

App Development Project

Week 6, Lesson 2

Looking Forward

At the end of this lesson, you will be able to:

- Create and use a `base.html` and a `home.html` Template.
- Import and use Bootstrap 5.
- Create a Bootstrap Navigation Bar (navbar) and include it in the `base.html` template.
- Create a `contactUs.html` template and add an entry into Flask `route()` to point to it.
- Use Bootstrap Tables and Tabs to organize information in the `contactUs.html` template.

1. ACTIVITY 1: PROJECT DEMONSTRATION.....	2
1.1 DEMO OF A FLASK PROJECT.....	2
2. ACTIVITY 2: START THE PROJECT	9
2.1 CREATING AN HTML BASE TEMPLATE.....	9
2.2 INTRODUCTION TO THE JINJA2 TEMPLATE ENGINE	13
2.3 CREATING A NAVIGATION BAR (NAVBAR) FOR YOUR SIMPLEWEBAPPLICATION.....	18
2.4 CREATE A CONTACT US HTML TEMPLATE	24

1. Activity 1: Project Demonstration

1.1 Demo of a Flask Project

A software project can have several features or use cases. The following screenshots illustrate a Flask Project with 5 features.

1.1.1 Account Management

Home Shop Now Educational Resources FAQ Shopping Cart (0) Login Register

Register

First Name
First Name

Last Name
Last Name

Email
Email

Password
Password

Submit

or

Already have an account? [Login](#)

Figure 1: Create Account

Home Shop Now Educational Resources FAQ Shopping Cart (0) Login Register

Login

Email
Email

Password
Password

Login

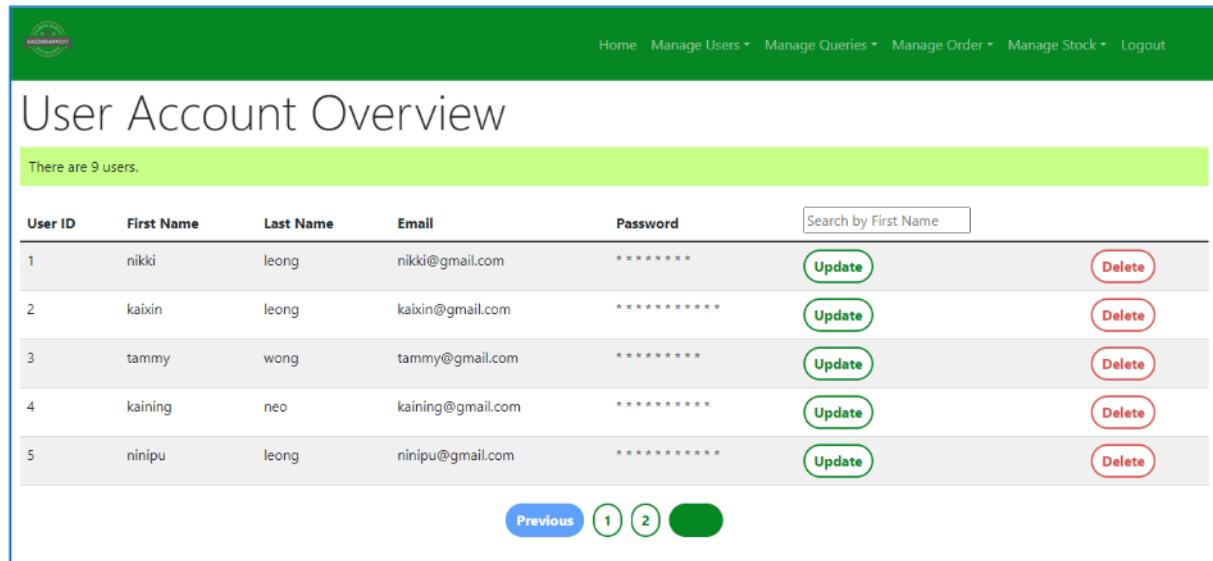
or

Continue as Guest

Do not have an account? [Register](#)

Figure 2: User Login

Official (Open)



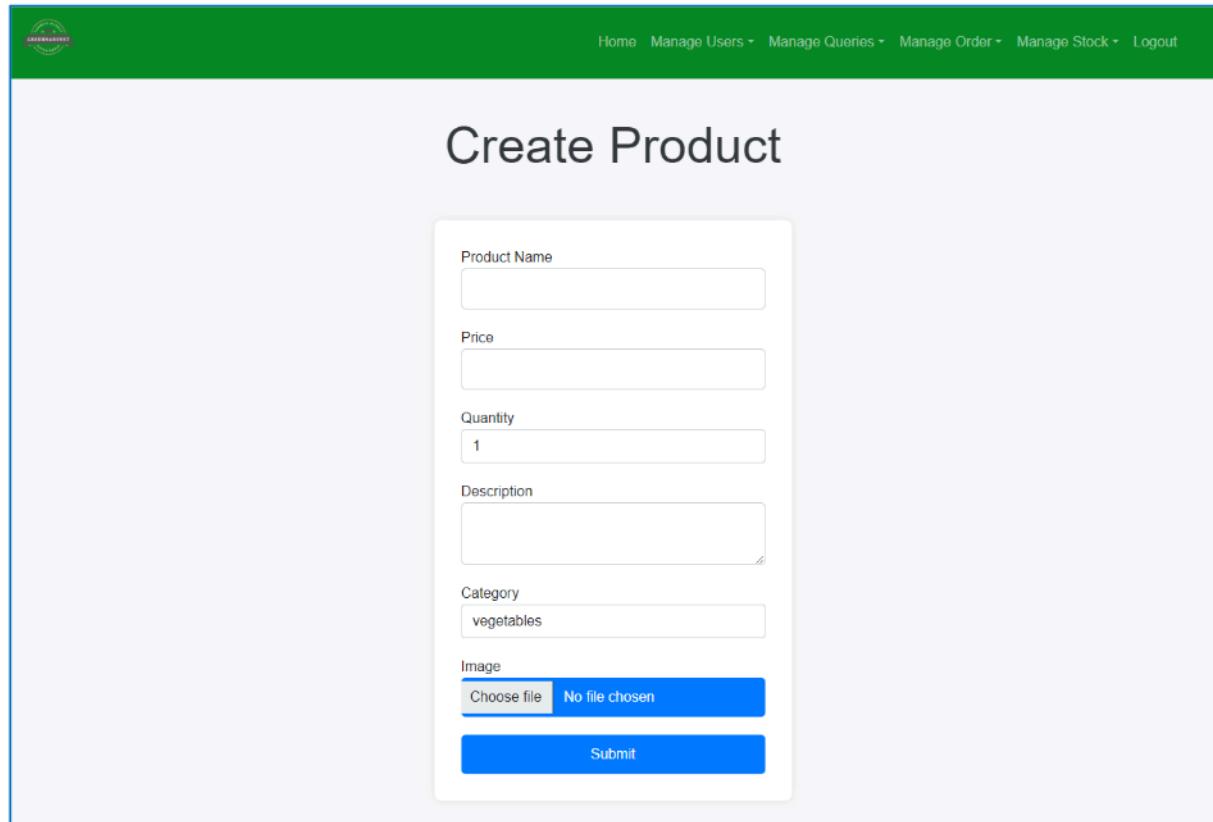
The screenshot shows a user management interface. At the top, there's a navigation bar with links for Home, Manage Users, Manage Queries, Manage Order, Manage Stock, and Logout. Below the navigation is a title "User Account Overview". A green banner at the top indicates "There are 9 users." The main content is a table with the following data:

User ID	First Name	Last Name	Email	Password	Action
1	nikki	leong	nikki@gmail.com	*****	Update Delete
2	kaixin	leong	kaixin@gmail.com	*****	Update Delete
3	tammy	wong	tammy@gmail.com	*****	Update Delete
4	kaining	neo	kaining@gmail.com	*****	Update Delete
5	ninipu	leong	ninipu@gmail.com	*****	Update Delete

At the bottom, there are navigation buttons for "Previous", "1", "2", and a large green "Next" button.

Figure 3: View Accounts

1.1.2 Product Management



The screenshot shows a product creation form. At the top, there's a navigation bar with links for Home, Manage Users, Manage Queries, Manage Order, Manage Stock, and Logout. Below the navigation is a title "Create Product". The form consists of the following fields:

- Product Name: An input field.
- Price: An input field.
- Quantity: An input field containing the value "1".
- Description: A text area.
- Category: An input field containing the value "vegetables".
- Image: A file input field with the placeholder "Choose file" and "No file chosen".
- Submit: A blue "Submit" button.

Figure 4: Add Products

Official (Open)

Product ID	Product Name	Price	Quantity	Description	Category	Images	Search by Product Name
1	Durian Meat (800g)	\$ 70.0	1000 qty	Durian is a tropical fruit distinguished by its large size and spiky, hard outer shell. It has a..... Show More	fruits	mango.jpg	Update Delete
2	Carrot (250g)	\$ 2.0	1000 qty	Carrots are root vegetables, usually orange in colour, and are very versatile in a number of..... Show More	vegetables	carrot.jpg	Update Delete
3	Potato (700g)	\$ 3.0	1000 qty	With a neutral flavor profile, our potatoes boast a fluffy, creamy texture that excels in..... Show More	vegetables	potato.jpg	Update Delete
4	Mint Seeds (20g)	\$ 3.6	100 qty	A hardy perennial that will produce runners and quick establish itself.The fragrant leaves which..... Show More	seeds	mint.jpg	Update Delete
5	Organic Vermicast (2.5L)	\$ 3.9	100 qty	Green Spade Organic Vermicast is the end product from the process of composting Earthworms'..... Show More	fertiliser	OV.jpg	Update Delete
6	Organic Potting Soil (5L)	\$ 4.6	100 qty	Green Spade Potting Soil, also commonly known as compost soil or black soil, is an organic..... Show More	soil	OPS.jpg	Update Delete
7	Rich Soil Enhancer (5L)	\$ 8.0	100 qty	Green Spade Rich Soil Enhancer is rich in humus and thus allows you to speed up the process of..... Show More	soil	RSE.jpg	Update Delete
8	Premium Compost (5L)	\$ 5.5	100 qty	Our Organic Premium Compost is a soil conditioner that is broken down by microorganisms (fungi)..... Show More	fertiliser	PC.jpg	Update Delete
9	Premium Neem Fertiliser (2.5L)	\$ 12.9	100 qty	Neem Fertiliser is organic manure and the by-product of Neem Kemel oil production, used as a..... Show More	fertiliser	PNF.jpg	Update Delete

Figure 5: View Products

1.1.3 Sales

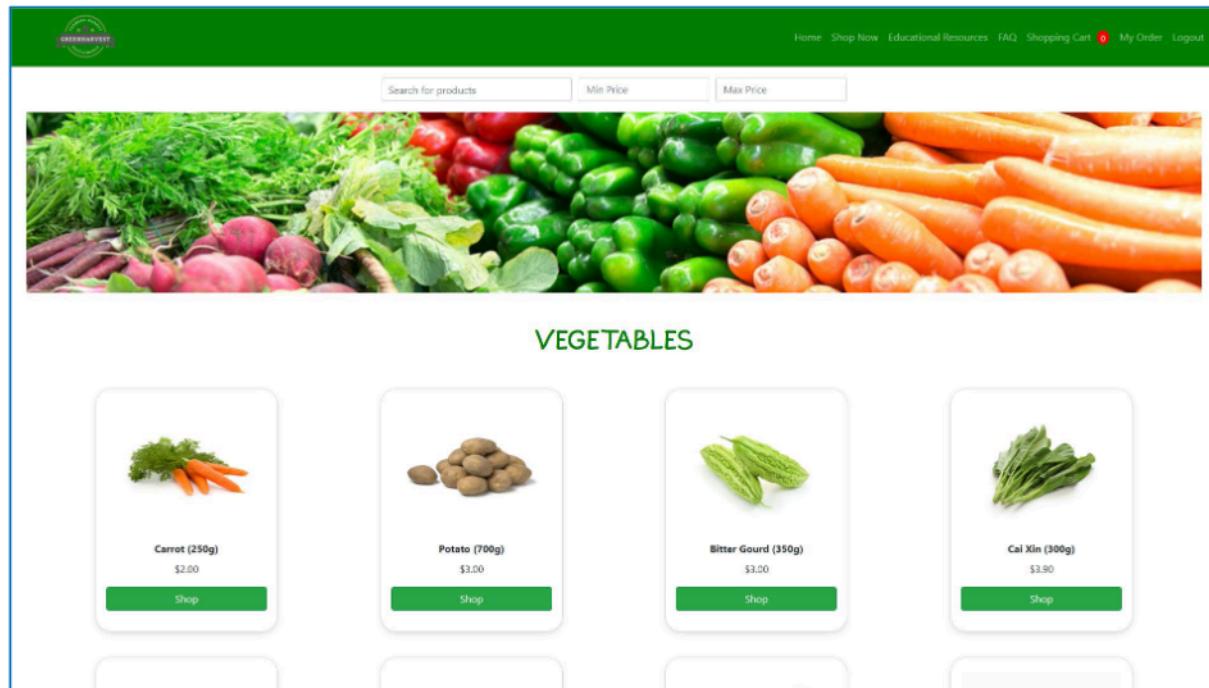


Figure 6: Customer Shopfront

Figure 7: Filter Items

Figure 8: Item Details

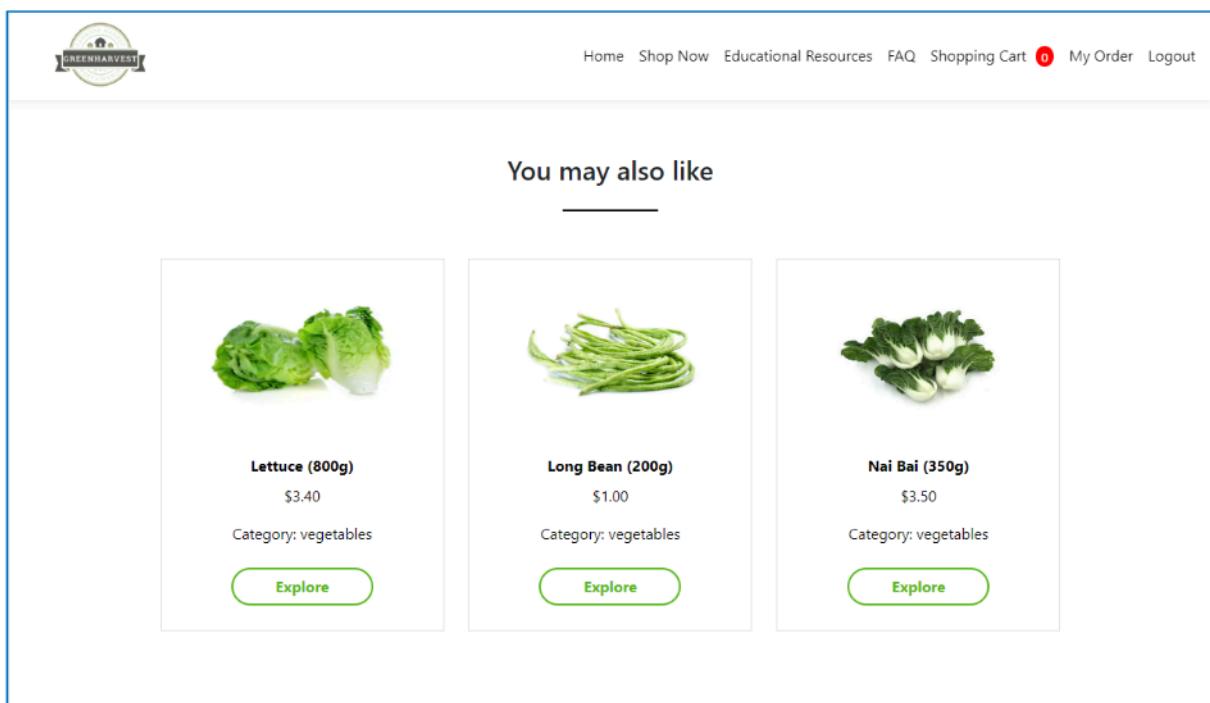


Figure 9: Recommendations

The screenshot shows the "Shopping Cart" page with the following details:

