(attrs={
            'placeholder': 'Enter product price',
            'class': 'form-control',
            'style': 'width: 100%; padding: 10px; margin-bottom: 10px;'
        })
    )
    quantity = forms.IntegerField(
        widget=forms.NumberInput(attrs={
            'placeholder': 'Enter product quantity',
            'class': 'form-control',
            'style': 'width: 100%; padding: 10px; margin-bottom: 10px;'
        })
    )
```

```python
class CustomerNameForm(forms.Form):
    def for_edit_customer(self, customer_name, *args, **kwargs):
        super().__init__(*args, **kwargs)
        self.fields['customer_name'].initial = customer_name

    customer_name = forms.CharField(
        required=False,
        widget=forms.TextInput(attrs={
            'placeholder': 'Customer name',
            'class': 'form-control',
            'style': 'width: 100%; padding: 10px; margin-bottom: 10px;',
        })
    )

def index(request):
    if not request.user.is_authenticated:
        return HttpResponseRedirect(reverse("recipt:login"))

    if "products" not in request.session:
        request.session["products"] = []  # 2D list to store [name, quantity, price, quantity_price]
    if "total_price" not in request.session:
        request.session["total_price"] = 0
    if "customer_name" not in request.session:
        request.session["customer_name"] = None

    return render(request, 'recipt/index.html', {
        "products": request.session["products"],
        "total_price": request.session["total_price"],
        "customer_name": request.session["customer_name"],
        'range_5': range(len(request.session["products"])),
        'now': datetime.now()
    })

def add(request):
    if not request.user.is_authenticated:
        return HttpResponseRedirect(reverse("recipt:login"))
    if request.method == 'POST':
        form = NewDataForm(request.POST)
        form_customer = CustomerNameForm(request.POST)
```

```python
        if form.is_valid() & form_customer.is_valid():
            if form.is_valid():
                name = form.cleaned_data['name']
                price = form.cleaned_data['price']
                quantity = form.cleaned_data['quantity']
                quantity_price = price * quantity
                request.session["products"].append([name, quantity,
price, quantity_price])
                request.session['total_price'] += quantity_price
                print(f'print(request.session["products"]) =
{request.session["products"]}')
                print(f'print(request.session["total_price"]) =
{request.session["total_price"]}')
            if form_customer.is_valid():
                customer_name =
form_customer.cleaned_data['customer_name']
                request.session["customer_name"] = customer_name
                print(f'print(request.session["customer_name"]) =
{request.session["customer_name"]}')
                # return redirect('recipt:index')  # Redirect after
adding
        else:
            return render(request, 'recipt/add.html', {'form': form,
'form_customer': form_customer})
    return render(request, 'recipt/add.html', {"form":
NewDataForm(), 'form_customer': CustomerNameForm()})


def new_receipt(request):
    if not request.user.is_authenticated:
        return HttpResponseRedirect(reverse("recipt:login"))

    request.session["products"] = []  # Reset 2D product list
    request.session["total_price"] = 0
    request.session["customer_name"] = None  # Reset customer name
    return redirect('recipt:add')


def dele(request, id):
    if not request.user.is_authenticated:
        return HttpResponseRedirect(reverse("recipt:login"))

    try:
        product = request.session["products"].pop(id)
```

```python
        request.session['total_price'] -= product[3]  # Subtract the
quantity_price
    except IndexError:
        pass  # Handle index errors if necessary


    return redirect('recipt:index')

def edit_customer(request, customer_name):
    if not request.user.is_authenticated:
        return HttpResponseRedirect(reverse("recipt:login"))

    if not customer_name:
        return redirect('recipt:index')  # Redirect if customer_name
is not provided

    if request.method == 'POST':
        customer_form = CustomerNameForm(request.POST)
        if customer_form.is_valid():
            customer_name =
customer_form.cleaned_data['customer_name']
            request.session['customer_name'] = customer_name
            return redirect('recipt:index')
        else:
            return render(request, 'recipt/edit_customer.html',
{'customer_form': customer_form, 'customer_name': customer_name})
    else:
        customer_form = CustomerNameForm()
        customer_form.for_edit_customer(customer_name)
        return render(request, 'recipt/edit_customer.html',
{"customer_form": customer_form, "customer_name": customer_name})

def edit_product(request, id):
    if not request.user.is_authenticated:
        return HttpResponseRedirect(reverse("recipt:login"))

    try:
        product = request.session["products"][id]
        name, quantity, price, quantity_price = product
    except IndexError:
        return redirect('recipt:index')  # Redirect if invalid ID

    if request.method == 'POST':
```

```python
        form = NewDataForm(request.POST)
        if form.is_valid():
            # Update session data
            new_name = form.cleaned_data['name']
            new_price = form.cleaned_data['price']
            new_quantity = form.cleaned_data['quantity']
            new_quantity_price = new_price * new_quantity

            # Update the product
            request.session["products"][id] = [new_name,
new_quantity, new_price, new_quantity_price]