There are 2 items

<input type="checkbox"/> Select All	Product Image	Product	Price	Quantity	
<input type="checkbox"/>		Bitter Gourd (350g)	\$3.00	5	Update Delete
<input type="checkbox"/>		Durian Meat (800g)	\$70.00	5	Update Delete

[Delete Selected Items](#)

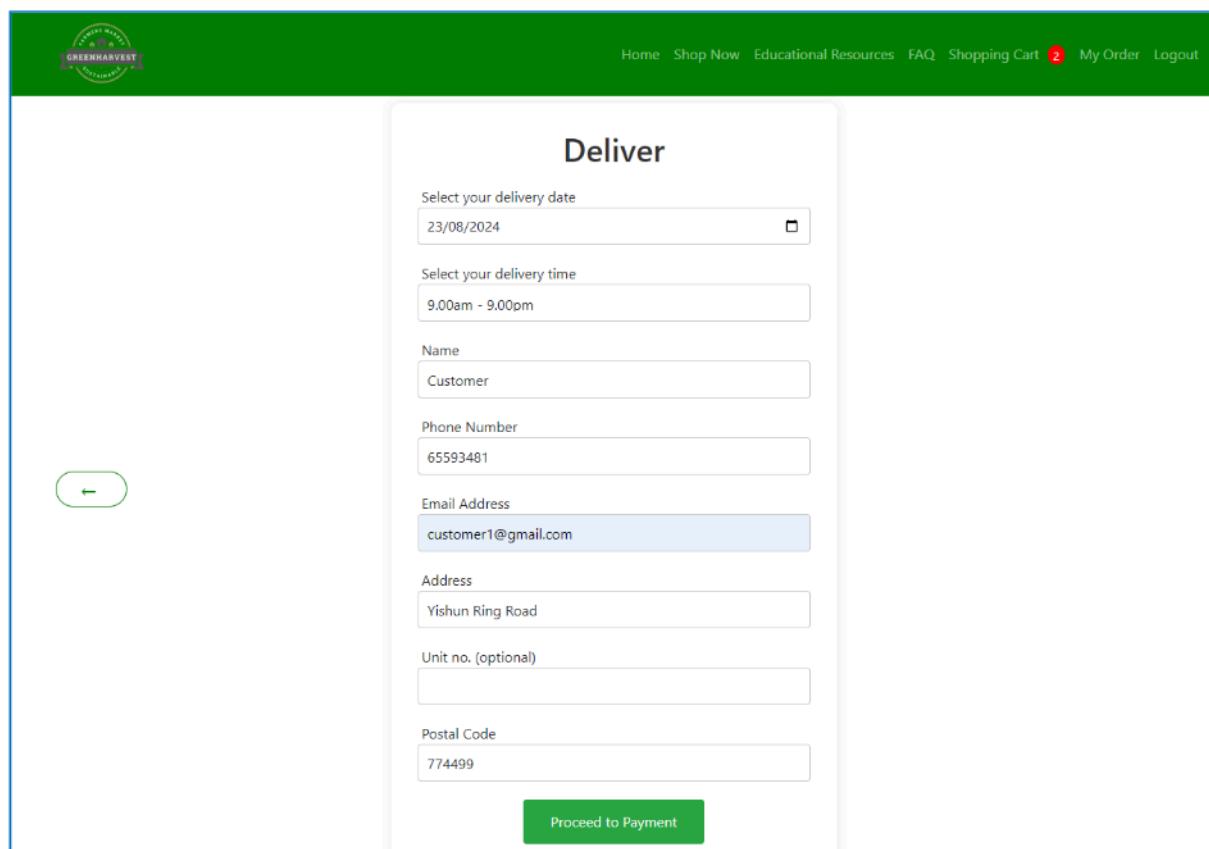
Order Details

Product	Quantity	Total
Bitter Gourd (350g)	5	\$15.00
Durian Meat (800g)	5	\$350.00

Total: \$365.00
GST: \$25.55
Subtotal: \$390.55

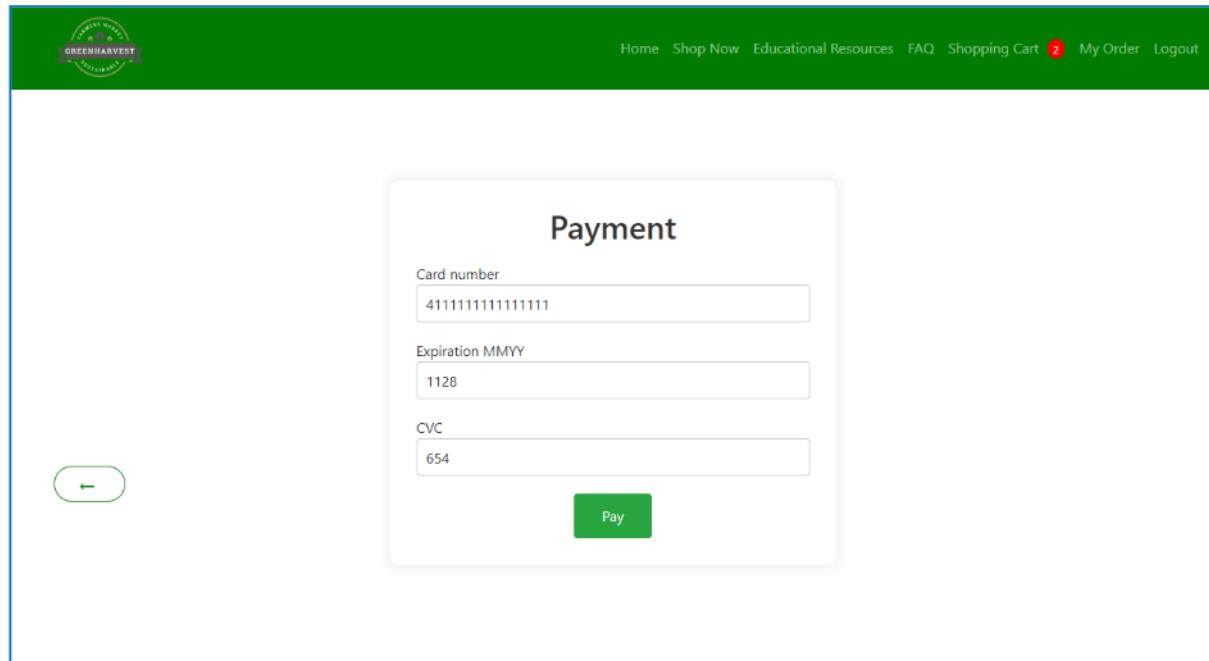
[Checkout](#)

Figure 10: Customer Shopping Cart



The screenshot shows a customer checkout page titled "Deliver". The page includes fields for delivery date (23/08/2024), delivery time (9.00am - 9.00pm), name (Customer), phone number (65593481), email address (customer1@gmail.com), address (Yishun Ring Road), unit number (optional), and postal code (774499). A green "Proceed to Payment" button is at the bottom.

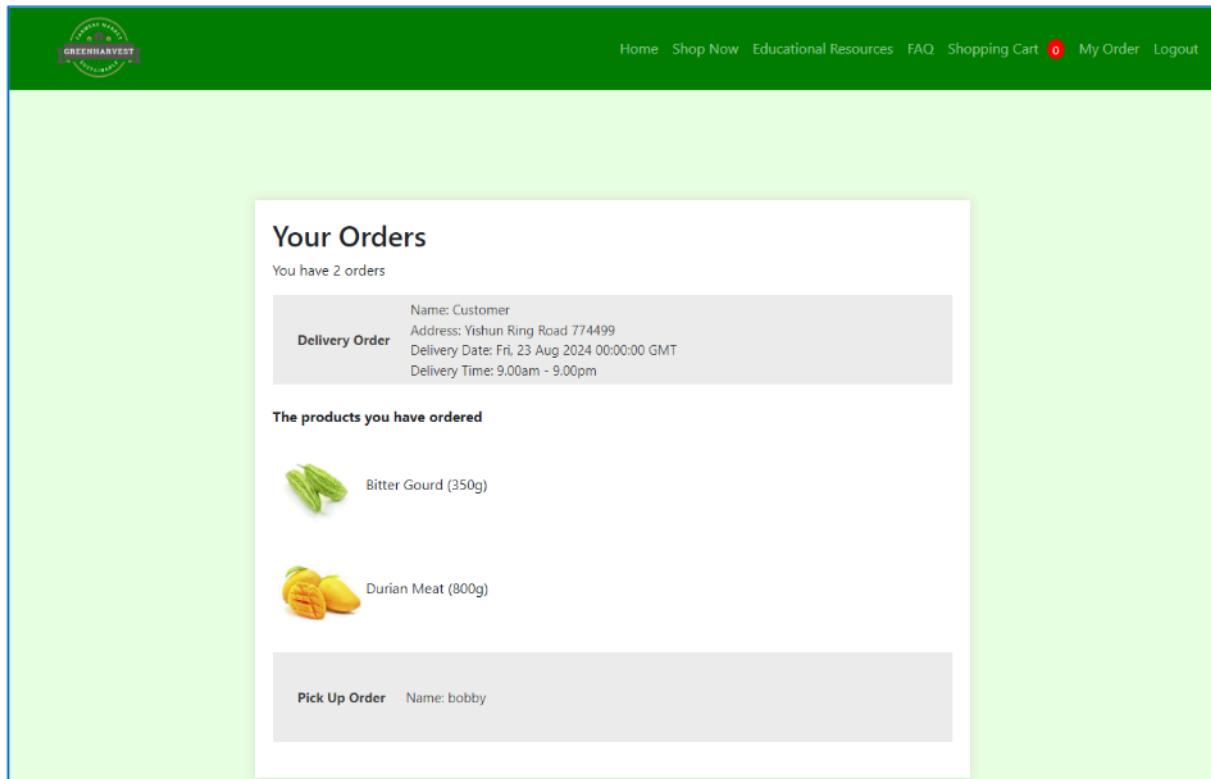
Figure 11: Customer Checkout (Deliver)



The screenshot shows a payment form titled "Payment". It includes fields for card number (4111111111111111), expiration (MMYY: 1128), and CVC (654). A green "Pay" button is at the bottom.

Figure 12: Payment

Official (Open)



Your Orders

You have 2 orders

Delivery Order	Name: Customer	Address: Yishun Ring Road 774499	Delivery Date: Fri, 23 Aug 2024 00:00:00 GMT	Delivery Time: 9.00am - 9.00pm

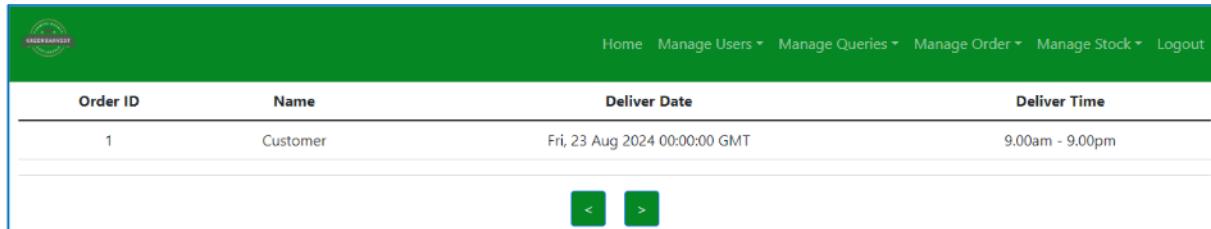
The products you have ordered

- Bitter Gourd (350g)
- Durian Meat (800g)

Pick Up Order Name: bobby

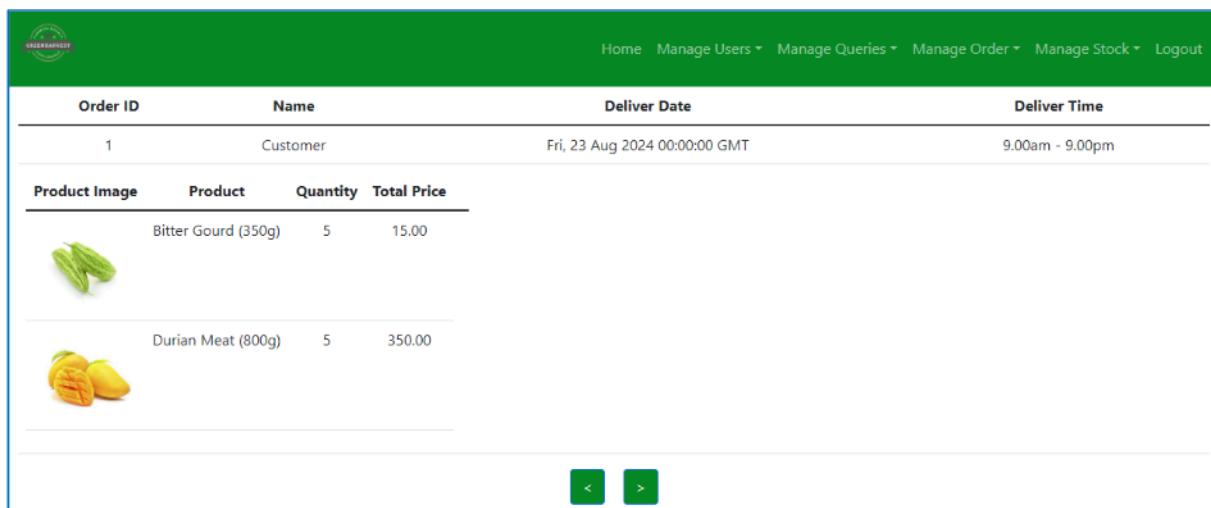
Figure 13: Order History

1.1.4 Orders Management



Order ID	Name	Deliver Date	Deliver Time
1	Customer	Fri, 23 Aug 2024 00:00:00 GMT	9.00am - 9.00pm

Figure 14: Order Summary

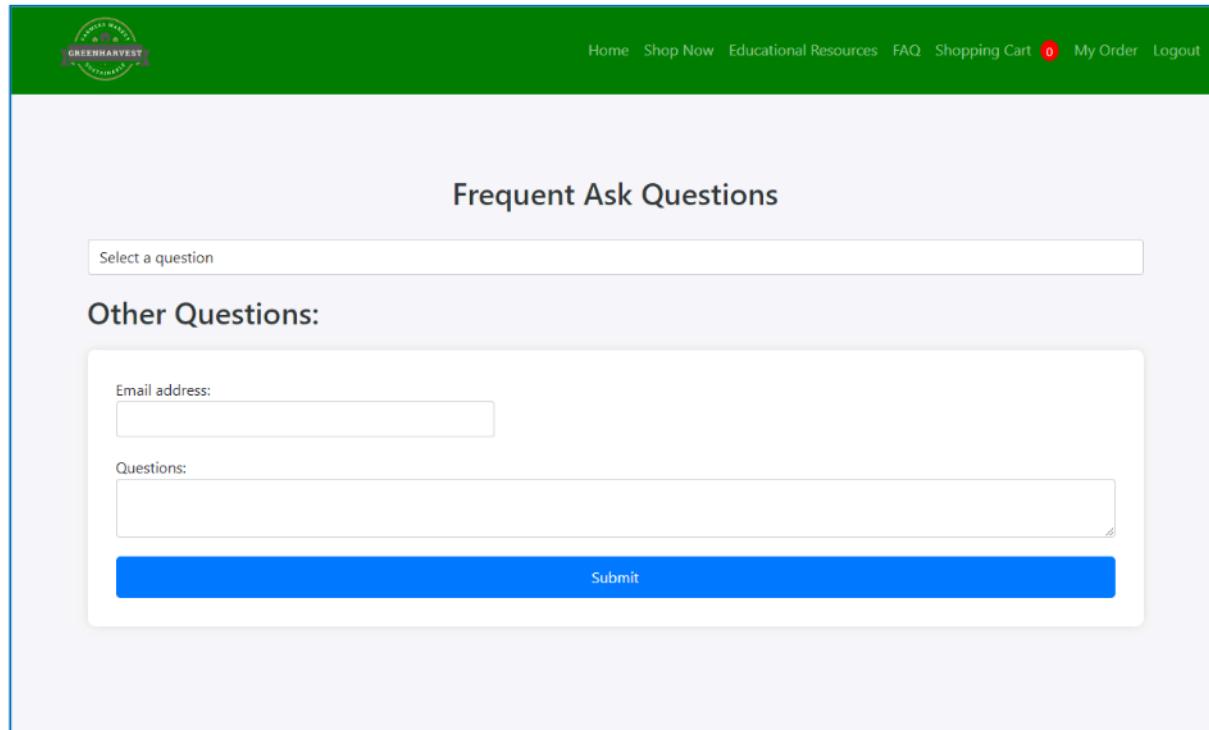


Order ID	Name	Deliver Date	Deliver Time
1	Customer	Fri, 23 Aug 2024 00:00:00 GMT	9.00am - 9.00pm

Product Image	Product	Quantity	Total Price
	Bitter Gourd (350g)	5	15.00
	Durian Meat (800g)	5	350.00

Figure 15: Order Details

1.1.5 FAQ & Feedbacks



The screenshot shows a green header with the Nanyang Polytechnic logo and a circular logo for "GREENHARVEST". The main content area has a title "Frequent Ask Questions" and a search bar labeled "Select a question". Below it is a section titled "Other Questions:" containing fields for "Email address:" and "Questions:", both with placeholder text. A blue "Submit" button is at the bottom.

Figure 16: FAQ



The screenshot shows a green header with the Nanyang Polytechnic logo and a circular logo for "GREENHARVEST". The main content area has a title "Feedback" and a table with three rows. Each row contains a user email, their feedback, and two buttons: "REPLY" (yellow) and "DELETE" (red). The table rows have alternating light and dark backgrounds.

User Email:	Feedback:		
wiwipu@gmail.com	菜很新鲜	REPLY	DELETE
ninipu@gmail.com	hhhhh	REPLY	DELETE
kaixin@gmail.com	good	REPLY	DELETE

Figure 17: Manage Feedbacks

2. Activity 2: Start the Project

2.1 Creating an HTML Base Template

2.1.1 Create a base.html Template

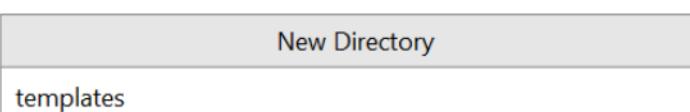
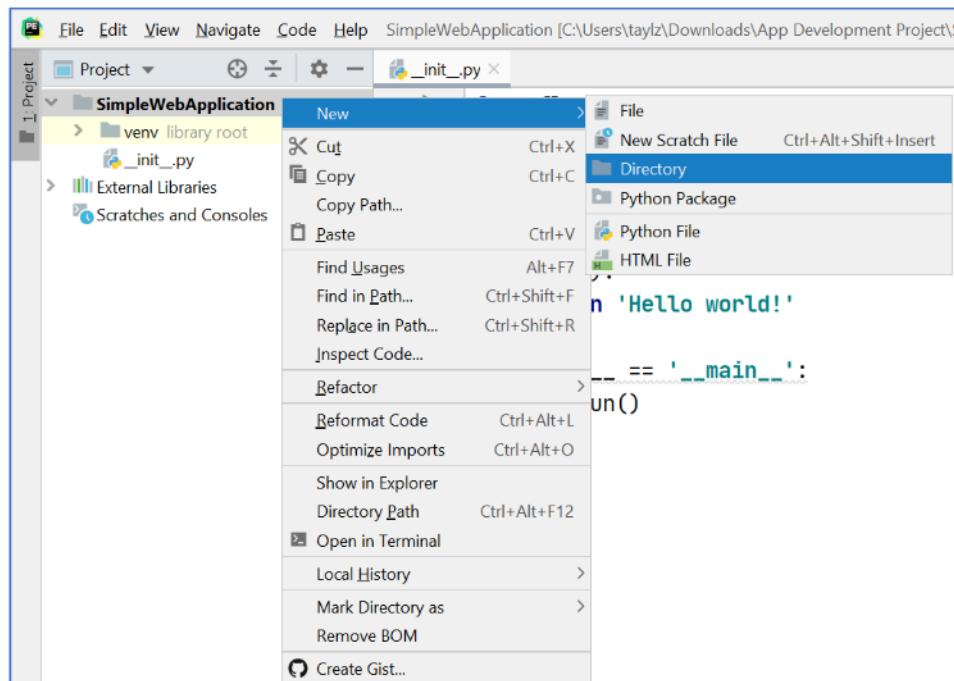
💡 **THINK ABOUT IT** 💡

Now you will create an HTML **base template** that all other HTML templates in our **SimpleWebApplication** will be based upon. This will help to **standardize** HTML pages and **reduce coding** by reusing code, components and HTML pages.

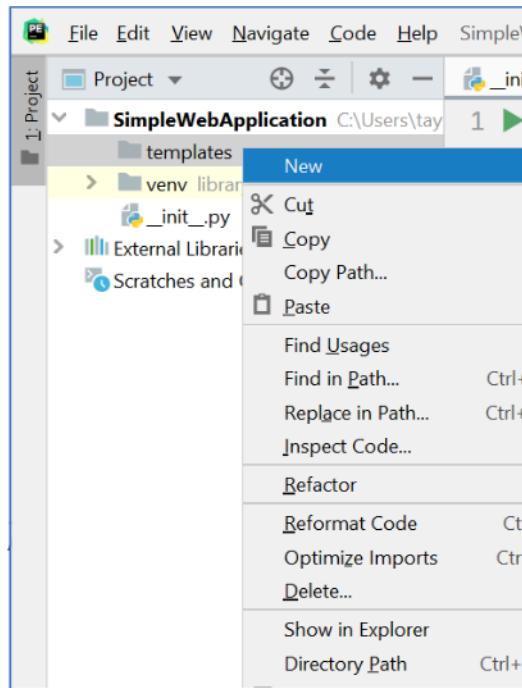
Official (Open)

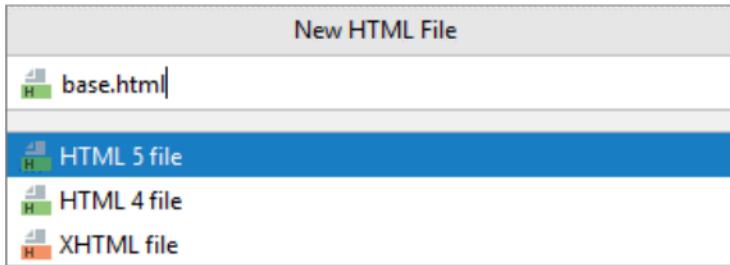
The **base template** will contain the necessary **imports**, **scripts** and even a **navigation bar** that can be coded once and reused across all other HTML pages. It will contain **placeholders** for the parts of the HTML page that will change for different HTML pages such as **title**, **body** and page-specific **scripts**.

Step 1: Right-click on the **SimpleWebApplication** folder and select **New > Directory** to create a new folder called **templates**.



Step 2: Right-click on the **templates** folder and select **New > HTML file** to create a new HTML template called **base.html**.





2.1.2 Import Bootstrap CSS and JavaScripts

Step 1: Go to <https://getbootstrap.com/docs/5.1/getting-started/introduction/>. Go to the **CSS** section and click on **Copy**.

A screenshot of a web browser displaying the Bootstrap 5.1 documentation at <https://getbootstrap.com/docs/5.1/getting-started/introduction/>. The page has a purple header with navigation links like Home, Docs, Examples, Icons, Themes, and Blog. On the left, there's a sidebar with sections like Getting started, Components, Utilities, and Forms. The main content area is titled "Introduction" and includes a "Quick start" section with a "Copy to clipboard" button highlighted with a red box. To the right, there's a sidebar with "On this page" navigation links for CSS, JS, and other components.

Step 2: **Paste** the copied stylesheet `<link>` tag between your `<head> </head>` tags below the `<title> </title>` tags.

!! IMPORTANT !!

Order is **important** and this stylesheet `<link>` tag should come before all other stylesheets.

Put in the HTML comment `<!-- Bootstrap 5.1.3 CSS -->` before the `<link>` tag to describe what it is for as a note to your future self.

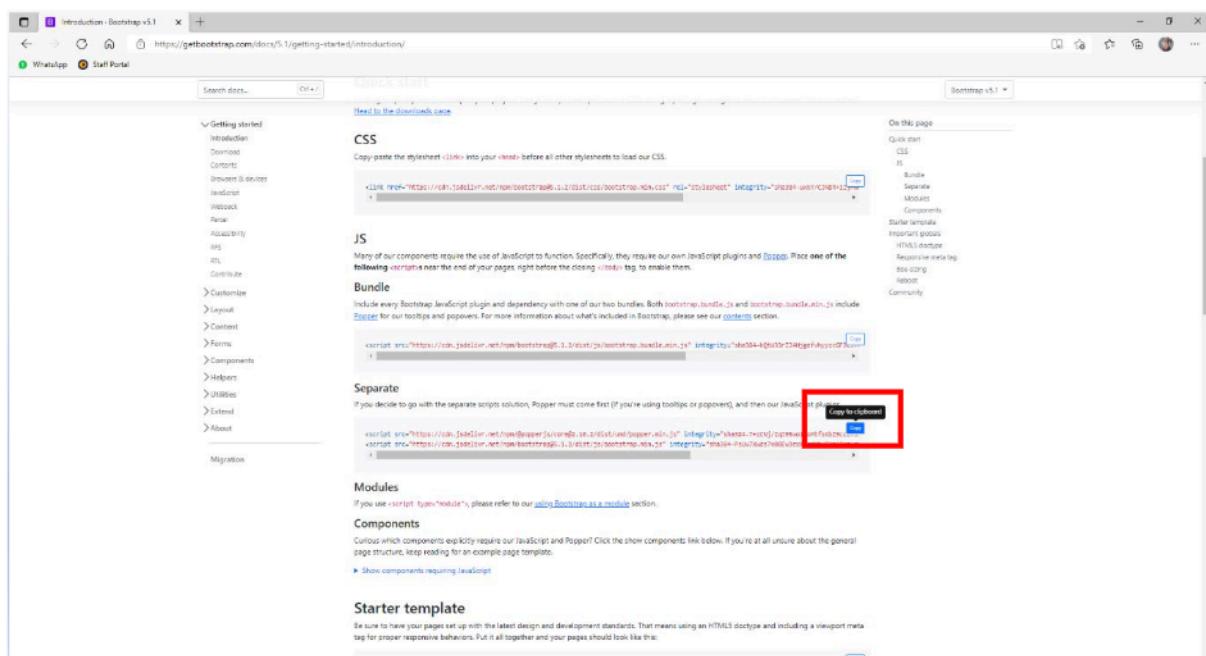
base.html

```

1 <!DOCTYPE html>
2 <html lang="en">
3 <head>
4   <meta charset="UTF-8">
5   <title>Title</title>
6
7   <!-- Bootstrap 5.1.3 CSS -->
8   <link crossorigin="anonymous"
      href="https://cdn.jsdelivr.net/npm/bootstrap@5.1.3/dist/css/bootstrap.min.css"
      integrity="sha384-1BmE4kWBq78iYhFldvKuhfTAU6auU8tT94WrHftjDbrCEXSU1oBoqyl2QvZ6jIW3"
      rel="stylesheet">
9 </head>
10 <body>
11
12 </body>
13 </html>
14

```

Step 3: Go to the JS Separate section and click on Copy.



Step 4: Add on to your base template by pasting the `<script>` tags near the end of the `base.html` template, right before the closing `</body>` tag.

u !! IMPORTANT !!

Order is important and these `<script>` tags should come before all other `<script>` tags.

Put in the HTML comment `<!-- Popper 2.10.2, Bootstrap 5.1.3 JavaScript -->` before the `<script>` tags to describe what they are for as a note to your future self.

base.html

Official (Open)

```

1 <!DOCTYPE html>
2 <html lang="en">
3 <head>
4     <meta charset="UTF-8">
5     <title>Title</title>
6
7     <!-- Bootstrap 5.1.3 CSS -->
8 <link crossorigin="anonymous" href="https://cdn.jsdelivr.net/npm/bootstrap@5.1.3/dist/css/bootstrap.min.css" integrity="sha384-1BmE4kWBq78iYhFdvKuhfTAU6auU8tT94WrHftjDbrCEXSU1oBoqyl2QvZ6jlW3" rel="stylesheet">
9 </head>
10 <body>
11     <!-- Popper 2.10.2, Bootstrap 5.1.3 JavaScript -->
12 <script crossorigin="anonymous" integrity="sha384-7+zCNj/lqJ95wo16oMtfsKbZ9ccEh31eOz1HGyDuCQ6wgnyJNSYdrPa03rtR1zdB" src="https://cdn.jsdelivr.net/npm/@popperjs/core@2.10.2/dist/umd/popper.min.js"></script>
13 <script crossorigin="anonymous" integrity="sha384-QJHtvGhmr9XOlpI6YVutG+2QOK9T+ZnN4kzFN1RtK3zEFEIsxhlmWI5/YESvpZ13" src="https://cdn.jsdelivr.net/npm/bootstrap@5.1.3/dist/js/bootstrap.min.js"></script>
14 </body>
</html>

```

THINK ABOUT IT

For more information on what Bootstrap 5 can do, visit <https://www.w3schools.com/bootstrap5/>.

2.2 Introduction to the Jinja2 Template Engine

THINK ABOUT IT

Now that you have created your **base template** using Bootstrap 5, you will need to add in **placeholders** so that those placeholders can be **replaced** by other HTML templates that extend the **base template** when you create them.

This is needed because while different HTML pages may share some **similarities** like a **navigation bar** and **theme**, there are unique features of each page such as **title**, **content** and **scripts**.

But how can it be done? Enter **Jinja2**.