            # Recalculate total price
            request.session['total_price'] = sum(p[3] for p in
request.session["products"])

            return redirect('recipt:index')
    else:
        form = NewDataForm()
        form.for_edit_product(name, price, quantity)

    return render(request, 'recipt/add.html', {"form": form,
'is_editing': True, 'id': id})

def login_view(request):
    if request.method == "POST":
        username = request.POST["username"]
        password = request.POST["password"]
        user = authenticate(request, username=username,
password=password)
        if user is not None:
            login(request, user)
            return HttpResponseRedirect(reverse("recipt:index"))
        else:
            return render(request, "recipt/login.html", {
                "message": "Invalid credentials.",
                "username": username  # Retain the entered username
            })
    return render(request, "recipt/login.html")

def logout_view(request):
    logout(request)
```

```python
        return HttpResponseRedirect(reverse("recipt:login"))
```

urls.py:

```python
 from django.urls import path

from . import views

app_name = 'recipt'

urlpatterns = [
    path('', views.index, name='index'),
    path('add/', views.add, name='add'),
    path('new/', views.new_receipt, name='new_receipt'),
    path('delete/<int:id>/', views.dele, name='dele'),
    path('edit_product/<int:id>/', views.edit_product,
name='edit_product'),
    path('edit_customer/<str:customer_name>/', views.edit_customer,
name='edit_customer'),
    path('login/', views.login_view, name='login'),
    path('logout/', views.logout_view, name='logout'),
]
```

Index.html: {% extends "recipt/layout.html" %}

```html
{% block body %}
<div>
    <div id="receipt-content">
        {% if not customer_name %}
        <h3>Here is your receipt by {{ request.user.first_name }} {{
request.user.last_name }}</h3>
        {% else %}
        <h3>Here is {{ customer_name }}'s receipt by {{
request.user.first_name }} {{ request.user.last_name }}</h3>
        {% endif %}
        <h6 class="receipt-date" style="margin-top: -20px;">{{ now
}}</h6>

        <div id="index_outer_div" class="receipt-details">
            <div>
                <ol>
```

```html
                    <br>
                    {% if products %}
                    <h3>Product Name</h3>
                    {% for product in products %}
                    <li style="margin-left: 15px;">{{ product.0
}}</li> <!-- Display product name -->
                    <br>
                    {% endfor %}
                    {% else %}
                    <h1>No items added</h1>
                    {% endif %}
                </ol>
            </div>

            <div class="receipt-section">
                <br>
                {% if products %}
                <h3>Quantity</h3>
                {% for product in products %}
                {{ product.1 }} <!-- Display quantity -->
                <br><br>
                {% endfor %}
                {% endif %}
            </div>

            <div class="receipt-section">
                <br>
                {% if products %}
                <h3>Price</h3>
                {% for product in products %}
                {{ product.2 }} <!-- Display price -->
                <br><br>
                {% endfor %}
                {% endif %}
            </div>

            <div class="receipt-section">
                <br>
                {% if products %}
                <h3>Total for Each Item</h3>
                {% for product in products %}
                {{ product.3 }} <!-- Display quantity_price -->
```

```html
                <br><br>
                {% endfor %}
                {% endif %}
            </div>

            <div class="receipt-actions">
                <br><br>
                {% for id in range_5 %}
                <a href="{% url 'recipt:dele' id %}" class="delete-
button">
                    <img src="https://icon-library.com/images/icon-
remove/icon-remove-18.jpg" alt="DEL"
                        style="width: 15px; height: 20px; margin-
bottom: 10px; margin-right: 10px;">
                </a>
                <a href="{% url 'recipt:edit_product' id %}"
class="edit-button">
                    <img
src="https://th.bing.com/th/id/OIP.P6trHImFdjGgSXQBU7_sagHaHa?rs=1&p
id=ImgDetMain" alt="EDIT"
                        style="width: 15px; height: 20px; margin-
bottom: 10px; margin-right: 10px;">
                </a>
                <br>
                {% endfor %}
            </div>
        </div>

        <div>
            <h4>Total Price: {{ total_price }}</h4>
        </div>
        <br>
    </div>

    <div class="actions">
        <a href="{% url 'recipt:new_receipt' %}" class="action-
button">New Receipt</a>
        <a href="{% url 'recipt:add' %}" class="action-button">Add
New Item</a>
        <button onclick="printReceipt()" class="action-button print-
button">Print Receipt</button>
        <!-- Example button/link in HTML template -->
```

```
        {% if customer_name %}
        <a href="{% url 'recipt:edit_customer' customer_name %}"
class="edit-button">
            <img
src="https://th.bing.com/th/id/OIP.P6trHImFdjGgSXQBU7_sagHaHa?rs=1&p
id=ImgDetMain" alt="EDIT"
                style="width: 15px; height: 20px; margin-bottom:
10px; margin-right: 10px;">
        </a>
        {% endif %}
    </div>

    <script>
        function printReceipt() {
            // Hide edit and delete buttons for printing
            document.querySelectorAll('.delete-button').forEach(el
=> el.style.display = 'none');
            document.querySelectorAll('.edit-button').forEach(el =>
el.style.display = 'none');

            // Print the page
            window.print();