Jinja2 is a full-featured **template engine** for Python. It provides **template inheritance** so you can use the same layout for all your HTML pages and yet allow for deviations for unique content by using **Jinja2 delimiters** (we will call them **Jinja2 tags** so as not to be confused).

These **Jinja2 tags** can be **primarily** used as **placeholders** but they are capable of creating variables, filtering, inheritance, if else statements, loops and so much more.

You may find out more here: <https://jinja.palletsprojects.com/en/2.11.x/templates/>

2.2.1 Add Placeholders to the Base Template Using Jinja2 Tags

Step 1: Add the following **server-side Jinja2** tags and **HTML** tags to your **base.html** template.

```
base.html
1 <!DOCTYPE html>
2 <html lang="en">
3 <head>
4   <meta charset="UTF-8">
5   <title>{% block title %}{% endblock %}</title>
6
7   <!-- Bootstrap 5.1.3 CSS -->
8   <link crossorigin="anonymous" href="https://cdn.jsdelivr.net/npm/bootstrap@5.1.3/dist/css/bootstrap.min.css" integrity="sha384-1BmE4kWBq78iYhFldvKuhfTAU6auU8tT94WrHftjDbrCEXSU1oBoqyl2QvZ6jlW3" rel="stylesheet">
9 </head>
10 <body>
11   {% block navbar %}
12   {% endblock %}
13
14   <div class="container-fluid">
15     {% block content %}
16     {% endblock %}
17   </div>
18
19   {% block scripts %}
20     <!-- Popper 2.10.2, Bootstrap 5.1.3 JavaScript -->
21     <script crossorigin="anonymous" integrity="sha384-7+zCNj/lqJ95wo16oMtsKbZ9ccEh31eOz1HGyDuCQ6wgnyJNSYdrPa03rtR1zdB" src="https://cdn.jsdelivr.net/npm/@popperjs/core@2.10.2/dist/umd/popper.min.js"></script>
22     <script crossorigin="anonymous" integrity="sha384-QJHtvGhmr9XOlpI6YVutG+2QOK9T+ZnN4kzFN1RtK3zEFFIsxhlmWI5/YESvpZ13" src="https://cdn.jsdelivr.net/npm/bootstrap@5.1.3/dist/js/bootstrap.min.js"></script>
23   {% endblock %}
24 </body>
25 </html>
```

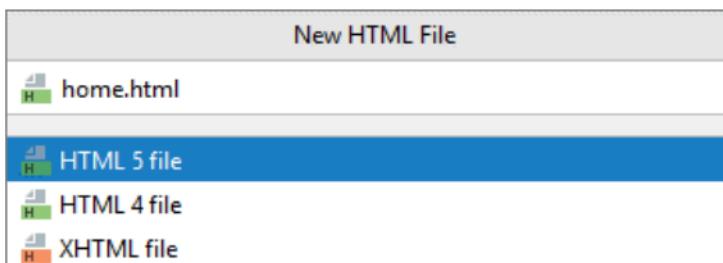
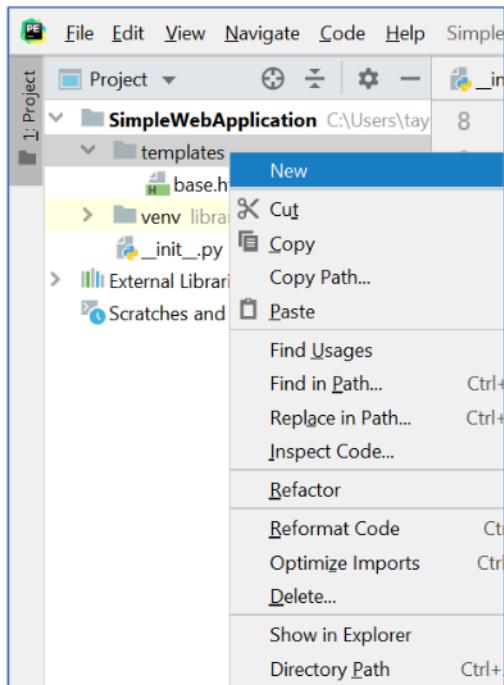
DID YOU KNOW

Client-side scripts, such as JavaScript, are processed on the **client's browser** when it is received. Whereas **server-side scripts**, such as PHP, C# and Jinja2 are processed on the **server**. By the time the page is received by the client's browser, the **server-side scripts** would have been processed by the server into something **readable** and will no longer be seen as **code**.

2.2.2 Create a home.html Template

Official (Open)

Step 1: Right-click on the **templates** folder then select **New > HTML File** to create a new HTML template called **home.html**.



Step 2: Delete all the auto-generated HTML tags and **replace** them with the following **server-side Jinja2** tags and **HTML** tags.

home.html	
1	{% extends "base.html" %}
2	{% block title %}Library Loan System - Home{% endblock %}
3	
4	{% block content %}
5	<h1 class="display-4">Home</h1>
6	<p>Hello world!</p>
7	{% endblock %}
8	

LET IT SINK IN

{% extends "base.html" %} allows you to create your **home.html** template by extending your

Official (Open)

base.html template. Meaning that your **base.html template** is now being used by your **home.html** template with specified modifications.

{% block title %}Library Loan System - Home{% endblock %} replaces the contents of the {% block title %}{% endblock %} **server-side Ninja2** tags which changes its title to “**Library Loan System - Home**”.

Likewise, the contents of the {% block content %}{% endblock %} **server-side Ninja2** tags will be replaced with the following:

```
<h1 class="display-4">Home</h1>
<p>Hello world!</p>
```

Step 3: Modify **__init__.py** by adding and changing the following codes.

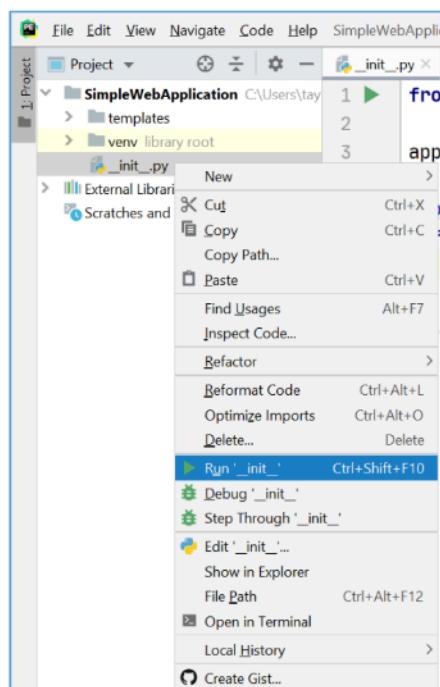
__init__.py

```

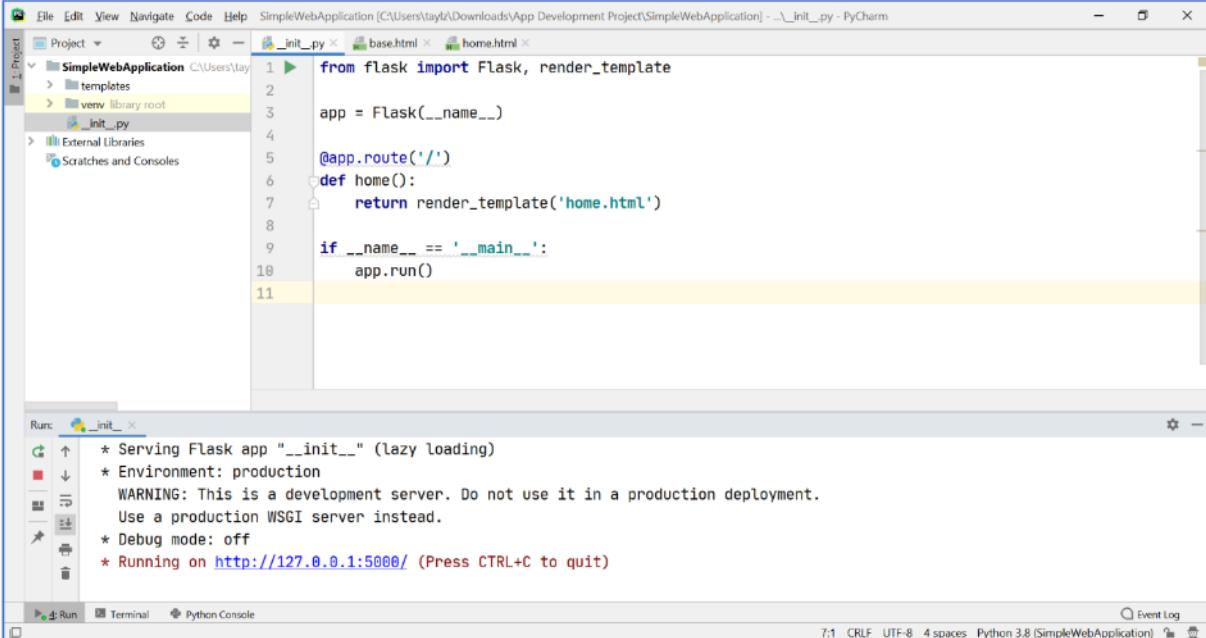
1 from flask import Flask, render_template
2
3 app = Flask(__name__)
4
5 @app.route('/')
6 def home():
7     return render_template('home.html')
8
9 if __name__ == '__main__':
10    app.run()
11

```

Step 4: Run your **SimpleWebApplication** by right-clicking on **__init__.py** and then selecting **Run ' __init__ '**.



Official (Open)



```

from flask import Flask, render_template

app = Flask(__name__)

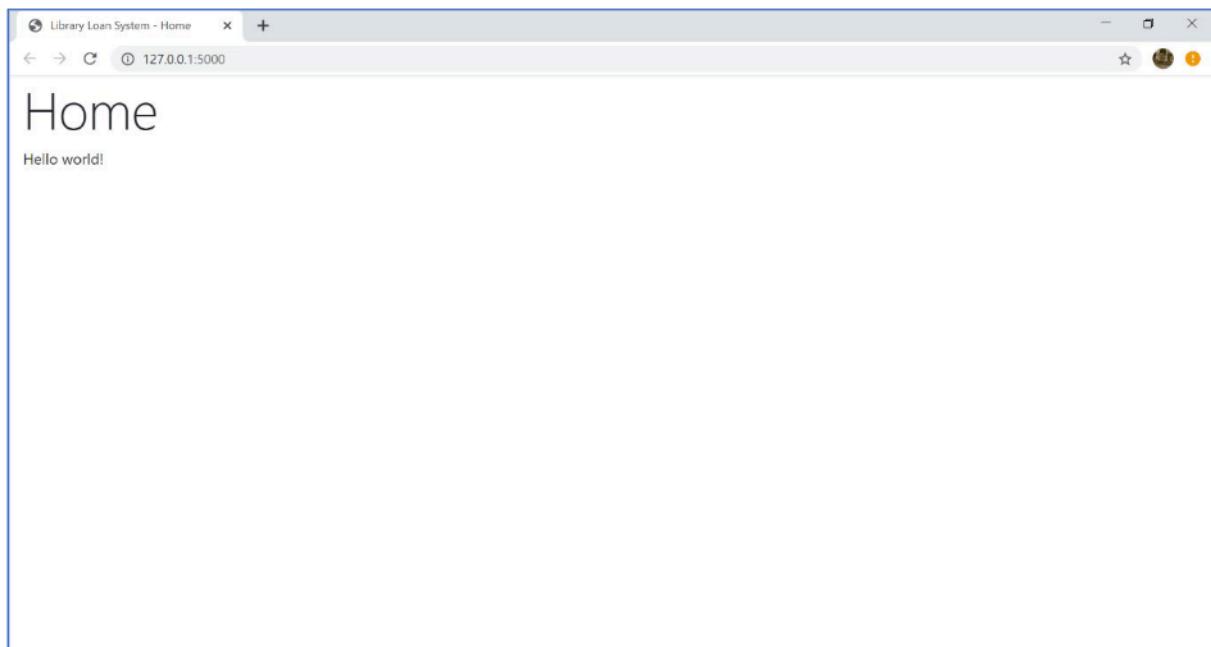
@app.route('/')
def home():
    return render_template('home.html')

if __name__ == '__main__':
    app.run()

```

The Run tab shows the application is running on <http://127.0.0.1:5000/>.

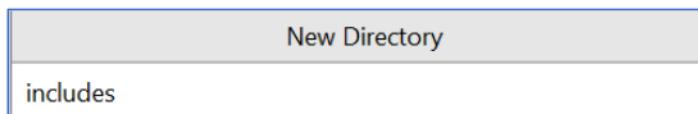
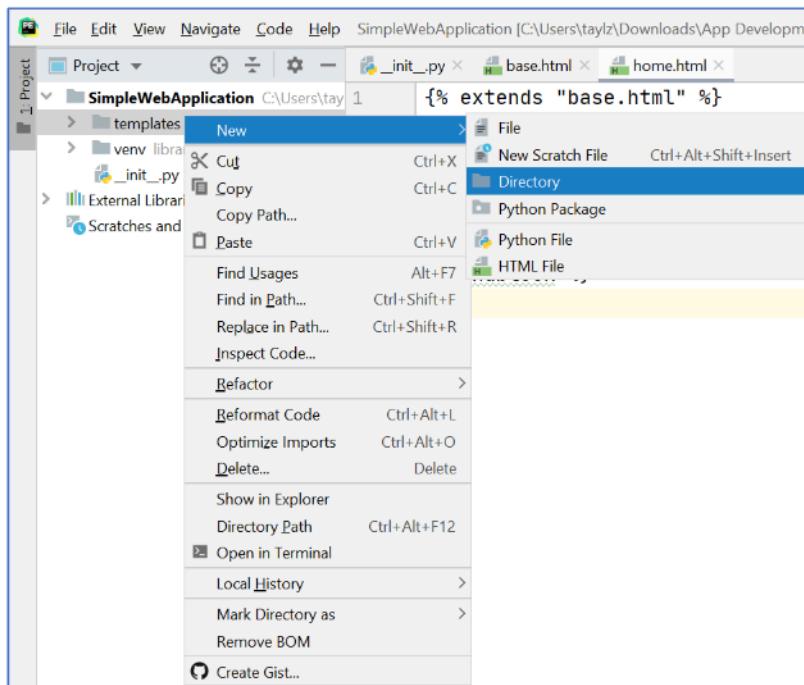
Step 5: Click on the <http://127.0.0.1:5000/> link in PyCharm Community Edition.



2.3 Creating a Navigation Bar (Navbar) for Your SimpleWebApplication

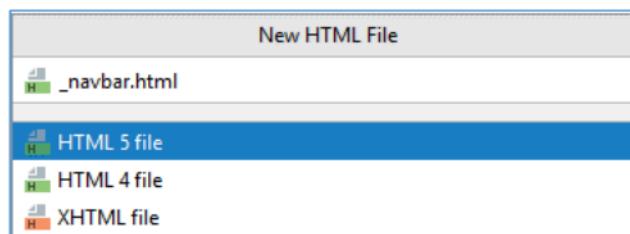
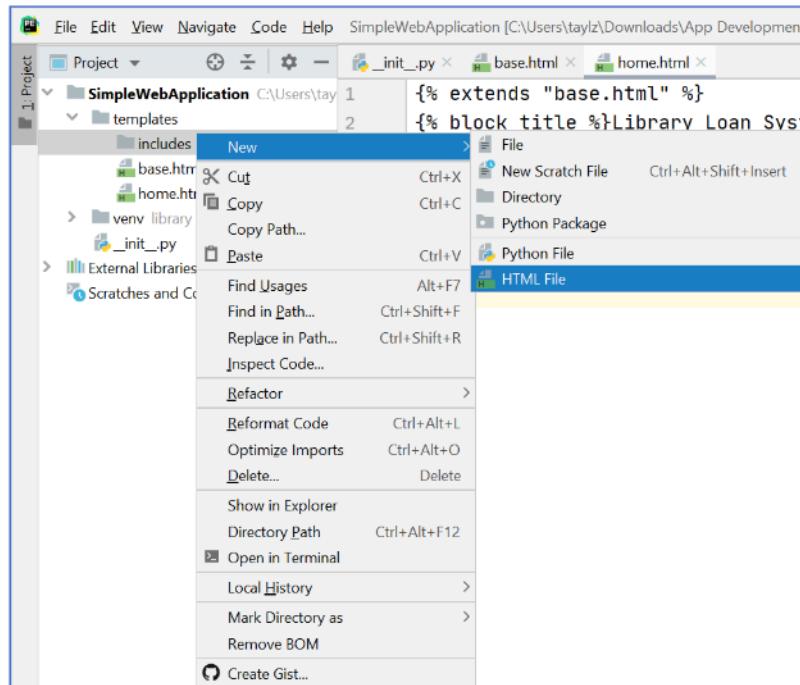
2.3.1 Create a Navbar Using Bootstrap 4

Step 1: Right-click on the **templates** folder and select **New > Directory** to create a new folder called **includes**.



Step 2: Right-click on the **includes** folder and select **New > HTML file** to create a new HTML template called **_navbar.html**.

Official (Open)



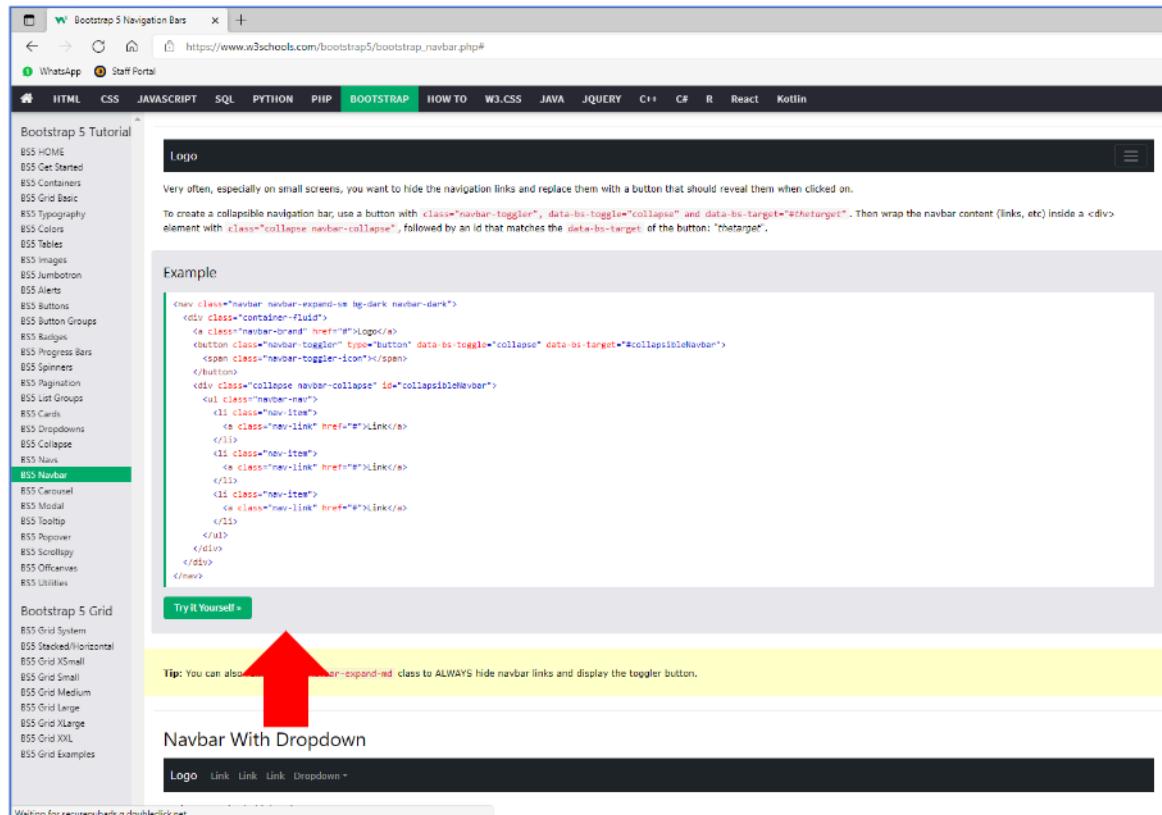
```

_file_ X base.html X home.html X _navbar.html X
1  <!DOCTYPE html>
2  <html lang="en">
3  <head>
4      <meta charset="UTF-8">
5      <title>Title</title>
6  </head>
7  <body>
8
9  </body>
10 </html>
11

```

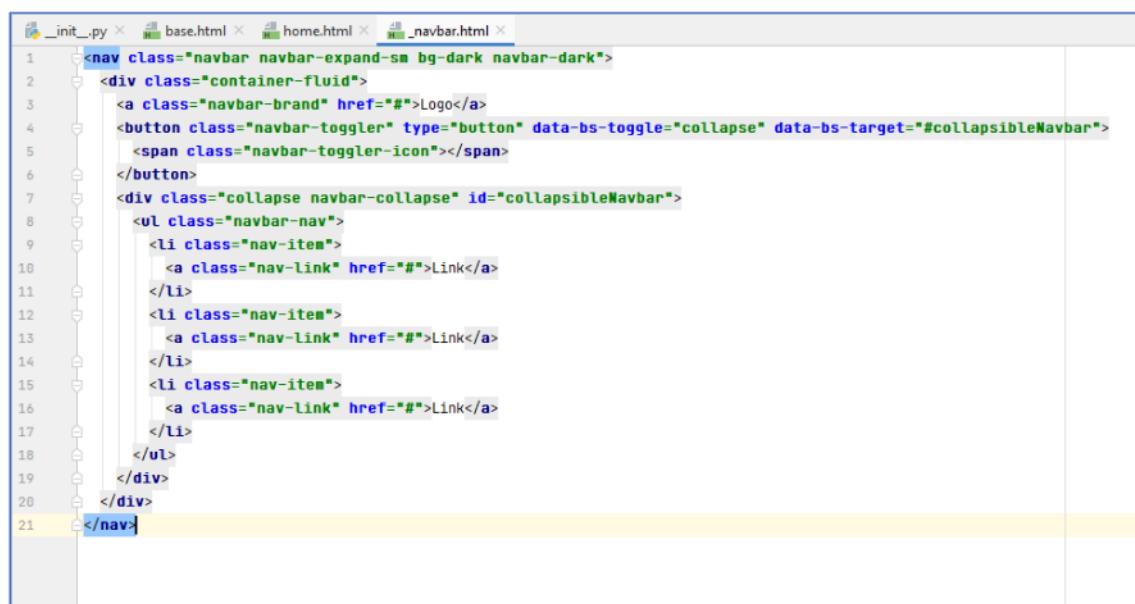
Official (Open)

Step 3: Go to https://www.w3schools.com/bootstrap5/bootstrap_navbar.php. Scroll down to the **Navbar With Dropdown** section and copy all the codes under **Example above the Navbar With Dropdown** heading.



The screenshot shows a browser window with the URL https://www.w3schools.com/bootstrap5/bootstrap_navbar.php. The left sidebar contains a navigation menu for Bootstrap 5, with 'Bootstrap 5 Tutorial' expanded and 'Bootstrap 5 Navbar' highlighted. The main content area displays the 'Example' code for a collapsible navbar. Below the code is a 'Try It Yourself' button and a tip about using the 'navbar-expand-md' class. The 'Navbar With Dropdown' section is visible at the bottom. The address bar shows 'Waiting for securepubsub.g.doubleclicknet...', and the status bar indicates 'Waiting for securepubsub.g.doubleclicknet...'.

Step 4: Replace all the auto-generated HTML tags in your `_navbar.html` template with the HTML codes you have copied.



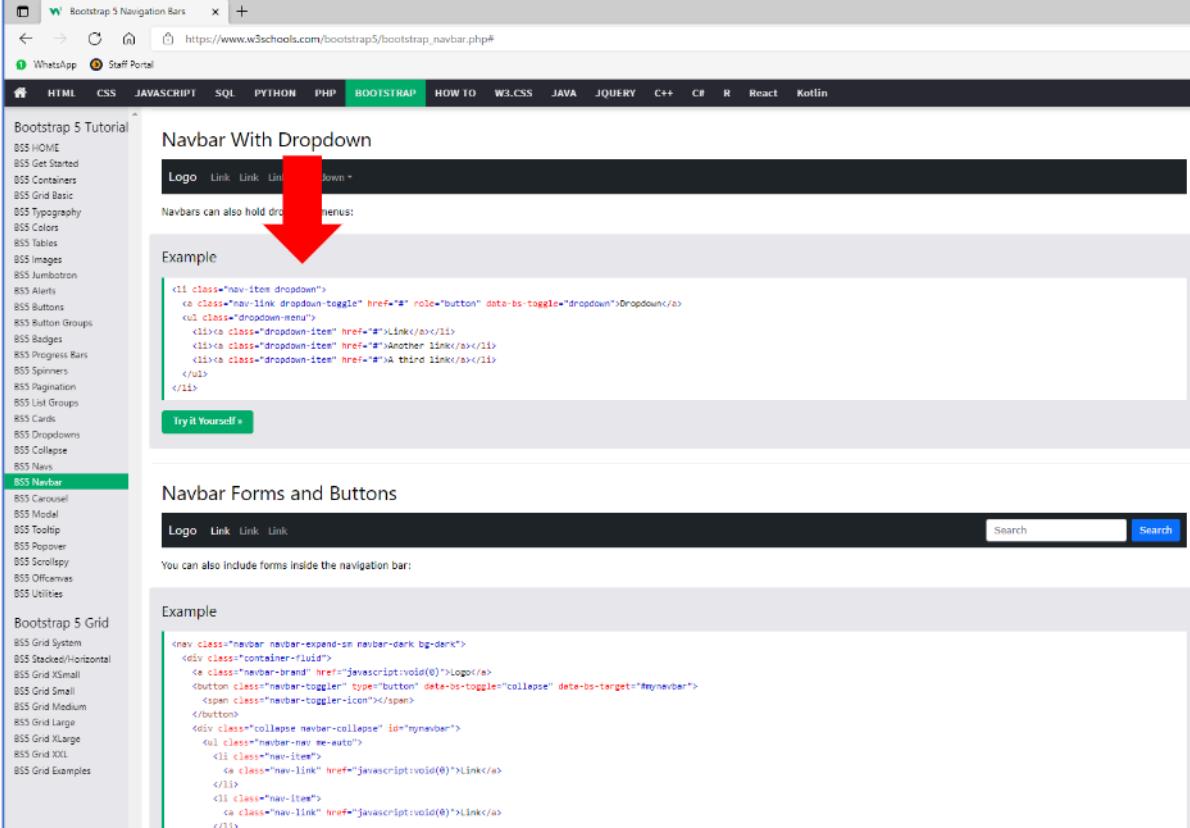
```

1  <nav class="navbar navbar-expand-sm bg-dark navbar-dark">
2      <div class="container-fluid">
3          <a class="navbar-brand" href="#">Logo</a>
4          <button class="navbar-toggler" type="button" data-bs-toggle="collapse" data-bs-target="#collapsibleNavbar">
5              <span class="navbar-toggler-icon"></span>
6          </button>
7          <div class="collapse navbar-collapse" id="collapsibleNavbar">
8              <ul class="navbar-nav">
9                  <li class="nav-item">
10                     <a class="nav-link" href="#">Link</a>
11                 </li>
12                 <li class="nav-item">
13                     <a class="nav-link" href="#">Link</a>
14                 </li>
15                 <li class="nav-item">
16                     <a class="nav-link" href="#">Link</a>
17                 </li>
18             </ul>
19         </div>
20     </div>
21 </nav>

```

Official (Open)

Step 5: Go to https://www.w3schools.com/bootstrap5/bootstrap_navbar.php. Scroll down to the **Navbar With Dropdown** section and copy all the codes under **Example** below the **Navbar With Dropdown** heading.



Bootstrap 5 Tutorial

- B55 HOME
- B55 Get Started
- B55 Containers
- B55 Grid Basic
- B55 Typography
- B55 Colors
- B55 Tables
- B55 Images
- B55 Jumbotron
- B55 Alerts
- B55 Buttons
- B55 Button Groups
- B55 Badges
- B55 Progress Bars
- B55 Spinners
- B55 Pagination
- B55 List Groups
- B55 Cards
- B55 Dropdowns
- B55 Collapse
- B55 Navs
- B55 Navbar**
- B55 Carousel
- B55 Model
- B55 Tooltip
- B55 Popover
- B55 Scrollspy
- B55 Offcanvas
- B55 Utilities

Bootstrap 5 Grid

- B55 Grid System
- B55 Stacked/Horizontal
- B55 Grid XS
- B55 Grid Small
- B55 Grid Medium
- B55 Grid Large
- B55 Grid XL
- B55 Grid XXL
- B55 Grid Examples

Navbar With Dropdown

Logo Link Link Link Dropdown

Nvbars can also hold dropdown menus:

Example

```
<li class="nav-item dropdown">
  <a class="nav-link dropdown-toggle" href="#" role="button" data-bs-toggle="dropdown">Dropdown</a>
  <ul class="dropdown-menu">
    <li><a class="dropdown-item" href="#">Link</a></li>
    <li><a class="dropdown-item" href="#">Another link</a></li>
    <li><a class="dropdown-item" href="#">A third link</a></li>
  </ul>
</li>
```

Try it Yourself

Navbar Forms and Buttons

Logo Link Link Link

You can also include forms inside the navigation bar:

Example

```
<nav class="navbar navbar-expand-sm navbar-dark bg-dark">
  <div class="container-fluid">
    <a class="navbar-brand" href="javascript:void(0)">Logo</a>
    <button class="navbar-toggler" type="button" data-bs-toggle="collapse" data-bs-target="#myNavbar">
      <span class="navbar-toggler-icon"></span>
    </button>
    <div class="collapse navbar-collapse" id="myNavbar">
      <ul class="navbar-nav me-auto">
        <li class="nav-item">
          <a class="nav-link" href="javascript:void(0)">Link</a>
        </li>
        <li class="nav-item">
          <a class="nav-link" href="javascript:void(0)">Link</a>
        </li>
        <li class="nav-item">
          <a class="nav-link" href="javascript:void(0)">Link</a>
        </li>
      </ul>
    </div>
  </div>
```