            // Restore the visibility of the hidden elements
            document.querySelectorAll('.delete-button').forEach(el
=> el.style.display = 'inline');
            document.querySelectorAll('.edit-button').forEach(el =>
el.style.display = 'inline');
        }
    </script>
</div>
{% endblock %}

Add.html: {% extends "recipt/layout.html" %}

{% block body %}
<div>
    <form action="{% if is_editing %}{% url 'recipt:edit_product' id
%}{% else %}{% url 'recipt:add' %}{% endif %}" method="post">
        {% csrf_token %}
```

```html
        <!-- Dynamic heading based on whether you are adding or
editing an item -->
        <h1>
            {% if is_editing %}
                Please edit details
            {% else %}
                Please add details
            {% endif %}
        </h1>

        {% if not request.session.customer_name %}
            <!-- Show the customer name field only if it is not
already set -->
            {% if form_customer %}
                {{ form_customer.as_p }}
            {% endif %}
        {% endif %}

        {% if form %}
            {{ form.as_p }}
        {% endif %}

        <input type="submit" style="width: fit-content; height: fit-
content; background-color: brown; color: white; padding: 5px;
margin-top: 7px; border-radius: 2px; border: 1px solid rgb(0, 0,
0);">
    </form>

    <a href="{% url 'recipt:index' %}">
        <button style="width: fit-content; height: fit-content;
background-color: brown; color: white; padding: 5px; margin-top: -
25px; border-radius: 2px; border: 1px solid rgb(0, 0, 0); float:
right;">
            Your receipt
        </button>
    </a>
</div>

<script>
    document.addEventListener("DOMContentLoaded", function() {
        // Focus on the product name field if the customer name
field is hidden
```

```
        const productNameField = document.getElementById("id_name");
        const customerNameField =
document.getElementById("id_customer_name");

        if (customerNameField &&
!customerNameField.closest("form").querySelector(".hidden")) {
            // Focus on the customer name field if it's visible
            customerNameField.focus();
        } else if (productNameField) {
            // Focus on the product name field otherwise
            productNameField.focus();
        }
    });
</script>
{% endblock %}
```

Edit_customer.html: `{% extends "recipt/layout.html" %}`

```
{% block body %}
<div>
    <form action="{% url 'recipt:edit_customer' customer_name %}"
method="post">
        {% csrf_token %}
        <h1>Edit Customer Name</h1>
        {% if customer_form %}
        {{ customer_form }}
        {% endif %}
        <input type="submit" value="Update Name" style="background-
color: brown; color: white; padding: 5px;margin-top: 30px;">
    </form>

    <a href="{% url 'recipt:index' %}">
        <button style="background-color: brown; color: white;
padding: 5px; float: right;margin-top: -25px;">
            Back to Receipt
        </button>
    </a>
</div>
{% endblock %}
```

Login.html: `<!DOCTYPE html>`

```html
<html lang="en">

<head>
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width, initial-
scale=1.0">
    {% load static %}
    <link rel="stylesheet" type="text/css" href="{% static
'recipt_css/style.css' %}" />

    <link rel="icon" type="image/x-icon"
        href="https://th.bing.com/th/id/OIG1.y_2amRAytZhrAjPsZA6Y?w=
173&h=173&c=6&r=0&o=5&pid=ImgGn"
        alt="https://th.bing.com/th/id/OIG1.y_2amRAytZhrAjPsZA6Y?w=1
73&h=173&c=6&r=0&o=5&pid=ImgGn">
    <title>B U G S</title>
</head>

<body>
    <header>
        <h1>Bhatti Union General Store</h1>
    </header>
    <br>
    <div id="outerContainer" >
        <div id="container">
            {% if message %}
            <p>{{ message }}</p>
            {% endif %}
            <form method="POST">
                {% csrf_token %}
                <label for="username">Username:</label>
                <input type="text" name="username" id="username"
value="{{ username }}">
                <br>
                <br>
                <label for="password">Password:</label>
                <input type="password" name="password"
id="password">
                <br>
                <br>
                <br>
```

```
                <button style="margin-left: 100px; padding: 10px;"
type="submit"><strong>Login</strong></button>
            </form>
    </div>
    </div>
</body>

</html>
Layout.html: <!DOCTYPE html>

<html lang="en">
<head>
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width, initial-
scale=1.0">
    {% load static %}
    <link rel="stylesheet" type="text/css" href="{% static
'recipt_css/style.css' %}">
    <link rel="icon" type="image/x-icon"
        href="https://th.bing.com/th/id/OIG1.y_2amRAytZhrAjPsZA6Y?
w=173&h=173&c=6&r=0&o=5&pid=ImgGn"
        alt="BUGS">
    <title>B U G S</title>
</head>
<body>
    <header>
        <h1>Bhatti Union General Store</h1>
        <a href="{% url 'recipt:logout' %}">
            <button type="button" class="logout-button"style="float:
right;width: 100px;height: 30px; color: brown; "><strong>Log
out</strong></button>
        </a>
    </header>
    <div id="outerContainer">
        <div id="container">
            {% block body %}
            {% endblock %}
        </div>
    </div>
</body>
</html>
```