Step 4: Replace the second `` section in your `_navbar.html` template with the HTML codes you have copied.



```

1  <nav class="navbar navbar-expand-sm bg-dark navbar-dark">
2    <div class="container-fluid">
3      <a class="navbar-brand" href="#">Logo</a>
4      <button class="navbar-toggler" type="button" data-bs-toggle="collapse" data-bs-target="#collapsibleNavbar">
5        <span class="navbar-toggler-icon"></span>
6      </button>
7      <div class="collapse navbar-collapse" id="collapsibleNavbar">
8        <ul class="navbar-nav">
9          <li class="nav-item">
10            <a class="nav-link" href="#">Link</a>
11          </li>
12          <li class="nav-item dropdown">
13            <a class="nav-link dropdown-toggle" href="#" role="button" data-bs-toggle="dropdown">Dropdown</a>
14            <ul class="dropdown-menu">
15              <li><a class="dropdown-item" href="#">Link</a></li>
16              <li><a class="dropdown-item" href="#">Another link</a></li>
17              <li><a class="dropdown-item" href="#">A third link</a></li>
18            </ul>
19          </li>
20          <li class="nav-item">
21            <a class="nav-link" href="#">Link</a>
22          </li>
23        </ul>
24      </div>
25    </div>
26  </nav>

```

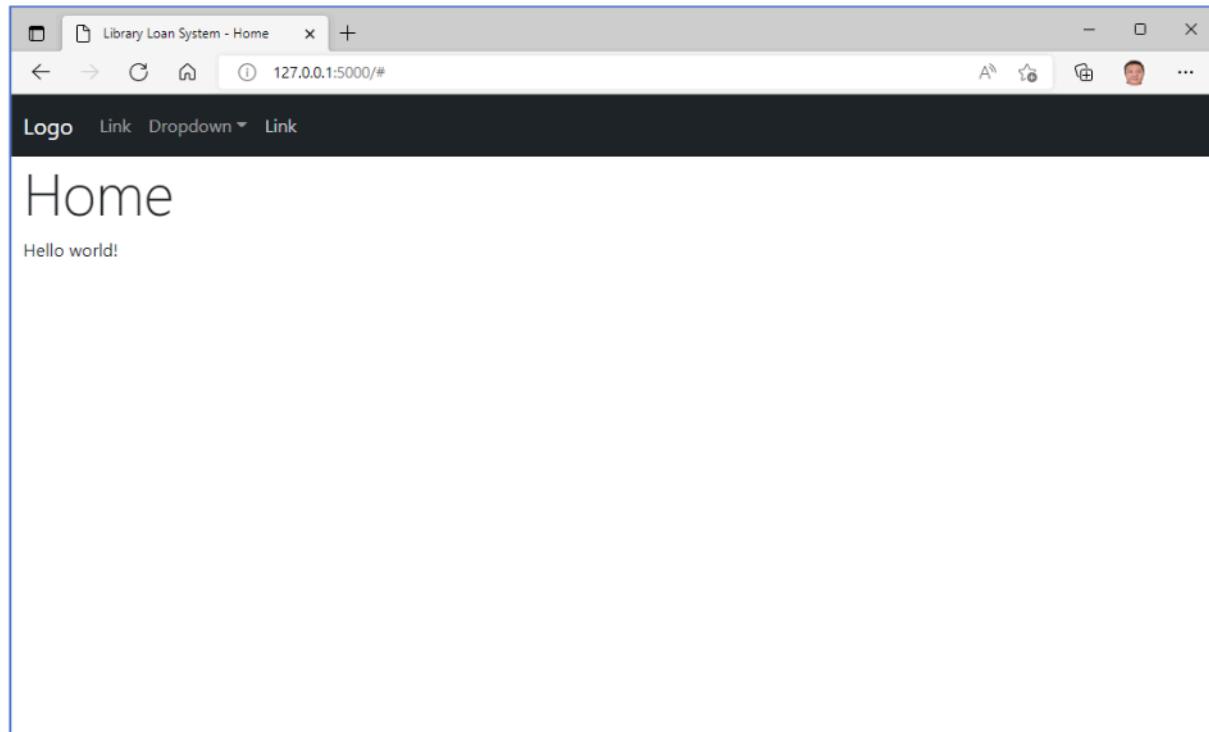
2.3.2 Include the Navbar into Your base.html Template using Server-side Jinja2 Tags

Step 1: Add in `{% include 'includes/_navbar.html' %}` in between the `{% block navbar %}` and `{% endblock %}` in your **base.html** template.

base.html	
<pre> 1 <!DOCTYPE html> 2 <html lang="en"> 3 <head> 4 <meta charset="UTF-8"> 5 <title>{% block title %}{% endblock %}</title> 6 7 <!-- Bootstrap 5.1.2 CSS --> 8 <link crossorigin="anonymous" href="https://cdn.jsdelivr.net/npm/bootstrap@5.1.2/dist/css/bootstrap.min.css" integrity="sha384-uWxY/CJNBR+1zjPWmfSnVxwRheevXITnMqoEleG1LJrdI0GlVs/9cVSyPYXdcSF" rel="stylesheet"> </head> <body> 9 {% block navbar %} 10 {% include 'includes/_navbar.html' %} 11 {% endblock %} 12 13 <div class="container-fluid"> 14 {% block content %} 15 {% endblock %} 16 </div> 17 18 {% block scripts %} 19 <!-- Popper 2.10.2, Bootstrap 5.1.2 JavaScript --> 20 <script crossorigin="anonymous" 21 integrity="sha384-7+zCNj/IqJ95wo16oMtfsKbZ9ccEh31eOz1HGyDuCQ6wgnyJNSYdrPa03rtR1zdB" 22 src="https://cdn.jsdelivr.net/npm/@popperjs/core@2.10.2/dist/umd/popper.min.js"></script> <script crossorigin="anonymous" 23 integrity="sha384-PsUw7Xwds7x08Ew3exXhqzbhuEYmA2xnwc8BuD6SEr+UmEHIX8/MCItyEodzWA4u" src="https://cdn.jsdelivr.net/npm/bootstrap@5.1.2/dist/js/bootstrap.min.js"></script> {% endblock %} </body> </html></pre>	

Step 2: Run your **SimpleWebApplication** by right-clicking on `__init__.py` and selecting **Run '`__init__`'**. Then click on the [link](http://127.0.0.1:5000/) in PyCharm Community Edition.

You should now see a nicely formatted **navbar** appear with your **home.html** template.



2.3.3 Add Suitable Links to Your Navbar for Your SimpleWebApplication

Step 1: Make the following modifications to your `_navbar.html`.

Take note of the `href="/"` at Line 3 and Line 10. This links **LLS** and **Home** to the **root** of your Flask Web Application.

```
_navbar.html
1 <nav class="navbar navbar-expand-sm bg-dark navbar-dark">
2   <div class="container-fluid">
3     <a class="navbar-brand" href="/">LLS</a>
4     <button class="navbar-toggler" type="button" data-bs-toggle="collapse" data-bs-
target="#collapsibleNavbar">
5       <span class="navbar-toggler-icon"></span>
6     </button>
7     <div class="collapse navbar-collapse" id="collapsibleNavbar">
8       <ul class="navbar-nav">
9         <li class="nav-item">
10          <a class="nav-link" href="/">Home</a>
11        </li>
12        <li class="nav-item dropdown">
13          <a class="nav-link dropdown-toggle" href="#" role="button" data-bs-toggle="dropdown">Manage
Users</a>
14          <ul class="dropdown-menu">
15            <li><a class="dropdown-item" href="#">Create User</a></li>
16            <li><a class="dropdown-item" href="#">Retrieve User</a></li>
17          </ul>
18        </li>
19        <li class="nav-item">
20          <a class="nav-link" href="#">Contact Us</a>
```

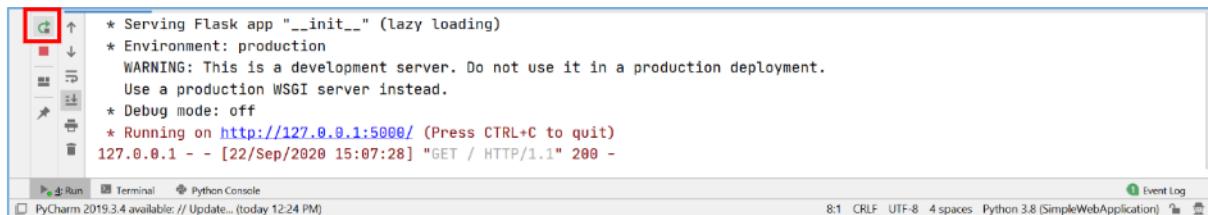
Official (Open)

```

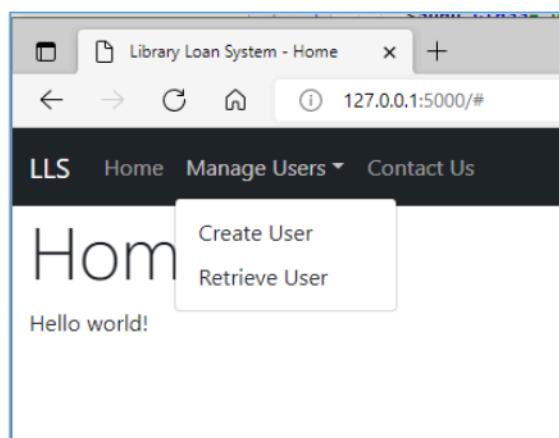
21  </li>
22  </ul>
23  </div>
24  </div>
25 </nav>
26

```

Step 2: Click on the  button in the Run window to **rerun** your **SimpleWebApplication** and click on the <http://127.0.0.1:5000/> link.



Notice that the **navbar** now has the links that you need.

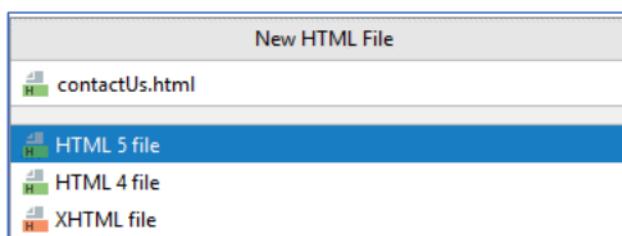
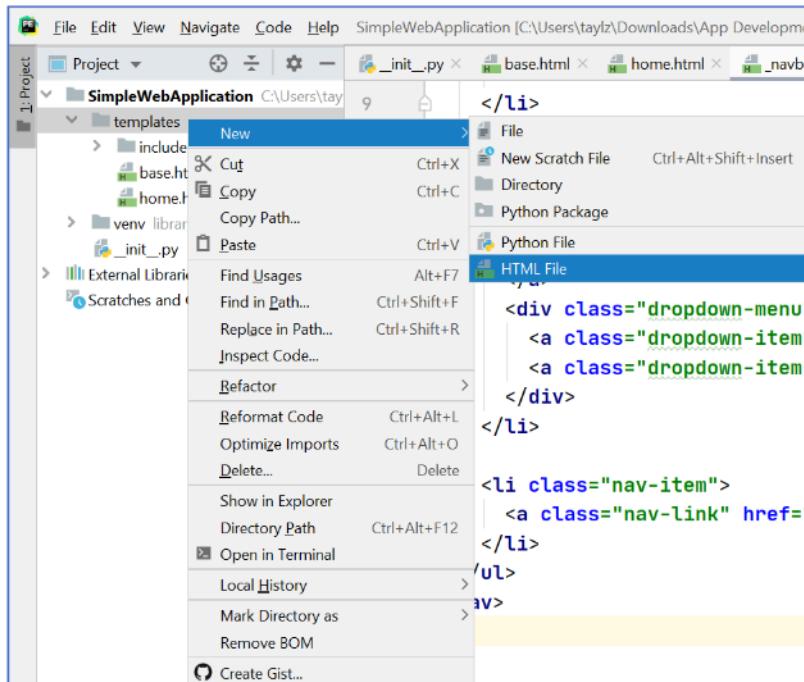
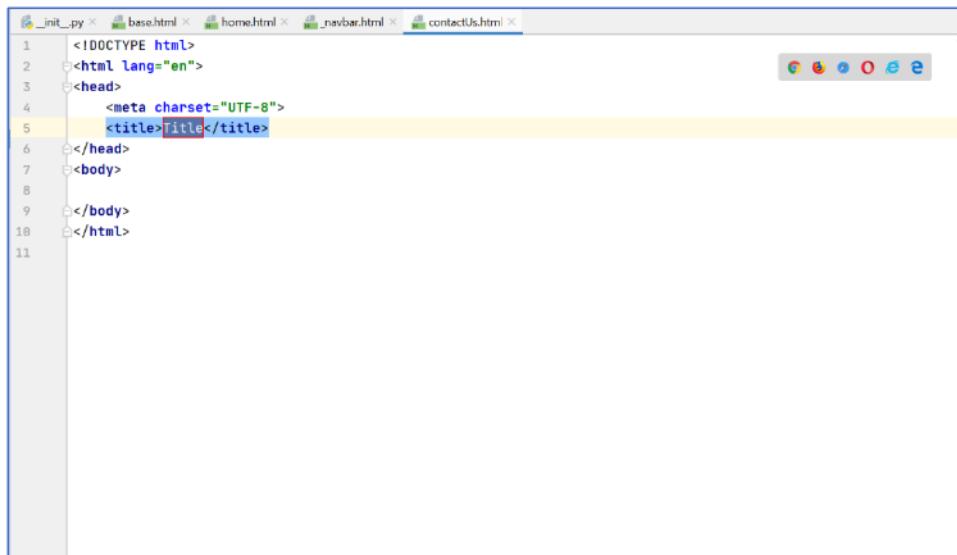


2.4 Create a Contact Us HTML Template

2.4.1 Create a contactUs.html Template

Step 1: Right-click on the **templates** folder and select **New > HTML File** to create a new HTML template called **contactUs.html**.

Official (Open)

```

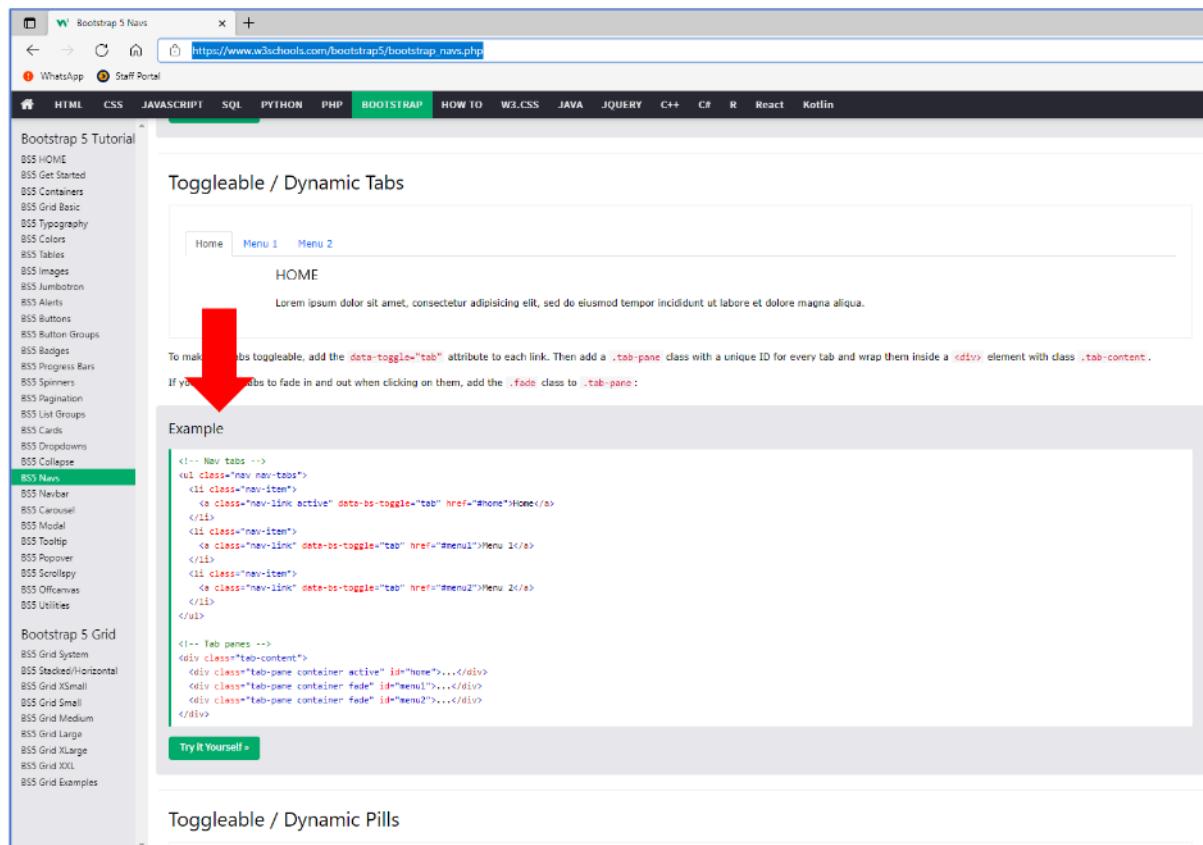
1 <!DOCTYPE html>
2 <html lang="en">
3   <head>
4     <meta charset="UTF-8">
5     <title>Title</title>
6   </head>
7   <body>
8
9   </body>
10 </html>
11

```

The screenshot shows a code editor with a file named 'contactUs.html' open. The code includes a basic HTML structure with a title tag. The title tag is currently selected.

Official (Open)

Step 2: Go to https://www.w3schools.com/bootstrap5/bootstrap_navs.php. Scroll down to the **Toggable / Dynamic Tabs** section and copy all the codes under **Example**.



The screenshot shows the w3schools Bootstrap 5 Tutorial page. The left sidebar has a 'Bootstrap 5 Navs' section highlighted. The main content area is titled 'Toggable / Dynamic Tabs'. It shows a navigation bar with tabs 'Home', 'Menu 1', and 'Menu 2'. The 'Home' tab is active. Below the tabs is a 'HOME' section with placeholder text. A note explains how to make tabs toggling by adding `data-toggle="tab"` to links and `.tab-pane` classes to tab content. The 'Example' section contains the following HTML code:

```

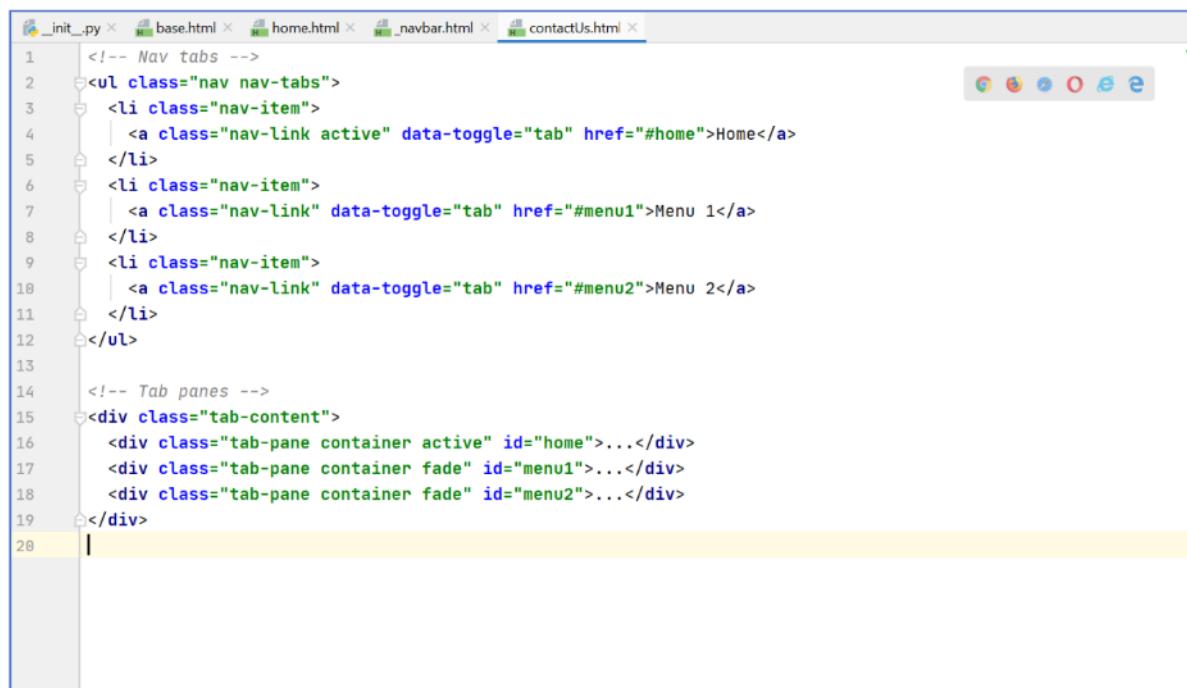
<!-- Nav tabs -->
<ul class="nav nav-tabs">
  <li class="nav-item">
    <a class="nav-link active" data-toggle="tab" href="#home">Home</a>
  </li>
  <li class="nav-item">
    <a class="nav-link" data-toggle="tab" href="#menu1">Menu 1</a>
  </li>
  <li class="nav-item">
    <a class="nav-link" data-toggle="tab" href="#menu2">Menu 2</a>
  </li>
</ul>

<!-- Tab panes -->
<div class="tab-content">
  <div class="tab-pane container active" id="home">...</div>
  <div class="tab-pane container fade" id="menu1">...</div>
  <div class="tab-pane container fade" id="menu2">...</div>
</div>

```

A green button labeled 'Try It Yourself' is visible below the example code.

Step 3: Replace all the auto-generated HTML tags in your **contactUs.html** template with the HTML codes you have copied.



The screenshot shows a code editor with the file 'contactUs.html' open. The code has been modified to use Bootstrap's tab system instead of the original auto-generated navigation. The code is as follows:

```

<!-- Nav tabs -->
<ul class="nav nav-tabs">
  <li class="nav-item">
    <a class="nav-link active" data-toggle="tab" href="#home">Home</a>
  </li>
  <li class="nav-item">
    <a class="nav-link" data-toggle="tab" href="#menu1">Menu 1</a>
  </li>
  <li class="nav-item">
    <a class="nav-link" data-toggle="tab" href="#menu2">Menu 2</a>
  </li>
</ul>

<!-- Tab panes -->
<div class="tab-content">
  <div class="tab-pane container active" id="home">...</div>
  <div class="tab-pane container fade" id="menu1">...</div>
  <div class="tab-pane container fade" id="menu2">...</div>
</div>

```

Official (Open)

Step 4: Add in the appropriate **server-side Ninja2 tags** and **<h1></h1> HTML tags** to the top and bottom of **contactUs.html**. For reference, you may refer to your **home.html**.

```

contactUs.html <
1  {% extends "base.html" %}
2  {% block title %}Library Loan System - Contact Us{% endblock %}
3
4  {% block content %}
5      <h1 class="display-4">Contact Us</h1>
6      <!-- Nav tabs -->
7      <ul class="nav nav-tabs">
8          <li class="nav-item">
9              <a class="nav-link active" data-toggle="tab" href="#home">Home</a>
10         </li>
11         <li class="nav-item">
12             <a class="nav-link" data-toggle="tab" href="#menu1">Menu 1</a>
13         </li>
14         <li class="nav-item">
15             <a class="nav-link" data-toggle="tab" href="#menu2">Menu 2</a>
16         </li>
17     </ul>
18
19     <!-- Tab panes -->
20     <div class="tab-content">
21         <div class="tab-pane container-fluid active" id="home">...</div>
22         <div class="tab-pane container-fluid fade" id="menu1">...</div>
23         <div class="tab-pane container-fluid fade" id="menu2">...</div>
24     </div>
25  {% endblock %}

```

2.4.2 Add contactUs.html to Your Flask route() and Your Navbar

Step 1: Add in a new route for **/contactUs** to the Flask **route()** in **__init__.py** that points to **contactUs.html**.

```

__init__.py
1 from flask import Flask, render_template
2
3 app = Flask(__name__)
4
5 @app.route('/')
6 def home():
7     return render_template('home.html')
8
9 @app.route('/contactUs')
10 def contact_us():
11     return render_template('contactUs.html')
12
13 if __name__ == '__main__':
14     app.run()
15

```

DID YOU KNOW

The name of the Python function **contact_us()** does not need to match the name defined in the **@app.route('/contactUs')** decorator.

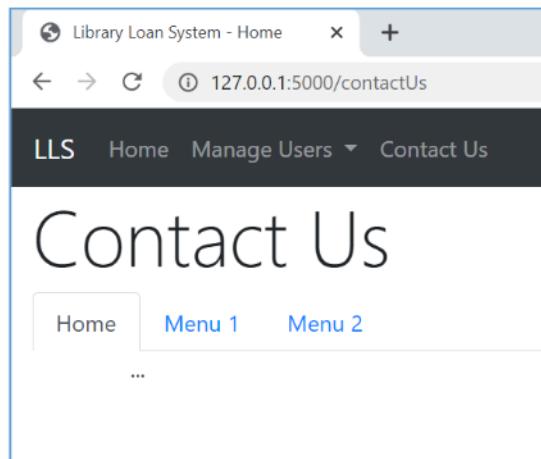
Official (Open)

Step 2: Modify the **Contact Us** link in `_navbar.html` to point to `/contactUs`.

<code>_navbar.html</code>	
19	<li class="nav-item">
20	Contact Us
21	

Step 3: Click on the  button in the Run window to **rerun** your **SimpleWebApplication** and click on the <http://127.0.0.1:5000/> link. Click on **Contact Us** in the navbar.

Notice that Toggleable Tabs are now showing on `contactUs.html`.



2.4.3 Populate Your `contactUs.html` with Information

Use the following information from the previous semesters to add the details of the **Module Leader/Tutors** of your course and those of the **other courses** to your `contactUs.html` template.

Module	IT1166 App Development Project	
Course	DIT	
Module Leader	Dr. Faris Foo	faris_foo@nyp.edu.sg
Module Tutors	Dr. Vincent Mack	vincent_mack@nyp.edu.sg
	Mr. Koh Wing Onn	koh_wing_onn@myaccount.nyp.edu.sg
	Mr. Loh Chao Hong	loh_chao_hong@nyp.edu.sg

Module	IT1566 App Development Project	
Course	DSF	
Module Leader	Dr. Faris Foo	faris_foo@nyp.edu.sg

Official (Open)

Module Tutors	Mr. Lee Keat Kean	lee_keat_kean@nyp.edu.sg
	Ms. Tan Sew Lan	tan_sew_lan@myaccount.nyp.edu.sg
	Mr. Sng Yong Meng	sng_yong_meng@myaccount.nyp.edu.sg

Module	IT1666 App Development Project	
Course	DCS	
Module Leader	Dr. Faris Foo	faris_foo@nyp.edu.sg
Module Tutors	Ms. Tan Sew Lan	tan_sew_lan@myaccount.nyp.edu.sg

Module	IT1866 App Development Project	
Course	DBFT	
Module Leader	Mr. Bobby Liu	liu_jianrong@nyp.edu.sg
Module Tutors	Mr. Lee Keat Kean	lee_keat_kean@nyp.edu.sg
	Mr. Ariel Abuel	ariel_abuel@nyp.edu.sg
	Mr. Sng Yong Meng	sng_yong_meng@myaccount.nyp.edu.sg
	Mr. Joey Zhang	joey_zhang@nyp.edu.sg

Module	IT1966 App Development Project	
Course	CIP	
Module Leader	Mr. Bobby Liu	liu_jianrong@nyp.edu.sg
Module Tutors	Dr. Vincent Mack	vincent_mack@nyp.edu.sg
	Mr. Woon Tong Wing	woon_tong_wing@nyp.edu.sg
	Mr. Choy Wai Leong	choy_wai_leong@myaccount.nyp.edu.sg
	Ms. Verawaty	verawaty@nyp.edu.sg
	Mr. Ong Eng Chuan	ong_eng_chuan@nyp.edu.sg

Step 1: Modify Home tab in **contactUs.html** by changing its `<a>` tag's `href="#home"` property to `href="#DIT"` and the corresponding content (or innerHTML) to **DIT**.

contactUs.html	
6	<code><!-- Nav tabs --></code>
7	<code><ul class="nav nav-tabs"></code>
8	<code><li class="nav-item"></code>

Official (Open)

```

9   <a class="nav-link active" data-bs-toggle="tab" href="#DIT">DIT</a>
10  </li>
11  <li class="nav-item">
12    <a class="nav-link" data-bs-toggle="tab" href="#menu1">Menu 1</a>
13  </li>
14  <li class="nav-item">
15    <a class="nav-link" data-bs-toggle="tab" href="#menu2">Menu 2</a>
16  </li>
17 </ul>

```

Step 2: Add **-fluid** to **container** in the corresponding **Tab Pane's** `<div>` tag's **class** property and change its `id="home"` to `id="DIT"`.

contactUs.html

```

19 <!-- Tab panes -->
20 <div class="tab-content">
21 <div class="tab-pane container-fluid active" id="DIT">...</div>
22 <div class="tab-pane container fade" id="menu1">...</div>
23 <div class="tab-pane container fade" id="menu2">...</div>
24 </div>

```

Step 3: Replace the ... with a `
` tag and `<h2>IT1166 App Development Project</h2>` header tags followed by another `
` tag.

contactUs.html

```

19 <!-- Tab panes -->
20 <div class="tab-content">
21 <div class="tab-pane container-fluid active" id="DIT">
22   <br>
23   <h2>IT1166 App Development Project</h2>
24   <br>
25 </div>
26 <div class="tab-pane container fade" id="menu1">...</div>
27 <div class="tab-pane container fade" id="menu2">...</div>
28 </div>

```

Step 4: Add in an **HTML table** with headers for **Name**, **Role** and **Email**.

contactUs.html

```

19 <!-- Tab panes -->
20 <div class="tab-content">
21 <div class="tab-pane container-fluid active" id="DIT">
22   <br>
23   <h2>IT1166 App Development Project</h2>
24   <br>
25     <table class="table table-striped">
26       <thead>
27         <tr>
28           <th>Name</th>
29           <th>Role</th>
30           <th>Email</th>
31         </tr>
32       </thead>

```

Official (Open)

```

33     </table>
34 </div>
35 <div class="tab-pane container fade" id="menu1">...</div>
36 <div class="tab-pane container fade" id="menu2">...</div>
37 </div>

```

Step 5: Add in **<tbody>** and **</tbody>** tags that contain rows of each **Module Leader/Tutors' details**.

contactUs.html

```

19 <!-- Tab panes -->
20 <div class="tab-content">
21 <div class="tab-pane container-fluid active" id="DIT">
22 <br>
23 <h2>IT1166 App Development Project</h2>
24 <br>
25 <table class="table table-striped">
26   <thead>
27     <tr>
28       <th>Name</th>
29       <th>Role</th>
30       <th>Email</th>
31     </tr>
32   </thead>
33   <tbody>
34     <tr>
35       <td>Dr. Faris Foo</td>
36       <td>Module Leader</td>
37       <td><a href="mailto:faris_foo@nyp.edu.sg">faris_foo@nyp.edu.sg</a></td>
38     </tr>
39     <tr>
40       <td>Dr. Vincent Mack</td>
41       <td>Module Tutor</td>
42       <td><a href="mailto:vincent_mack@nyp.edu.sg">vincent_mack@nyp.edu.sg</a></td>
43     </tr>
44     <tr>
45       <td>Mr. Koh Wing Onn</td>
46       <td>Module Tutor</td>
47       <td><a href="mailto:koh_wing_onn@myaccount.nyp.edu.sg">koh_wing_onn@myaccount.nyp.edu.sg</a></td>
48     </tr>
49     <tr>
50       <td>Mr. Loh Chao Hong</td>
51       <td>Module Tutor</td>
52       <td><a href="mailto:loh_chao_hong@nyp.edu.sg">loh_chao_hong@nyp.edu.sg</a></td>
53     </tr>
54   </tbody>
55 </table>
56 </div>
57 <div class="tab-pane container fade" id="menu1">...</div>
58 <div class="tab-pane container fade" id="menu2">...</div>

```

Step 6: Click on the  button in the Run window to **rerun** your **SimpleWebApplication** and click on the [link](http://1270.0.0.1:5000/). Click on **Contact Us** in the **navbar**.

The details of the **Module Leader/Tutors** now appear on the first tab called **DIT**.

Official (Open)

127.0.0.1:5000/contactUs

SIT NYP Development Teaching Tool Mental Health

LLS Home Manage Users Contact Us

Contact Us

DIT Menu 1 Menu 2

IT1166 App Development Project

Name	Role	Email
Dr. Faris Foo	Module Leader	faris.foo@nyp.edu.sg
Dr. Vincent Mack	Module Tutor	vincent.mack@nyp.edu.sg
Mr. Koh Wing Onn	Module Tutor	koh.wing.onn@myaccount.nyp.edu.sg
Mr. Loh Chao Hong	Module Tutor	loh.chao.hong@nyp.edu.sg

 DID YOU FORGET 

If the content of your **Contact Us** page looks centralized like the screenshot below instead of being stretched across the screen, go back to **Step 2** and check if you have missed out adding **-fluid** to **container** in the corresponding Tab Pane's `<div>` tag's **class** property.

127.0.0.1:5000/contactUs

SIT NYP Development Teaching Tool Mental Health

LLS Home Manage Users Contact Us

Contact Us

DIT Menu 1 Menu 2

IT1166 App Development Project

Name	Role	Email
Dr. Faris Foo	Module Leader	faris.foo@nyp.edu.sg
Dr. Vincent Mack	Module Tutor	vincent.mack@nyp.edu.sg
Mr. Koh Wing Onn	Module Tutor	koh.wing.onn@myaccount.nyp.edu.sg
Mr. Loh Chao Hong	Module Tutor	loh.chao.hong@nyp.edu.sg

Step 7: Repeat **Steps 1 to 6** to modify the remaining tabs to contain the details of the **Module Leader/Tutors** details of **other diploma courses**.

```
contactUs.html
```

```

58 </tr>
59 </tbody>
60 </table>
61 </div>
62 <div class="tab-pane container fade" id="menu1">...</div>
63 <div class="tab-pane container fade" id="menu2">...</div>
64 </div>

```

Official (Open)

127.0.0.1:5000/contactUs

SIT NYP Development Teaching Tool Mental Health

LLS Home Manage Users Contact Us

Contact Us

DIT DSF DCS DBFT CIP

IT1566 App Development Project

Name	Role	Email
Dr. Faris Foo	Module Leader	faris.foo@nyp.edu.sg
Mr. Lee Keat Kean	Module Tutor	lee.keat.kean@nyp.edu.sg
Ms. Tan Sew Lan	Module Tutor	tan.sew.lan@myaccount.nyp.edu.sg
Mr. Sng Yong Meng	Module Tutor	sng.yong.meng@myaccount.nyp.edu.sg

127.0.0.1:5000/contactUs

SIT NYP Development Teaching Tool Mental Health

LLS Home Manage Users Contact Us

Contact Us

DIT DSF DCS DBFT CIP

IT1666 App Development Project

Name	Role	Email
Dr. Faris Foo	Module Leader	faris.foo@nyp.edu.sg
Ms. Tan Sew Lan	Module Tutor	tan.sew.lan@myaccount.nyp.edu.sg

127.0.0.1:5000/contactUs

SIT NYP Development Teaching Tool Mental Health

LLS Home Manage Users Contact Us

Contact Us

DIT DSF DCS DBFT CIP

IT1866 App Development Project

Name	Role	Email
Mr. Bobby Liu	Module Leader	liu.jianrong@nyp.edu.sg
Mr. Lee Keat Kean	Module Tutor	lee.keat.kean@nyp.edu.sg
Mr. Ariel Abuel	Module Tutor	ariel.abuel@nyp.edu.sg
Mr. Sng Yong Meng	Module Tutor	sng.yong.meng@myaccount.nyp.edu.sg
Mr. Joey Zhang	Module Tutor	joey.zhang@nyp.edu.sg

Official (Open)

127.0.0.1:5000/contactUs

SIT NYP Development Teaching Tool Mental Health

LLS Home Manage Users Contact Us

Contact Us

DIT DSF DCS DBFT CIP

IT1966 App Development Project

Name	Role	Email
Mr. Bobby Liu	Module Leader	liu_jianrong@nyp.edu.sg
Dr. Vincent Mack	Module Tutor	vincent_mack@nyp.edu.sg
Mr. Woon Tong Wing	Module Tutor	woon_tong_wing@nyp.edu.sg
Mr. Choy Wai Leong	Module Tutor	choy_wai_leong@myaccount.nyp.edu.sg
Ms. Verawaty	Module Tutor	verawaty@nyp.edu.sg
Mr. Ong Eng Chuan	Module Tutor	ong_eng_chuan@nyp.edu.sg

DID YOU FORGET

If all your **nav tabs** look like they are **active** and there are **no inactive tabs**, check to see if you have **active** within the **class** attributes for all your **nav tab** links.

127.0.0.1:5000/contactUs

SIT NYP Development Teaching Tool Mental Health

LLS Home Manage Users Contact Us

Contact Us

DIT DSF DCS DBFT CIP

IT1166 App Development Project

Name	Role	Email
Dr. Faris Foo	Module Leader	faris.foo@nyp.edu.sg
Dr. Vincent Mack	Module Tutor	vincent.mack@nyp.edu.sg
Mr. Koh Wing Onn	Module Tutor	koh.wing.onn@myaccount.nyp.edu.sg
Mr. Loh Chao Hong	Module Tutor	loh.chao.hong@nyp.edu.sg

Only **one** nav tab link should have **active** within its **class** attribute to indicate that that is the default **active** tab.

```

contactUs.html
6 <!-- Nav tabs -->
7 <ul class="nav nav-tabs">
8   <li class="nav-item">
9     <a class="nav-link active" data-bs-toggle="tab" href="#DIT">DIT</a>
10   </li>
11   <li class="nav-item">
```

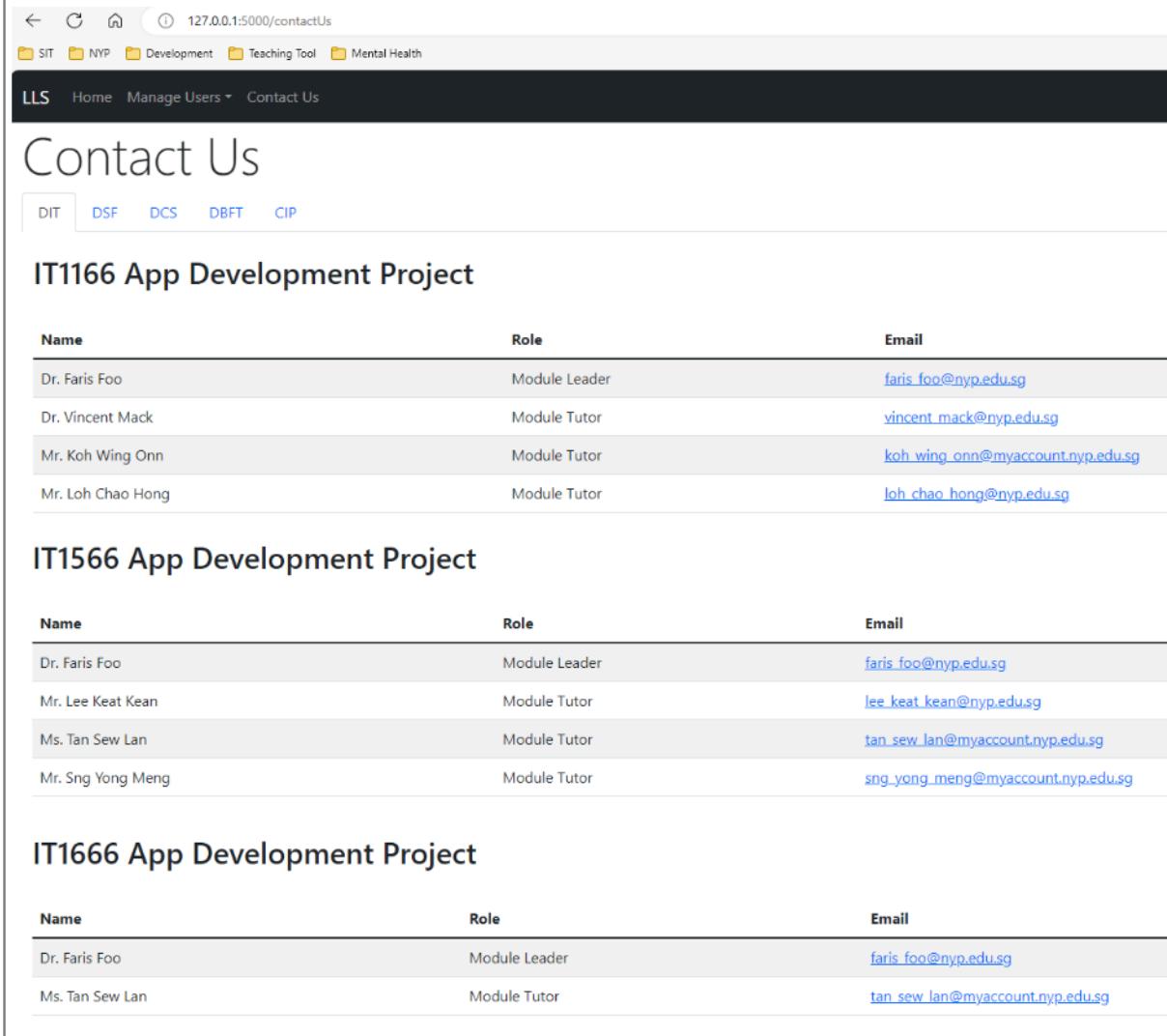
Official (Open)

```

12 <a class="nav-link active" data-bs-toggle="tab" href="#DBA">DBA</a>
13 </li>
14 <li class="nav-item">
15 <a class="nav-link active" data-bs-toggle="tab" href="#DCS">DCS</a>
16 </li>
17 </ul>

```

If all your **tab panes** appear on the same page, check to see if you have **active** within the **class** attributes for all your new tab panes' **<div></div>** tags instead of **fade**.



The screenshot shows a web application interface. At the top, there's a navigation bar with links for SIT, NYP, Development, Teaching Tool, and Mental Health. Below that is a secondary navigation bar with LLS, Home, Manage Users, and Contact Us. The main content area has a title "Contact Us" and a sub-section titled "IT1166 App Development Project". It contains a table with three columns: Name, Role, and Email. The table lists four individuals: Dr. Faris Foo (Module Leader, email: faris.foo@nyp.edu.sg), Dr. Vincent Mack (Module Tutor, email: vincent.mack@nyp.edu.sg), Mr. Koh Wing Onn (Module Tutor, email: koh.wing.onn@myaccount.nyp.edu.sg), and Mr. Loh Chao Hong (Module Tutor, email: loh.chao.hong@nyp.edu.sg). Below this section is another titled "IT1566 App Development Project" with a similar table listing Dr. Faris Foo (Module Leader, email: faris.foo@nyp.edu.sg), Mr. Lee Keat Kean (Module Tutor, email: lee.keat.kean@nyp.edu.sg), Ms. Tan Sew Lan (Module Tutor, email: tan.sew.lan@myaccount.nyp.edu.sg), and Mr. Sng Yong Meng (Module Tutor, email: sng.yong.meng@myaccount.nyp.edu.sg). Finally, there's a section for "IT1666 App Development Project" with a table listing Dr. Faris Foo (Module Leader, email: faris.foo@nyp.edu.sg) and Ms. Tan Sew Lan (Module Tutor, email: tan.sew.lan@myaccount.nyp.edu.sg).

Name	Role	Email
Dr. Faris Foo	Module Leader	faris.foo@nyp.edu.sg
Dr. Vincent Mack	Module Tutor	vincent.mack@nyp.edu.sg
Mr. Koh Wing Onn	Module Tutor	koh.wing.onn@myaccount.nyp.edu.sg
Mr. Loh Chao Hong	Module Tutor	loh.chao.hong@nyp.edu.sg

Name	Role	Email
Dr. Faris Foo	Module Leader	faris.foo@nyp.edu.sg
Mr. Lee Keat Kean	Module Tutor	lee.keat.kean@nyp.edu.sg
Ms. Tan Sew Lan	Module Tutor	tan.sew.lan@myaccount.nyp.edu.sg
Mr. Sng Yong Meng	Module Tutor	sng.yong.meng@myaccount.nyp.edu.sg

Name	Role	Email
Dr. Faris Foo	Module Leader	faris.foo@nyp.edu.sg
Ms. Tan Sew Lan	Module Tutor	tan.sew.lan@myaccount.nyp.edu.sg

Official (Open)

IT1866 App Development Project

Name	Role	Email
Mr. Bobby Liu	Module Leader	liu_jianrong@nyp.edu.sg
Mr. Lee Keat Kean	Module Tutor	lee_keat_kean@nyp.edu.sg
Mr. Ariel Abuel	Module Tutor	ariel_abuel@nyp.edu.sg
Mr. Sng Yong Meng	Module Tutor	sng_yong_meng@myaccount.nyp.edu.sg
Mr. Joey Zhang	Module Tutor	joey_zhang@nyp.edu.sg

IT1966 App Development Project

Name	Role	Email
Mr. Bobby Liu	Module Leader	liu_jianrong@nyp.edu.sg
Dr. Vincent Mack	Module Tutor	vincent_mack@nyp.edu.sg
Mr. Woon Tong Wing	Module Tutor	woon_tong_wing@nyp.edu.sg
Mr. Choy Wai Leong	Module Tutor	choy_wai_leong@myaccount.nyp.edu.sg
Ms. Verawaty	Module Tutor	verawaty@nyp.edu.sg
Mr. Ong Eng Chuan	Module Tutor	ong_eng_chuan@nyp.edu.sg

Only **one** tab pane's `<div></div>` tags should have **active** within its `class` attribute to indicate that that is the default **active** tab pane.

contactUs.html

```

19 <!-- Tab panes -->
20 <div class="tab-content">
21   <div class="tab-pane container-fluid active" id="DIT">
22     ...
23     </div>
24     <div class="tab-pane container-fluid active fade" id="DSF">
25       ...
26     </div>
27     <div class="tab-pane container-fluid active fade" id="DCS">
28       ...
29     </div>
30   </div>

```

~ End ~